

CLEANING SPECIALITIES

# GLOBAL CLEANING SOLUTIONS



ZSCHIMMER & SCHWARZ



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# CHEMISTRY TAILOR-MADE

Zschimmer & Schwarz is a global supplier of chemical auxiliaries and specialties headquartered in Lahnstein near Koblenz, Germany. The family business was founded in Chemnitz in 1894 and is positioned across industries with different business divisions.

Our core business is the development, production and supply of tailor-made chemical auxiliaries for the leather, fur, ceramic, textile and chemical fibre industries. Manufacturers of cleaning agents, personal care products, paints and coatings, lubricants and industrial applications all over the world trust in the company's chemical specialties as well.

## A FAMILY BUSINESS WITH A GLOBAL FORMULA FOR SUCCESS

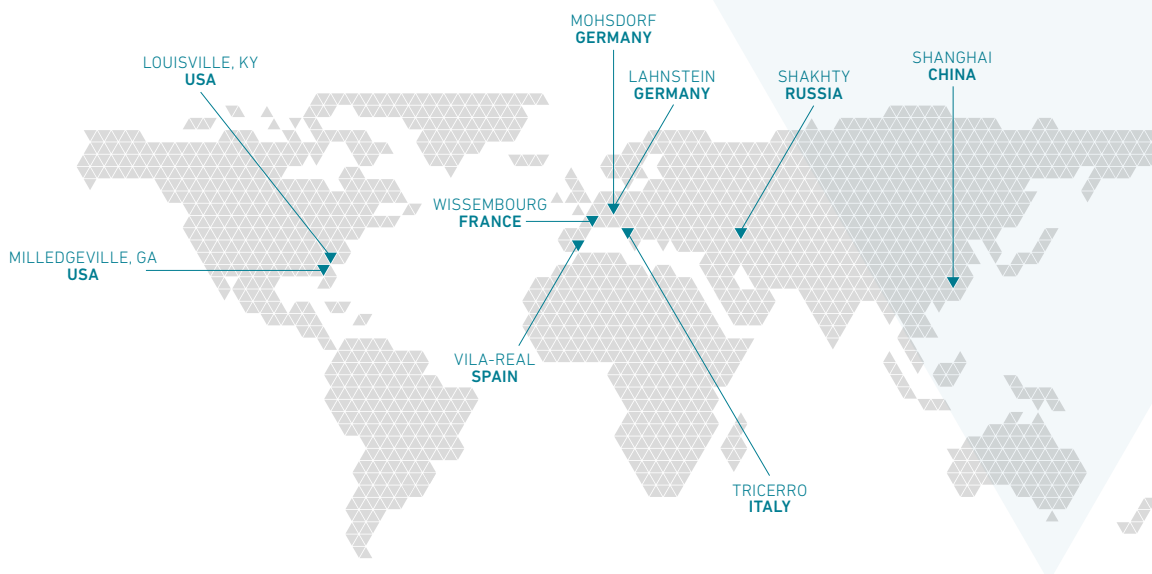
The corporate group Zschimmer & Schwarz comprises 30 companies in 17 countries on five continents, 22 of which have their own production facilities. Our customers can always rely on a uniform quality standard worldwide and on the high service orientation of our local experts.

## TOGETHER FOR A CLEAN SWEEP

The Cleaning Specialties Division of the company is dedicated to developing new solutions for home care, industrial and institutional cleaning as well as car care. Whether for household use, in the automotive sector, hospitals or large-scale industry: our surfactants, polymers and phosphonates, combined with additional formulation services, shorten development times for our customers. Environmentally friendly, efficient, compatible even with sensitive surfaces: this is cleaning at its best.

An extensive portfolio, a strong focus on service, flexibility and responsible stewardship of the environment make Zschimmer & Schwarz your perfect partner for the development and production of your cleaning products.

In this brochure, we present our global product portfolio. Some products are exclusively available in selected countries – please ask your local representative. In addition, our application technologists and sales service will be happy to advise you regarding your application area. For a comprehensive list of our locations and contact details, please visit our website.





# HOME CARE

DISHES



FLOORS/  
CARPET



HARD  
SURFACES



GLASS



TEXTILES



SANITARY



A welcoming and cosy home requires constant care. The modern consumer's expectations for cleaning and care products have changed dramatically over the last decades. In addition to the simple and safe application of a product, efficiency and eco-friendliness have become important criteria in purchase decisions. Zschimmer & Schwarz offers a wide range of raw materials that support formulators in the manufacturing of modern products.

# DISHES

Whether mechanically or manually – perfectly removing food residues from dishes is a highly demanding cleaning task. Dishes are expected to sparkle and be hygienically clean, ideally in no time at all and regardless of the type and stubbornness of the residues.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AMPHOTENSID</b>			
AMPHOTENSID AB	Coco-betaine	30	5–8 (original)
AMPHOTENSID B *	Cocamidopropyl betaine	30–40	5 (original)
AMPHOTENSID EH	Sodium salt of a short-chained alkylamine carboxylate	40	8 (original)
<b>CUBLEN</b>			
CUBLEN A 4015	ATMP: amino tris(methylene phosphonic acid), Na5-salt	29	10 (1% in water)
CUBLEN AP 5	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN BIT 721	Proprietary mixture of organophosphonic acids, sodium salts	35	10 (1% in water)
CUBLEN ED 351	Proprietary mixture of sodium salts of amino methylene phosphonic acids	33	7 (1% in water)
CUBLEN K 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN K 60	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN K 8514 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	60	12 (1% in water)
CUBLEN K 9012 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na2-salt (disodium etidronate)	81	5 (1% in water)
CUBLEN KT 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN KT 600	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN R 60	HEMPA: hydroxyethylamino bis(methylene phosphonic acid)	60	1–2 (1% in water)
<b>LUMOROL</b>			
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10% in water)
LUMOROL 54/SPEZIAL	Blend of anionic and nonionic surfactants	54	7–8 (10% in water)
LUMOROL RK	Combination of anionic and amphoteric surfactants	28	6 (original)
<b>MULSIFAN</b>			
MULSIFAN RT 269	Fatty alcohol polyglycol ether	100	6 (10% in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**
**FUNCTIONS AND PROPERTIES**

liquid	Mild co-surfactant, improves foam stability
liquid	Mild co-surfactant with excellent foaming power and stability
liquid	Low-foaming and hydrotropic surfactant
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Unique and synergistic mixture which provides benefits in the stabilisation of water hardness, effective peroxide bleaching, stain and spot removal as well as corrosion inhibition on steel
liquid	Inhibits both the precipitation and encrustation of hardly soluble salts of alkaline earth metals in substoichiometric amounts, excellent complexing behaviour; stabilising agent for hydrogen peroxide under neutral and alkaline conditions; corrosion inhibition on both unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Regular granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Unique granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Similar to Cublen K 3014 but with non-preferential origin; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale under weakly alkaline conditions, improves the hydrophilicity of surfaces and rinsing properties
flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
viscous liquid	Surfactant blend for laundry detergents for hand washing
liquid	Surfactant blend for mild cleaning formulations
liquid	Co-emulsifier for microemulsions; thickener

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>PROPETAL</b>			
PROPETAL 105	Alkyl polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 140	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 160	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 220	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
<b>PROTELAN</b>			
PROTELAN VE/K NP	Sodium cocoyl hydrolysed wheat protein and disodium cocoyl glutamate	30	9–10 (original)
<b>PURTON</b>			
PURTON CFD	Coconut fatty acid diethanolamide	85	9–11 (1% in water)
PURTON CFM/F	Coconut fatty acid monoethanolamide	85	n/a
PURTON SFD	Soybean oil fatty acid diethanolamide	87	8.5–11 (1% in water)
<b>SETACIN</b>			
SETACIN 103 *	Disodium laureth sulfosuccinate	38	6.5–7.5 (10 % in water)
<b>SULFETAL</b>			
SULFETAL 4069	Sodium alkyl (C8-C10) sulfate	43	10.5 (10 % in water)
SULFETAL 4105	Sodium 2-ethylhexyl sulfate	43	9 (10 % in water)
SULFETAL KT 400	Triethanol ammonium fatty alcohol sulfate	43	7.5 (10 % in water)
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27–70	7–9 (10 % in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27–40	11–11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5–7.5 (10 % in water)
SULFETAL ZN	Zinc coco-sulfate	30	4 (original)
<b>TREOSAL</b>			
TREOSAL 288	Ethoxylated olive oil	100	6 (10 % in water)
TREOSAL 401	Ethoxylated coconut oil	100	6 (10 % in water)
TREOSAL HE	PEG-7 glyceryl cocoate	100	5.7–7.3 (10 % in water)
<b>TRIUMPHNETZER</b>			
TRIUMPHNETZER ZSG *	Sulfosuccinic acid diisooctyl ester, sodium salt	67	5 (1% in water)
<b>TURKEY RED OIL</b>			
TURKEY RED OIL	Sodium sulfuricinate	82	7.5 (10 % in water)
<b>ZETESECO</b>			
ZETESECO HS 100	Disodium capryloyl glutamate	30	10 (original)
ZETESECO HS 200	Disodium cocoyl glutamate / sodium cocoyl glutamate	25	7 (original)
ZETESECO HS 300	Disodium cocoyl glutamate	25	10 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]****FUNCTIONS AND PROPERTIES**

liquid	Low-foaming and extremely fast wetting surfactant
liquid	Low-foaming and wetting surfactant for applications at 40 °C
liquid	Low-foaming and wetting surfactant for applications at 60 °C
liquid	Extremely low-foaming surfactant for applications at 20 °C
liquid	Mild anionic surfactant, useful for high-foaming manual dishwashing agents for sensitive skin
liquid	Improves lathering power, foam stability and structure, increases viscosity of formulation
flakes	Improves lathering power, foam stability and structure, increases viscosity of formulation
liquid	Improves lathering power and viscosity
liquid	Anionic surfactant, exceptionally mild to the skin, stable foam with fine bubbles, excellent rinsability, suitable for washing-up liquid formulations
liquid	High-foaming and hydrotropic surfactant
liquid	Low-foaming and hydrotropic surfactant
liquid	High-foaming surfactant
liquid	Foaming surfactant for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in 2 different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in 2 different concentrations
liquid	Good solubility in hard water, stable foam
liquid	Anionic surfactant, suitable for washing-up liquids due to its mildness on the skin; has anti-bacterial properties and can thus be used for deep cleaning
liquid	Mild solubiliser for essential oils and triglycerides
liquid	Mild solubiliser for essential oils and triglycerides
liquid	Nonionic surfactant to be used in no-label detergents, baby clothes care, pet care etc.
liquid	Excellent wetting agent
liquid	Natural, solubilising surfactant
liquid	Natural, low-foaming and hydrotropic and odour-preventing surfactant
liquid	Natural, foaming and hydrotropic surfactant with low salt content
liquid	Natural, foaming and hydrotropic surfactant

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>ZETESOL</b>			
ZETESOL 270/N	Sodium laureth sulfate	68	6–10 (10% in water)
ZETESOL 370/N*	Sodium laureth sulfate	68	6–10 (10% in water) 11–13 (10% in water)
ZETESOL AN 27	Sodium laureth sulfate	27	10–11.5 (original)
ZETESOL AN/70	Sodium laureth sulfate	70	10–12 (10% in water)
ZETESOL LA	Ammonium laureth sulfate	25	6–7 (10% in water)
ZETESOL LES 11/7	Sodium undeceth-7 sulfate	27	6–8 (1% in water)
ZETESOL LES 117 HC	Sodium undeceth-7 sulfate	80	10.5–12.5 (10% in water)
ZETESOL LES 2*	Sodium coceth sulfate	27	10.8–11.5 (original)
ZETESOL LES 3/SL	Sodium coceth sulfate	27	10.8–11.6 (original)
ZETESOL LME	Monoethanol ammonium laureth sulfate	27	7–8 (10% in water)
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1% in water)
ZETESOL ZN	Zinc coceth sulfate	23.5	3.5–4.5 (original)
<b>ZUSOLAT</b>			
ZUSOLAT 1004	Fatty alcohol with 4 moles EO	100	6 (10% in water)
ZUSOLAT 1608/85	Fatty alcohol with 8 moles EO	85	6 (10% in water)
<b>ZUTELAN</b>			
ZUTELAN GL 124	Alkyl polyglucoside	60	12 (original)
ZUTELAN GL 810	Alkyl polyglucoside	50	12 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**



flowable paste	High-foaming surfactant suitable for many different applications, stable in hard water
paste	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	Excellent performance in hard water, possible alternative to alkylbenzene sulfonate in detergency for its less aggressive profile (for example in washing-up liquids)
flowable paste	Excellent performance in hard water, possible alternative to alkylbenzene sulfonate in detergency for its less aggressive profile (for example in washing-up liquids)
liquid	Suitable for delicate laundry/dishes; to be used only in formulations with pH < 8.5
liquid	Anionic surfactant; tolerates hard water and cationic surfactants
viscous liquid	Highly concentrated anionic surfactant; tolerates hard water and cationic surfactants, allows the formulation of highly concentrated products with low viscosity
liquid	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	Suitable for delicate laundry/dishes
liquid	High-foaming surfactant with enhanced solvent compatibility
liquid	Anionic surfactant, can be also used in dual-purpose products (like "hand /dish") thanks to its mildness and anti-bacterial properties; must be used in a pH range between 4 and 8
liquid	Medium-foaming, degreasing and fast wetting surfactant
liquid	Medium-foaming, wetting and excellently degreasing surfactant
liquid	Natural, high-foaming, wetting and degreasing surfactant
liquid	Natural, medium-foaming, wetting and degreasing surfactant

# FLOORS/CARPET

The cleaning requirements for different types of flooring are just as diverse as the materials themselves. There is a great difference between the caring cleaning of delicate wood floors and the targeted elimination of stains on carpets. Foaming capacity, cleaning power, sustainability and special finishes, such as antistatic properties, are factors that vary depending on the respective application area.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AMPHOTENSID</b>			
AMPHOTENSID AB	Coco-betaine	30	5–8 (original)
AMPHOTENSID B *	Cocamidopropyl betaine	30–40	5 (original)
AMPHOTENSID CCF	Alkyliminodipropionate, sodium salt	40	8 (original)
<b>CUBLEN</b>			
CUBLEN A 4015	ATMP: amino tris(methylene phosphonic acid), Na5-salt	29	10 (1% in water)
CUBLEN AP 5	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN BIT 721	Proprietary mixture of organophosphonic acids, sodium salts	35	10 (1% in water)
CUBLEN D 3217 N	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 3217 S	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 4217	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	32	7 (1% in water)
CUBLEN D 5012	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-salt	51	2 (1% in water)
CUBLEN D 5113	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-3-salt	44	2–3 (1% in water)
CUBLEN E 3115	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Na5-salt	25	7 (1% in water)
CUBLEN E 34135 P	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Ca5-Na6-salt, granules	34	12 (1% in water)
CUBLEN ED 351	Proprietary mixture of sodium salts of amino methylene phosphonic acids	33	7 (1% in water)
CUBLEN K 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN K 60	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN K 8514 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	60	12 (1% in water)

\* Different grades available


**PHYSICAL FORM  
[AT 20 °C]**
**FUNCTIONS AND PROPERTIES**

liquid	Mild co-surfactant, improves foam stability
liquid	Mild co-surfactant with excellent foaming power and stability
liquid	High-foaming and hydrotropic surfactant
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Unique and synergistic mixture which provides benefits in the stabilisation of water hardness, effective peroxide bleaching, stain and spot removal as well as corrosion inhibition on steel
liquid	Outstanding coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding light-coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition unalloyed and high-grade steel
liquid	Highly concentrated, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts: peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
granules	Regular granular structure; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent, retarded dissolution in water
liquid	Inhibits both the precipitation and encrustation of hardly soluble salts of alkaline earth metals in substoichiometric amounts, excellent complexing behaviour; stabilising agent for hydrogen peroxide under neutral and alkaline conditions; corrosion inhibition on both unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Regular granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>CUBLEN</b>			
CUBLEN K 9012 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na <sub>2</sub> -salt (disodium etidronate)	81	5 (1% in water)
CUBLEN KT 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na <sub>4</sub> -salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN KT 600	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
<b>FLEROGUM</b>			
FLEROGUM K 38	Potassium cocoate	30	10–12 (10% in water)
FLEROGUM LX	Potassium laurate	30	10–12 (10% in water)
FLEROGUM O 24 *	Potassium oleate	20	10–12 (10% in water)
<b>LUMOROL</b>			
LUMOROL 4192 M	Combination of anionic and nonionic surfactants and soap	52	10 (10% in water)
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10% in water)
LUMOROL RK	Combination of anionic and amphoteric surfactants	28	6 (original)
<b>MULSIFAN</b>			
MULSIFAN RT 133	Fatty alcohol polyglycol ether	100	6 (10% in water)
MULSIFAN RT 163	Ethoxylated triglyceride	100	8 (10% in water)
<b>PHOSFETAL</b>			
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	100	1.5 (1% in water)
<b>PROPETAL</b>			
PROPETAL 105	Alkyl polyalkylene glycol ether	100	6 (10% in water)
PROPETAL 120	Fatty alcohol polyalkylene glycol ether	100	6 (10% in water)
PROPETAL 220	Fatty alcohol polyalkylene glycol ether	100	6 (10% in water)
<b>PURTON</b>			
PURTON CFD	Coconut fatty acid diethanolamide	85	9–11 (1% in water)
PURTON CFM/F	Coconut fatty acid monoethanolamide	85	n/a
PURTON SFD	Soybean oil fatty acid diethanolamide	87	8.5–11 (1% in water)
<b>SETACIN</b>			
SETACIN 103 *	Disodium laureth sulfosuccinate	38	6.5–7.5 (10% in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**



granules	Unique granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Similar to CUBLEN K 3014 but with non-preferential origin; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Soap; also used to control the formation of foam in some formulations (e.g. to prevent overfoaming in washing machine)
liquid	Soap; selecting LX instead of K 38 is advised in case a substance is present to which LX is more stable, for example chlorine
liquid	Soap; different origin from LX and K 38, not based on palm oil
liquid	Concentrated surfactant blend with soap for cleaning formulations
flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
liquid	Surfactant blend for mild cleaning formulations
wax	Emulsifier for natural and synthetic waxes
liquid	Emulsifier for natural oils / triglycerides
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Low-foaming and extremely fast wetting surfactant
liquid	Low-foaming and wetting surfactant for applications at 20 °C
liquid	Extremely low-foaming surfactant for applications at 20 °C
liquid	Improves lathering power, foam stability and structure, increases viscosity of formulation
flakes	Improves lathering power, foam stability and structure, increases viscosity of formulation
liquid	Improves lathering power and viscosity
liquid	Anionic surfactant, exceptionally mild to the skin, stable foam with fine bubbles, excellent rinsability

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>SULFETAL</b>			
SULFETAL 4069	Sodium alkyl (C8-C10) sulfate	43	10.5 (10 % in water)
SULFETAL 4105	Sodium 2-ethylhexyl sulfate	43	9 (10 % in water)
SULFETAL KT 400	Triethanol ammonium fatty alcohol sulfate	43	7.5 (10 % in water)
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27–70	7–9 (10 % in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27–40	11–11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5–7.5 (10 % in water)
<b>SYNTRAN®</b>			
SYNTRAN® 1560E	Alkali-solubilised modified acrylic copolymer	25	7.2 (original)
SYNTRAN® 1671	Bimodal, non-metal-bound modified acrylic copolymer	40	8.8 (original)
SYNTRAN® 1950 *	Non-metal-bound, water-based styrene acrylate copolymer	40	7.5 (original)
SYNTRAN® 4001C	Blend of polymers and surfactants	32	7.0–7.5 (original)
SYNTRAN® 4002C	Blend of polymers and surfactants	22	7.0–7.5 (original)
SYNTRAN® 4015 *	Modified polymer solution	30	7.5 (original)
SYNTRAN® 4020 *	Carboxylated acrylic copolymer	35	6.7 (original)
SYNTRAN® PA1445 *	Grafted wax emulsion	40	9.2 (original)
SYNTRAN® WE1401	Ethylene copolymer emulsion	35	9.5 (original)
<b>TRIUMPHNETZER</b>			
TRIUMPHNETZER ZSG *	Sulfosuccinic acid diisooctyl ester, sodium salt	67	5 (1% in water)
<b>TURKEY RED OIL</b>			
TURKEY RED OIL	Sodium sulfuricinate	82	7.5 (10 % in water)
<b>WAXEMULSION</b>			
WAXEMULSION 1864	Nonionic carnauba wax emulsion	20	4 (10 % in water)
<b>ZETESECO</b>			
ZETESECO HS 100	Disodium capryloyl glutamate	30	10 (original)
ZETESECO HS 200	Disodium cocoyl glutamate / sodium cocoyl glutamate	25	7 (original)
ZETESECO HS 300	Disodium cocoyl glutamate	25	10 (original)
<b>ZETESOL</b>			
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1% in water)
<b>ZUSOLAT</b>			
ZUSOLAT 1004	Fatty alcohol with 4 moles EO	100	6 (10 % in water)
ZUSOLAT 1005/85	Fatty alcohol with 5 moles EO	85	6 (10 % in water)
ZUSOLAT 1608/85	Fatty alcohol with 8 moles EO	85	6 (10 % in water)
<b>ZUTELAN</b>			
ZUTELAN GL 124	Alkyl polyglucoside	60	12 (original)
ZUTELAN GL 810	Alkyl polyglucoside	50	12 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	High-foaming and hydrotropic surfactant
liquid	Low-foaming and hydrotropic surfactant
liquid	High-foaming surfactant
liquid	Foaming surfactant for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in two different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in two different concentrations
liquid	Good solubility in hard water, stable foam
liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Binder for permanent sealers
liquid	Binder for household floor polishes
liquid	Concentrate for carpet shampoos
liquid	Concentrate for spray-extraction cleaners for carpets
liquid	Cleaning booster, soil-suspending agent for carpet cleaners
liquid	Embrittling agent for milky carpet cleaners
liquid	Wax for floor polishes with a high coefficient of friction and good high-speed buffing response
liquid	Wax for floor polishes with very good mechanical resistance
liquid	Excellent wetting agent
liquid	Natural, solubilising surfactant
liquid	Emulsion of carnauba wax for cleaning and caring applications
liquid	Natural, low-foaming and hydrotropic and odour-preventing surfactant
liquid	Natural, foaming and hydrotropic surfactant with low salt content
liquid	Natural, foaming and hydrotropic surfactant
liquid	High-foaming surfactant with enhanced solvent compatibility
liquid	Medium-foaming, degreasing and fast wetting surfactant
liquid	Medium-foaming, degreasing and well-wetting surfactant
liquid	Medium-foaming, wetting and excellently degreasing surfactant
liquid	Natural, high-foaming, wetting and degreasing surfactant
liquid	Natural, medium-foaming, wetting and degreasing surfactant



# HARD SURFACES

Surface cleaning includes all types of hard surfaces, such as plastic and wood surfaces or furniture. These need to be cleaned in the private home as well as in professional and industrial areas. The specific requirements that must be met by cleaning agents are as diverse as the surfaces themselves.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AMPHOTENSID</b>			
AMPHOTENSID AB	Coco-betaine	30	5–8 (original)
AMPHOTENSID B *	Cocamidopropyl betaine	30–40	5 (original)
AMPHOTENSID CCF	Alkyliminodipropionate, sodium salt	40	8 (original)
AMPHOTENSID D 1	N-alkylamino acid triethanol ammonium salt	40	8.5 (original)
AMPHOTENSID DMOX	Lauramine oxide	30	8 (original)
<b>AUTOPOON</b>			
AUTOPOON 4012	Blend of cationic surfactant and solvents	100	3 (10 % in water)
<b>CUBLEN</b>			
CUBLEN A 4015	ATMP: amino tris(methylene phosphonic acid), Na5-salt	29	10 (1% in water)
CUBLEN AP 1	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN AP 5	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN BIT 721	Proprietary mixture of organophosphonic acids, sodium salts	35	10 (1% in water)
CUBLEN CAP 364	Phosphonate based on natural, renewable raw material	26	7 (1% in water)
CUBLEN D 3217 N	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 3217 S	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 4217	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	32	7 (1% in water)
CUBLEN D 5012	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-salt	51	2 (1% in water)
CUBLEN D 5113	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-3-salt	44	2–3 (1% in water)
CUBLEN D 900 GR	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	> 80	1–2 (1% in water)
CUBLEN E 3115	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Na5-salt	25	7 (1% in water)

\* Different grades available

PHYSICAL FORM  
[AT 20 °C]

## FUNCTIONS AND PROPERTIES

liquid	Mild co-surfactant, improves foam stability
liquid	Mild co-surfactant with excellent foaming power and stability
liquid	High-foaming and hydrotropic surfactant
liquid	High-foaming and extremely stable surfactant
liquid	High and stable foam volume; adds viscosity to hypochlorite or active oxygen cleaners; cationic at acidic/neutral pH, nonionic at pH > 8
liquid	Hydrophobic rinsing agent
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Peroxide-stabilising agent with low chloride content; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Unique and synergistic mixture which provides benefits in the stabilisation of water hardness, effective peroxide bleaching, stain and spot removal as well as corrosion inhibition on steel
liquid	Chloride- and alkaline-free, based on raw material with natural, vegetable origin; surface-active properties especially in pH-neutral formulations; strong hydrotropic effect; easily introduced into O/W-emulsions; effective corrosion inhibition on steel and aluminium; readily biodegradable with a degradation rate of 70% according to OECD 301 F
liquid	Outstanding coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding light-coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition unalloyed and high-grade steel
liquid	Highly concentrated, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
granules	Highly concentrated and purified solid, free from stabilising materials and typical impurities, low hygroscopicity, easy to handle; outstanding scale inhibitor, prevents the precipitation of hardly soluble alkaline earth salts, very calcium-tolerant, highest complex stability in alkaline formulations; stabilising agent for hydrogen peroxide
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>CUBLEN</b>			
CUBLEN ED 351	Proprietary mixture of sodium salts of amino methylene phosphonic acids	33	7 (1% in water)
CUBLEN F 3016	HDTMP: hexamethylenediamine tetra(methylene phosphonic acid), Na6-salt	24	6 (1% in water)
CUBLEN K 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN K 60	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN KT 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN KT 600	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN P 4014	PBTC: 2-phosphonobutane-1,2,4-tricarboxylic acid, Na4-salt	30	8 (1% in water)
CUBLEN P 50	PBTC: 2-Phosphonobutane-1,2,4-tricarboxylic acid	50	1–2 (1% in water)
<b>FLEROGUM</b>			
FLEROGUM K 38	Potassium cocoate	30	10–12 (10% in water)
FLEROGUM LX	Potassium laurate	30	10–12 (10% in water)
FLEROGUM O 24 *	Potassium oleate	20	10–12 (10% in water)
<b>LUMOROL</b>			
LUMOROL 4192 M	Combination of anionic and nonionic surfactants and soap	52	10 (10% in water)
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10% in water)
LUMOROL HSC	Blend of anionic and nonionic surfactants and soap	50	8.5–9.5 (10% in water)
LUMOROL RK	Combination of anionic and amphoteric surfactants	28	6 (original)
<b>MULSIFAN</b>			
MULSIFAN K 326	Combination of anionic and nonionic surfactants	86	6 (10% in water)
MULSIFAN RT 1	Fatty acid polyglycol ester	100	6 (10% in water)
MULSIFAN RT 11	Fatty alcohol polyglycol ether	100	6 (10% in water)
MULSIFAN RT 110	Mixture of fatty alcohol polyglycol ethers	100	6 (10% in water)
MULSIFAN RT 133	Fatty alcohol polyglycol ether	100	6 (10% in water)
MULSIFAN RT 163	Ethoxylated triglyceride	100	8 (10% in water)
MULSIFAN RT 203/80	Fatty alcohol polyglycol ether	80	6 (10% in water)
MULSIFAN RT 24	Fatty alcohol polyglycol ether	100	6 (10% in water)
MULSIFAN RT 269	Fatty alcohol polyglycol ether	100	6 (10% in water)
MULSIFAN RT 38	Fatty alcohol polyglycol ether	100	6 (10% in water)
MULSIFAN RT 410 G	Combination of fatty alcohol polyalkylene glycol ethers and fatty acid ester	96	7 (10% in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**



liquid	Inhibits both the precipitation and encrustation of hardly soluble salts of alkaline earth metals in substoichiometric amounts, excellent complexing behaviour; stabilising agent for hydrogen peroxide under neutral and alkaline conditions; corrosion inhibition on both unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, especially calcium sulfate
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Similar to Cublen K 3014 but with non-preferential origin; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Soap; also used to control the formation of foam in some formulations (e.g. to prevent overfoaming in washing machine)
liquid	Soap; selecting LX instead of K 38 is advised in case a substance is present to which LX is more stable, for example chlorine
liquid	Soap; different origin from LX and K 38, not based on palm oil
liquid	Concentrated surfactant blend with soap for cleaning formulations
flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
viscous/pasty liquid	Surfactant blend specifically designed for hard-surface cleaning formulations
liquid	Surfactant blend for mild cleaning formulations
liquid	Emulsifier for solvents and the formulation of cold cleaners
liquid	Emulsifier for mineral oils
wax	Emulsifier for fatty acids and fatty alcohols
wax	Emulsifier for paraffins and micro paraffin waxes
wax	Emulsifier for natural and synthetic waxes
liquid	Emulsifier for natural oils / triglycerides
liquid	Solubiliser for perfumes and essential oils
liquid	Emulsifier for white oils and paraffin oils
liquid	Co-emulsifier for microemulsions; thickener
liquid	Emulsifier for silicone oil
liquid	Emulsifier for hydrocarbon solvents

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>OXETAL</b>			
OXETAL ID 104	Fatty alcohol with 4 moles EO	100	6 (10 % in water)
<b>PHOSFETAL</b>			
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	100	1.5 (1% in water)
<b>PROPETAL</b>			
PROPETAL 105	Alkyl polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 120	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 220	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
<b>PURTON</b>			
PURTON CFD	Coconut fatty acid diethanolamide	85	9–11 (1% in water)
PURTON CFM/F	Coconut fatty acid monoethanolamide	85	n/a
PURTON SFD	Soybean oil fatty acid diethanolamide	87	8.5–11 (1% in water)
<b>SULFETAL</b>			
SULFETAL 4069	Sodium alkyl (C8-C10) sulfate	43	10.5 (10 % in water)
SULFETAL 4105	Sodium 2-ethylhexyl sulfate	43	9 (10 % in water)
SULFETAL KT 400	Triethanol ammonium fatty alcohol sulfate	43	7.5 (10 % in water)
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27–70	7–9 (10 % in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27–40	11–11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5–7.5 (10 % in water)
SULFETAL ZN	Zinc coco-sulfate	30	4 (original)
<b>SYNTRAN®</b>			
SYNTRAN® 1560E	Alkali-solubilised modified acrylic copolymer	25	7.2 (original)
SYNTRAN® PA1445 *	Grafted wax emulsion	40	9.2 (original)
<b>TREOSAL</b>			
TREOSAL 288	Ethoxylated olive oil	100	6 (10 % in water)
TREOSAL 401	Ethoxylated coconut oil	100	6 (10 % in water)
<b>TRIUMPHNETZER</b>			
TRIUMPHNETZER ZSG *	Sulfosuccinic acid diisooctyl ester, sodium salt	67	5 (1% in water)
<b>TURKEY RED OIL</b>			
TURKEY RED OIL	Sodium sulforicinoleate	82	7.5 (10 % in water)
<b>WAXEMULSION</b>			
WAXEMULSION 1864	Nonionic carnauba wax emulsion	20	4 (10 % in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**



liquid	Extremely fast wetting surfactant, especially suitable for metal surfaces
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Low-foaming and extremely fast wetting surfactant
liquid	Low-foaming and wetting surfactant for applications at 20 °C
liquid	Extremely low-foaming surfactant for applications at 20 °C
liquid	Improves lathering power, foam stability and structure, increases viscosity of formulation
flakes	Improves lathering power, foam stability and structure, increases viscosity of formulation
liquid	Improves lathering power and viscosity
liquid	High-foaming and hydrotropic surfactant
liquid	Low-foaming and hydrotropic surfactant
liquid	High-foaming surfactant
liquid	Foaming surfactant for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in two different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in two different concentrations
liquid	Good solubility in hard water, stable foam
liquid	Anionic surfactant, suitable for washing-up liquids due to its mildness on the skin; has anti-bacterial properties and can thus be used for deep cleaning
liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Wax for floor polishes with a high coefficient of friction and good high-speed buffing response
liquid	Mild solubiliser for essential oils and triglycerides
liquid	Mild solubiliser for essential oils and triglycerides
liquid	Excellent wetting agent
liquid	Natural, solubilising surfactant
liquid	Emulsion of carnauba wax for cleaning and caring applications

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>ZETESECO</b>			
ZETESECO HS 100	Disodium capryloyl glutamate	30	10 (original)
ZETESECO HS 200	Disodium cocoyl glutamate / sodium cocoyl glutamate	25	7 (original)
ZETESECO HS 300	Disodium cocoyl glutamate	25	10 (original)
<b>ZETESOL</b>			
ZETESOL 270/N	Sodium laureth sulfate	68	6–10 (10% in water)
ZETESOL 370/N *	Sodium laureth sulfate	68	6–10 (10% in water) 11–13 (10% in water)
ZETESOL AN 27	Sodium laureth sulfate	27	10-11.5 (original)
ZETESOL AN/70	Sodium laureth sulfate	70	10–12 (10% in water)
ZETESOL LES 11/7	Sodium undeceth-7 sulfate	27	6–8 (1% in water)
ZETESOL LES 117 HC	Sodium undeceth-7 sulfate	80	10.5–12.5 (10% in water)
ZETESOL LES 2 *	Sodium coceth sulfate	27	10.8–11.5 (original)
ZETESOL LES 3/SL	Sodium coceth sulfate	27	10.8–11.6 (original)
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1% in water)
<b>ZUSOLAT</b>			
ZUSOLAT 1004	Fatty alcohol with 4 moles EO	100	6 (10% in water)
ZUSOLAT 1005/85	Fatty alcohol with 5 moles EO	85	6 (10% in water)
ZUSOLAT 1608/85	Fatty alcohol with 8 moles EO	85	6 (10% in water)
<b>ZUTELAN</b>			
ZUTELAN GL 124	Alkyl polyglucoside	60	12 (original)
ZUTELAN GL 810	Alkyl polyglucoside	50	12 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	Natural, low-foaming, hydrotropic and odour-preventing surfactant
liquid	Natural, foaming and hydrotropic surfactant with low salt content
liquid	Natural, foaming and hydrotropic surfactant
flowable paste	High-foaming surfactant suitable for many different applications, stable in hard water
paste	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	Excellent performance in hard water, possible alternative to alkylbenzene sulfonate in detergency for its less aggressive profile (for example in washing-up liquids)
flowable paste	Excellent performance in hard water, possible alternative to alkylbenzene sulfonate in detergency for its less aggressive profile (for example in washing-up liquids)
liquid	Anionic surfactant; tolerates hard water and cationic surfactants
viscous liquid	Highly concentrated anionic surfactant; tolerates hard water and cationic surfactants, allows the formulation of highly concentrated products with low viscosity
liquid	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	High-foaming surfactant with enhanced solvent compatibility
liquid	Medium-foaming, degreasing and fast wetting surfactant
liquid	Medium-foaming, degreasing and well-wetting surfactant
liquid	Medium-foaming, wetting and excellently degreasing surfactant
liquid	Natural, high-foaming, wetting and degreasing surfactant
liquid	Natural, medium-foaming, wetting and degreasing surfactant



# GLASS

At home, glass surfaces can be found practically everywhere – from windows to mirrors to the oven door. Cleaning them is supposed to be a quick affair with a streak-free finish. If desired, the cleaning agent can provide specific properties such as antistatic or anti-fogging effects.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AMPHOTENSID</b>			
AMPHOTENSID D 1	N-alkylamino acid triethanol ammonium salt	40	8.5 (original)
<b>AUTOPOON</b>			
AUTOPOON 4012	Blend of cationic surfactant and solvents	100	3 (10 % in water)
<b>CUBLEN</b>			
CUBLEN R 60	HEMPA: hydroxyethylamino bis(methylene phosphonic acid)	60	1–2 (1% in water)
<b>LUMOROL</b>			
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10 % in water)
LUMOROL RK	Combination of anionic and amphoteric surfactants	28	6 (original)
<b>OXETAL</b>			
OXETAL ID 104	Fatty alcohol with 4 moles EO	100	6 (10 % in water)
<b>PHOSFETAL</b>			
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	100	1.5 (1% in water)
<b>PROPETAL</b>			
PROPETAL 105	Alkyl polyalkylene glycol ether	100	6 (10 % in water)
<b>PROTELAN</b>			
PROTELAN 1430	Sodium myristoyl sarcosinate	30	9–10 (original)
PROTELAN LS 9011 *	Sodium lauroyl sarcosinate	30	9.5–11 (original)
<b>PURTON</b>			
PURTON CFD	Coconut fatty acid diethanolamide	85	9–11 (1% in water)
PURTON CFM/F	Coconut fatty acid monoethanolamide	85	n/a
PURTON SFD	Soybean oil fatty acid diethanolamide	87	8.5–11 (1% in water)
<b>SULFETAL</b>			
SULFETAL 4105	Sodium 2-ethylhexyl sulfate	43	9 (10 % in water)
SULFETAL KT 400	Triethanol ammonium fatty alcohol sulfate	43	7.5 (10 % in water)
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27–70	7–9 (10 % in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27–40	11–11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5–7.5 (10 % in water)

\* Different grades available


**PHYSICAL FORM**  
 [AT 20 °C]

**FUNCTIONS AND PROPERTIES**

liquid	High-foaming and extremely stable surfactant
liquid	Hydrophobic rinsing agent
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale under weakly alkaline conditions, improves the hydrophilicity of surfaces and rinsing properties
flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
liquid	Surfactant blend for mild cleaning formulations
liquid	Extremely fast wetting surfactant, especially suitable for metal surfaces
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Low-foaming and extremely fast wetting surfactant
liquid	Mild surfactant, excellently foaming, hydrotrope, slight anti-corrosion properties
liquid	Mild surfactant, excellently foaming, hydrotrope, slight anti-corrosion properties
liquid	Improves lathering power, foam stability and structure, increases viscosity of formulation
flakes	Improves lathering power, foam stability and structure, increases viscosity of formulation
liquid	Improves lathering power and viscosity
liquid	Low-foaming and hydrotropic surfactant
liquid	High-foaming surfactant
liquid	Foaming surfactant for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in two different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in two different concentrations
liquid	Good solubility in hard water, stable foam

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>SYNTRAN®</b>			
SYNTRAN® 1501	Alkali-solubilised modified acrylic copolymer	25	8.2 (original)
SYNTRAN® 1555	Alkali-solubilised modified acrylic copolymer	25	8.0 (original)
SYNTRAN® 1560E	Alkali-solubilised modified acrylic copolymer	25	7.2 (original)
<b>TRIUMPHNETZER</b>			
TRIUMPHNETZER ZSG *	Sulfosuccinic acid diisooctyl ester, sodium salt	67	5 (1% in water)
<b>ZETESECO</b>			
ZETESECO HS 200	Disodium cocoyl glutamate / sodium cocoyl glutamate	25	7 (original)
<b>ZETESOL</b>			
ZETESOL LA	Ammonium laureth sulfate	25	6–7 (10% in water)
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1% in water)
<b>ZUSOLAT</b>			
ZUSOLAT 1004	Fatty alcohol with 4 moles EO	100	6 (10% in water)
ZUSOLAT 1608/85	Fatty alcohol with 8 moles EO	85	6 (10% in water)
<b>ZUTELAN</b>			
ZUTELAN GL 124	Alkyl polyglucoside	60	12 (original)
ZUTELAN GL 810	Alkyl polyglucoside	50	12 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Excellent wetting agent
liquid	Natural, foaming and hydrotropic surfactant with low salt content
liquid	Suitable for delicate laundry/dishes; to be used only in formulations with pH < 8.5
liquid	High-foaming surfactant with enhanced solvent compatibility
liquid	Medium-foaming, degreasing and fast wetting surfactant
liquid	Medium-foaming, wetting and excellently degreasing surfactant
liquid	Natural, high-foaming, wetting and degreasing surfactant
liquid	Natural, medium-foaming, wetting and degreasing surfactant



# TEXTILES

The textiles available on the market are just as diverse as the personal preferences of the individuals wearing them. Their cleaning must perfectly match the specific material because a delicate silk scarf cannot be washed with the same detergent as a robust terry towel.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AMPHOTENSID</b>			
AMPHOTENSID AB	Coco-betaine	30	5–8 (original)
AMPHOTENSID B *	Cocamidopropyl betaine	30–40	5 (original)
AMPHOTENSID CCF	Alkyliminodipropionate, sodium salt	40	8 (original)
AMPHOTENSID DMOX	Lauramine oxide	30	8 (original)
AMPHOTENSID EH	Sodium salt of a short-chained alkylamine carboxylate	40	8 (original)
AMPHOTENSID HPOX	Amines, C12-18(even numbered)-alkyl dimethyl, N-oxides	30	6–9 (original)
<b>CONTRASPUM</b>			
CONTRASPUM 300	Alkyl polyalkylene glycol ether	100	4 (10% in water)
<b>CUBLEN</b>			
CUBLEN A 4015	ATMP: amino tris(methylene phosphonic acid), Na5-salt	29	10 (1% in water)
CUBLEN AP 5	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN BIT 721	Proprietary mixture of organophosphonic acids, sodium salts	35	10 (1% in water)
CUBLEN D 3217 N	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 3217 S	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 4217	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	32	7 (1% in water)
CUBLEN D 5012	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-salt	51	2 (1% in water)
CUBLEN D 5113	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-3-salt	44	2–3 (1% in water)
CUBLEN D 900 GR	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	> 80	1–2 (1% in water)
CUBLEN E 3115	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Na5-salt	25	7 (1% in water)
CUBLEN E 34135 P	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Ca5-Na6-salt, granules	34	12 (1% in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]****FUNCTIONS AND PROPERTIES**

liquid	Mild co-surfactant, improves foam stability
liquid	Mild co-surfactant with excellent foaming power and stability
liquid	High-foaming and hydrotropic surfactant
liquid	High and stable foam volume; adds viscosity to hypochlorite or active oxygen cleaners; cationic at acidic/neutral pH, nonionic at pH > 8.
liquid	Low-foaming and hydrotropic surfactant
liquid	High and stable foam volume; adds viscosity to both hydrogen peroxide and hypochlorite cleaners
liquid	Defoamer for aqueous systems
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Unique and synergistic mixture which provides benefits in the stabilisation of water hardness, effective peroxide bleaching, stain and spot removal as well as corrosion inhibition on steel
liquid	Outstanding coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding light-coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition unalloyed and high-grade steel
liquid	Highly concentrated, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts: peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
granules	Highly concentrated and purified solid, free from stabilising materials and typical impurities, low hygroscopicity, easy to handle; outstanding scale inhibitor, prevents the precipitation of hardly soluble alkaline earth salts, very calcium-tolerant, highest complex stability in alkaline formulations; stabilising agent for hydrogen peroxide
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
granules	Regular granular structure; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent, retarded dissolution in water

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>CUBLEN</b>			
CUBLEN ED 351	Proprietary mixture of sodium salts of amino methylene phosphonic acids	33	7 (1% in water)
CUBLEN K 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na <sub>4</sub> -salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN K 60	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN K 8514 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na <sub>4</sub> -salt (tetrasodium etidronate)	60	12 (1% in water)
CUBLEN K 9012 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na <sub>2</sub> -salt (disodium etidronate)	81	5 (1% in water)
CUBLEN KT 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na <sub>4</sub> -salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN KT 600	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN P 4014	PBTC: 2-phosphonobutane-1,2,4-tricarboxylic acid, Na <sub>4</sub> -salt	30	8 (1% in water)
CUBLEN P 50	PBTC: 2-Phosphonobutane-1,2,4-tricarboxylic acid	50	1–2 (1% in water)
<b>FLEROGUM</b>			
FLEROGUM K 38	Potassium cocoate	30	10–12 (10% in water)
FLEROGUM LX	Potassium laurate	30	10–12 (10% in water)
FLEROGUM O 24 *	Potassium oleate	20	10–12 (10% in water)
<b>LUMOROL</b>			
LUMOROL 4192 M	Combination of anionic and nonionic surfactants and soap	52	10 (10% in water)
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10% in water)
LUMOROL 54/SPEZIAL	Blend of anionic and nonionic surfactants	54	7–8 (10% in water)
LUMOROL FMO *	Blend of anionic and nonionic surfactants and soap	40–55	7.5 (original) 11–11.5 (original)
LUMOROL RK	Combination of anionic and amphoteric surfactants	28	6 (original)
<b>MULSIFAN</b>			
MULSIFAN K 326	Combination of anionic and nonionic surfactants	86	6 (10% in water)
MULSIFAN RT 133	Fatty alcohol polyglycol ether	100	6 (10% in water)
MULSIFAN RT 163	Ethoxylated triglyceride	100	8 (10% in water)
MULSIFAN RT 203/80	Fatty alcohol polyglycol ether	80	6 (10% in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	Inhibits both the precipitation and encrustation of hardly soluble salts of alkaline earth metals in substoichiometric amounts, excellent complexing behaviour; stabilising agent for hydrogen peroxide under neutral and alkaline conditions; corrosion inhibition on both unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Regular granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Unique granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Similar to Cublen K 3014 but with non-preferential origin; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Soap; also used to control the formation of foam in some formulations (e.g. to prevent overfoaming in washing machine)
liquid	Soap; selecting LX instead of K 38 is advised in case a substance is present to which LX is more stable, for example chlorine
liquid	Soap; different origin from LX and K 38, not based on palm oil
liquid	Concentrated surfactant blend with soap for cleaning formulations
flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
viscous liquid	Surfactant blend for laundry detergents for hand washing
viscous liquid	Surfactant blend specifically designed for laundry formulations
liquid	Surfactant blend for mild cleaning formulations
liquid	Emulsifier for solvents and the formulation of cold cleaners
wax	Emulsifier for natural and synthetic waxes
liquid	Emulsifier for natural oils / triglycerides
liquid	Solubiliser for perfumes and essential oils



PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>PHOSFETAL</b>			
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	100	1.5 (1% in water)
<b>PROPETAL</b>			
PROPETAL 105	Alkyl polyalkylene glycol ether	100	6 (10% in water)
PROPETAL 140	Fatty alcohol polyalkylene glycol ether	100	6 (10% in water)
PROPETAL 160	Fatty alcohol polyalkylene glycol ether	100	6 (10% in water)
PROPETAL 220	Fatty alcohol polyalkylene glycol ether	100	6 (10% in water)
<b>PROTELAN</b>			
PROTELAN VE/K NP	Sodium cocoyl hydrolysed wheat protein and disodium cocoyl glutamate	30	9–10 (original)
<b>PURTON</b>			
PURTON CFD	Coconut fatty acid diethanolamide	85	9–11 (1% in water)
PURTON CFM/F	Coconut fatty acid monoethanolamide	85	n/a
PURTON SFD	Soybean oil fatty acid diethanolamide	87	8.5–11 (1% in water)
<b>SETACIN</b>			
SETACIN 103 *	Disodium laureth sulfosuccinate	38	6.5–7.5 (10% in water)
<b>SULFETAL</b>			
SULFETAL 4069	Sodium alkyl (C8-C10) sulfate	43	10.5 (10% in water)
SULFETAL 4105	Sodium 2-ethylhexyl sulfate	43	9 (10% in water)
SULFETAL KT 400	Triethanol ammonium fatty alcohol sulfate	43	7.5 (10% in water)
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27–70	7–9 (10% in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27–40	11–11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5–7.5 (10% in water)
<b>TREOSAL</b>			
TREOSAL 288	Ethoxylated olive oil	100	6 (10% in water)
TREOSAL 401	Ethoxylated coconut oil	100	6 (10% in water)
TREOSAL HE	PEG-7 glyceryl cocoate	100	5.7–7.3 (10% in water)
<b>TRIUMPHNETZER</b>			
TRIUMPHNETZER ZSG *	Sulfosuccinic acid diisooctyl ester, sodium salt	67	5 (1% in water)
<b>TURKEY RED OIL</b>			
TURKEY RED OIL	Sodium sulforicinoleate	82	7.5 (10% in water)
<b>ZETESECO</b>			
ZETESECO HS 100	Disodium capryloyl glutamate	30	10 (original)
ZETESECO HS 200	Disodium cocoyl glutamate / sodium cocoyl glutamate	25	7 (original)
ZETESECO HS 300	Disodium cocoyl glutamate	25	10 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Low-foaming and extremely fast wetting surfactant
liquid	Low-foaming and wetting surfactant for applications at 40 °C
liquid	Low-foaming and wetting surfactant for applications at 60 °C
liquid	Extremely low-foaming surfactant for applications at 20 °C
liquid	Mild anionic surfactant, useful for delicate laundry (also hand wash) and for pet shampoos
liquid	Improves lathering power, foam stability and structure, increases viscosity of formulation
flakes	Improves lathering power, foam stability and structure, increases viscosity of formulation
liquid	Improves lathering power and viscosity
liquid	Anionic surfactant, exceptionally mild to the skin, stable foam with fine bubbles, excellent rinsability
liquid	High-foaming and hydrotropic surfactant
liquid	Low-foaming and hydrotropic surfactant
liquid	High-foaming surfactant
liquid	Foaming surfactant for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in two different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in two different concentrations
liquid	Good solubility in hard water, stable foam
liquid	Mild solubiliser for essential oils and triglycerides
liquid	Mild solubiliser for essential oils and triglycerides
liquid	Nonionic surfactant to be used in no-label detergents, baby clothes care, pet care etc.
liquid	Excellent wetting agent
liquid	Natural, solubilising surfactant
liquid	Natural, low-foaming, hydrotropic and odour-preventing surfactant
liquid	Natural, foaming and hydrotropic surfactant with low salt content
liquid	Natural, foaming and hydrotropic surfactant



PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>ZETESOL</b>			
ZETESOL 270/N	Sodium laureth sulfate	68	6–10 (10% in water)
ZETESOL 370/N *	Sodium laureth sulfate	68	6–10 (10% in water) 11–13 (10% in water)
ZETESOL AN 27	Sodium laureth sulfate	27	10-11.5 (original)
ZETESOL AN/70	Sodium laureth sulfate	70	10–12 (10% in water)
ZETESOL LES 11/7	Sodium undeceth-7 sulfate	27	6–8 (1% in water)
ZETESOL LES 117 HC	Sodium undeceth-7 sulfate	80	10.5–12.5 (10% in water)
ZETESOL LES 2 *	Sodium coceth sulfate	27	10.8–11.5 (original)
ZETESOL LES 3/SL	Sodium coceth sulfate	27	10.8–11.6 (original)
ZETESOL LME	Monoethanol ammonium laureth sulfate	27	7–8 (10% in water)
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1% in water)
ZETESOL ZN	Zinc coceth sulfate	23.5	3.5–4.5 (original)
<b>ZUSOLAT</b>			
ZUSOLAT 1004	Fatty alcohol with 4 moles EO	100	6 (10% in water)
ZUSOLAT 1005/85	Fatty alcohol with 5 moles EO	85	6 (10% in water)
ZUSOLAT 1608/85	Fatty alcohol with 8 moles EO	85	6 (10% in water)
<b>ZUTELAN</b>			
ZUTELAN GL 124	Alkyl polyglucoside	60	12 (original)
ZUTELAN GL 810	Alkyl polyglucoside	50	12 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

flowable paste	High-foaming surfactant suitable for many different applications, stable in hard water
paste	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	Excellent performance in hard water, possible alternative to alkylbenzene sulfonate in detergency for its less aggressive profile (for example in washing-up liquids)
flowable paste	Excellent performance in hard water, possible alternative to alkylbenzene sulfonate in detergency for its less aggressive profile (for example in washing-up liquids)
liquid	Anionic surfactant; tolerates hard water and cationic surfactants
viscous liquid	Highly concentrated anionic surfactant; tolerates hard water and cationic surfactants, allows the formulation of highly concentrated products with low viscosity
liquid	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	Suitable for delicate laundry/dishes
liquid	High-foaming surfactant with enhanced solvent compatibility
liquid	Anionic surfactant, can be also used in dual-purpose products (like "hand /dish") thanks to its mildness and anti-bacterial properties; must be used in a pH range between 4 and 8
liquid	Medium-foaming, degreasing and fast wetting surfactant
liquid	Medium-foaming, degreasing and well-wetting surfactant
liquid	Medium-foaming, wetting and excellently degreasing surfactant
liquid	Natural, high-foaming, wetting and degreasing surfactant
liquid	Natural, medium-foaming, wetting and degreasing surfactant



# SANITARY

In contrast to most other cleaning agents, sanitary cleaners have an acidic pH value that allows them to effectively remove specific types of soiling like rust or limescale. Anti-corrosion agents can effectively protect metals against the effects of acidic cleaning agents.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AMPHOTENSID</b>			
AMPHOTENSID AB	Coco-betaine	30	5–8 (original)
AMPHOTENSID B *	Cocamidopropyl betaine	30–40	5 (original)
AMPHOTENSID CCF	Alkyliminodipropionate, sodium salt	40	8 (original)
AMPHOTENSID D 1	N-alkylamino acid triethanol ammonium salt	40	8.5 (original)
AMPHOTENSID DMOX	Lauramine oxide	30	8 (original)
AMPHOTENSID EH	Sodium salt of a short-chained alkylamine carboxylate	40	8 (original)
AMPHOTENSID HPOX	Amines, C12-18(even numbered)-alkyl dimethyl, N-oxides	30	6–9 (original)
<b>AUTOPOON</b>			
AUTOPOON 4012	Blend of cationic surfactant and solvents	100	3 (10 % in water)
<b>CUBLEN</b>			
CUBLEN A 4015	ATMP: amino tris(methylene phosphonic acid), Na5-salt	29	10 (1% in water)
CUBLEN ACS 402	Nitriлотris(methylene phosphonic acid)-N-oxide, potassium salt	27	10 (1% in water)
CUBLEN AP 1	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN AP 5	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN BIT 721	Proprietary mixture of organophosphonic acids, sodium salts	35	10 (1% in water)
CUBLEN D 3217 N	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 3217 S	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 4217	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	32	7 (1% in water)
CUBLEN D 5012	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-salt	51	2 (1% in water)
CUBLEN D 5113	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-3-salt	44	2–3 (1% in water)
CUBLEN D 900 GR	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	> 80	1–2 (1% in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]****FUNCTIONS AND PROPERTIES**

liquid	Mild co-surfactant, improves foam stability
liquid	Mild co-surfactant with excellent foaming power and stability
liquid	High-foaming and hydrotropic surfactant
liquid	High-foaming and extremely stable surfactant
liquid	High and stable foam volume; adds viscosity to hypochlorite or active oxygen cleaners; cationic at acidic/neutral pH, nonionic at pH > 8.
liquid	Low-foaming and hydrotropic surfactant
liquid	High and stable foam volume; adds viscosity to both hydrogen peroxide and hypochlorite cleaners
liquid	Hydrophobic rinsing agent
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite; good dispersion, scale inhibition and sequestering properties; excellent solubility in highly alkaline formulations
liquid	Peroxide-stabilising agent with low chloride content; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Unique and synergistic mixture which provides benefits in the stabilisation of water hardness, effective peroxide bleaching, stain and spot removal as well as corrosion inhibition on steel
liquid	Outstanding coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding light-coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition unalloyed and high-grade steel
liquid	Highly concentrated, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
granules	Highly concentrated and purified solid, free from stabilising materials and typical impurities, low hygroscopicity, easy to handle; outstanding scale inhibitor, prevents the precipitation of hardly soluble alkaline earth salts, very calcium-tolerant, highest complex stability in alkaline formulations; stabilising agent for hydrogen peroxide

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>CUBLEN</b>			
CUBLEN DNC 450	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	45	1–2 (1% in water)
CUBLEN E 3115	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Na5-salt	25	7 (1% in water)
CUBLEN E 34135 P	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Ca5-Na6-salt, granules	34	12 (1% in water)
CUBLEN ED 351	Proprietary mixture of sodium salts of amino methylene phosphonic acids	33	7 (1% in water)
CUBLEN K 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN K 60	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN K 8514 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	60	12 (1% in water)
CUBLEN K 9012 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na2-salt (disodium etidronate)	81	5 (1% in water)
CUBLEN KT 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN KT 600	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN P 4014	PBTC: 2-phosphonobutane-1,2,4-tricarboxylic acid, Na4-salt	30	8 (1% in water)
CUBLEN P 50	PBTC: 2-Phosphonobutane-1,2,4-tricarboxylic acid	50	1–2 (1% in water)
<b>FLEROGUM</b>			
FLEROGUM K 38	Potassium cocoate	30	10–12 (10% in water)
FLEROGUM LX	Potassium laurate	30	10–12 (10% in water)
FLEROGUM O 24 *	Potassium oleate	20	10–12 (10% in water)
<b>LUMOROL</b>			
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10% in water)
LUMOROL HSC	Blend of anionic and nonionic surfactants and soap	50	8.5–9.5 (10% in water)
LUMOROL RK	Combination of anionic and amphoteric surfactants	28	6 (original)
<b>MULSIFAN</b>			
MULSIFAN RT 203/80	Fatty alcohol polyglycol ether	80	6 (10% in water)
<b>PHOSFETAL</b>			
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	100	1.5 (1% in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**



liquid	Chloride-free product; excellent universal scaling inhibitor, stabilising agent for hydrogen peroxide
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
granules	Regular granular structure; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent, retarded dissolution in water
liquid	Inhibits both the precipitation and encrustation of hardly soluble salts of alkaline earth metals in substoichiometric amounts, excellent complexing behaviour; stabilising agent for hydrogen peroxide under neutral and alkaline conditions; corrosion inhibition on both unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Regular granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Unique granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Similar to Cublen K 3014 but with non-preferential origin; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Soap; also used to control the formation of foam in some formulations (e.g. to prevent overfoaming in washing machine)
liquid	Soap; selecting LX instead of K 38 is advised in case a substance is present to which LX is more stable, for example chlorine
liquid	Soap; different origin from LX and K 38, not based on palm oil
flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
viscous/pasty liquid	Blend specifically designed for hard-surface cleaning formulations
liquid	Surfactant blend for mild cleaning formulations
liquid	Solubiliser for perfumes and essential oils
liquid	Anionic surfactant with corrosion protection and antistatic effect

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>PROPETAL</b>			
PROPETAL 105	Alkyl polyalkylene glycol ether	100	6 (10 % in water)
<b>SETACIN</b>			
SETACIN 103 *	Disodium laureth sulfosuccinate	38	6.5–7.5 (10 % in water)
<b>SULFETAL</b>			
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27–70	7–9 (10 % in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27–40	11–11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5–7.5 (10 % in water)
<b>TREOSAL</b>			
TREOSAL HE	PEG-7 glyceryl cocoate	100	5.7–7.3 (10 % in water)
<b>ZETESECO</b>			
ZETESECO HS 100	Disodium capryloyl glutamate	30	10 (original)
<b>ZETESOL</b>			
ZETESOL 270/N	Sodium laureth sulfate	68	6–10 (10 % in water)
ZETESOL 370/N *	Sodium laureth sulfate	68	6–10 (10 % in water) 11–13 (10 % in water)
ZETESOL AN 27	Sodium laureth sulfate	27	10–11.5 (original)
ZETESOL AN/70	Sodium laureth sulfate	70	10–12 (10 % in water)
ZETESOL LES 11/7	Sodium undeceth-7 sulfate	27	6–8 (1 % in water)
ZETESOL LES 117 HC	Sodium undeceth-7 sulfate	80	10.5–12.5 (10 % in water)
ZETESOL LES 2 *	Sodium coceth sulfate	27	10.8–11.5 (original)
ZETESOL LES 3/SL	Sodium coceth sulfate	27	10.8–11.6 (original)
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1 % in water)
<b>ZUSOLAT</b>			
ZUSOLAT 1004	Fatty alcohol with 4 moles EO	100	6 (10 % in water)
ZUSOLAT 1005/85	Fatty alcohol with 5 moles EO	85	6 (10 % in water)
ZUSOLAT 1608/85	Fatty alcohol with 8 moles EO	85	6 (10 % in water)
<b>ZUTELAN</b>			
ZUTELAN GL 124	Alkyl polyglucoside	60	12 (original)
ZUTELAN GL 810	Alkyl polyglucoside	50	12 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	Low-foaming and extremely fast wetting surfactant
liquid	Anionic surfactant, exceptionally mild to the skin, stable foam with fine bubbles, excellent rinsability
liquid	Foaming surfactant for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in two different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in two different concentrations
liquid	Good solubility in hard water, stable foam
liquid	Nonionic surfactant to be used in no-label detergents, baby clothes care, pet care etc.
liquid	Natural, low-foaming, hydrotropic and odour-preventing surfactant
flowable paste	High-foaming surfactant suitable for many different applications, stable in hard water
paste	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	Excellent performance in hard water, possible alternative to alkylbenzene sulfonate in detergency for its less aggressive profile (for example in washing-up liquids)
flowable paste	Excellent performance in hard water, possible alternative to alkylbenzene sulfonate in detergency for its less aggressive profile (for example in washing-up liquids)
liquid	Anionic surfactant; tolerates hard water and cationic surfactants
viscous liquid	Highly concentrated anionic surfactant; tolerates hard water and cationic surfactants, allows the formulation of highly concentrated products with low viscosity
liquid	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	High-foaming surfactant with enhanced solvent compatibility
liquid	Medium-foaming, degreasing and fast wetting surfactant
liquid	Medium-foaming, degreasing and well-wetting surfactant
liquid	Medium-foaming, wetting and excellently degreasing surfactant
liquid	Natural, high-foaming, wetting and degreasing surfactant
liquid	Natural, medium-foaming, wetting and degreasing surfactant





# INDUSTRIAL AND INSTITUTIONAL

COMMERCIAL  
KITCHEN



FLOORS/  
CARPET



HARD  
SURFACES



SANITARY



FACADE



MANUFACTURING  
AREAS



Products used in the area of professional cleaning, for example in food production facilities, hospitals and public buildings, have to meet higher requirements than household products. The residue-free removal of contaminations is an essential criterion. Zschimmer & Schwarz has developed a wide range of products that can be adapted to individual requirements.

# COMMERCIAL KITCHEN

When it comes to food preparation, hygiene is always the top priority. This is why cleaning the respective rooms and equipment is of utmost importance. From the hygienic and quick cleaning of dishes to the professional degreasing of stoves: the cleaning agents and their application may differ, but they all have to deliver a hygienically clean result.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AMPHOTENSID</b>			
AMPHOTENSID AB	Coco-betaine	30	5–8 (original)
AMPHOTENSID B *	Cocamidopropyl betaine	30–40	5 (original)
AMPHOTENSID CCF	Alkyliminodipropionate, sodium salt	40	8 (original)
AMPHOTENSID D 1	N-alkylamino acid triethanol ammonium salt	40	8.5 (original)
AMPHOTENSID DMOX	Lauramine oxide	30	8 (original)
AMPHOTENSID EH	Sodium salt of a short-chained alkylamine carboxylate	40	8 (original)
AMPHOTENSID HPOX	Amines, C12-18(even numbered)-alkyl dimethyl, N-oxides	30	6–9 (original)
<b>CUBLEN</b>			
CUBLEN A 4015	ATMP: amino tris(methylene phosphonic acid), Na5-salt	29	10 (1% in water)
CUBLEN ACS 402	Nitritotris(methylene phosphonic acid)-N-oxide, potassium salt	27	10 (1% in water)
CUBLEN AP 1	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN AP 5	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN BIT 721	Proprietary mixture of organophosphonic acids, sodium salts	35	10 (1% in water)
CUBLEN D 3217 N	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 3217 S	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 4217	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	32	7 (1% in water)
CUBLEN D 5012	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-salt	51	2 (1% in water)
CUBLEN D 5113	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-3-salt	44	2–3 (1% in water)
CUBLEN D 900 GR	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	> 80	1–2 (1% in water)
CUBLEN E 3115	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Na5-salt	25	7 (1% in water)

\* Different grades available

PHYSICAL FORM  
[AT 20 °C]

## FUNCTIONS AND PROPERTIES

liquid	Mild co-surfactant, improves foam stability
liquid	Mild co-surfactant with excellent foaming power and stability
liquid	High-foaming and hydrotropic surfactant
liquid	High-foaming and extremely stable surfactant
liquid	High and stable foam volume; adds viscosity to hypochlorite or active oxygen cleaners; cationic at acidic/neutral pH, nonionic at pH > 8.
liquid	Low-foaming and hydrotropic surfactant
liquid	High and stable foam volume; adds viscosity to both hydrogen peroxide and hypochlorite cleaners
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite; good dispersion, scale inhibition and sequestering properties; excellent solubility in highly alkaline formulations
liquid	Peroxide-stabilising agent with low chloride content; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Unique and synergistic mixture which provides benefits in the stabilisation of water hardness, effective peroxide bleaching, stain and spot removal as well as corrosion inhibition on steel
liquid	Outstanding coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding light-coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition unalloyed and high-grade steel
liquid	Highly concentrated, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts: peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
granules	Highly concentrated and purified solid, free from stabilising materials and typical impurities, low hygroscopicity, easy to handle; outstanding scale inhibitor, prevents the precipitation of hardly soluble alkaline earth salts, very calcium-tolerant, highest complex stability in alkaline formulations; stabilising agent for hydrogen peroxide
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>CUBLEN</b>			
CUBLEN K 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN K 60	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN K 8514 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	60	12 (1% in water)
CUBLEN KT 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN KT 600	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN P 4014	PBTC: 2-phosphonobutane-1,2,4-tricarboxylic acid, Na4-salt	30	8 (1% in water)
CUBLEN P 50	PBTC: 2-Phosphonobutane-1,2,4-tricarboxylic acid	50	1–2 (1% in water)
CUBLEN R 60	HEMPA: hydroxyethylamino bis(methylene phosphonic acid)	60	1–2 (1% in water)
<b>FLEROGUM</b>			
FLEROGUM K 38	Potassium cocoate	30	10–12 (10% in water)
FLEROGUM LX	Potassium laurate	30	10–12 (10% in water)
FLEROGUM O 24 *	Potassium oleate	20	10–12 (10% in water)
<b>LUMOROL</b>			
LUMOROL 4192 M	Combination of anionic and nonionic surfactants and soap	52	10 (10% in water)
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10% in water)
LUMOROL VC-E 4376	Combination of nonionic surfactants	90	9 (10% in water)
<b>MULSIFAN</b>			
MULSIFAN K 326	Combination of anionic and nonionic surfactants	86	6 (10% in water)
MULSIFAN RT 1	Fatty acid polyglycol ester	100	6 (10% in water)
MULSIFAN RT 11	Fatty alcohol polyglycol ether	100	6 (10% in water)
MULSIFAN RT 163	Ethoxylated triglyceride	100	8 (10% in water)
MULSIFAN RT 24	Fatty alcohol polyglycol ether	100	6 (10% in water)
<b>OXETAL</b>			
OXETAL 500/85	Fatty alcohol with 5 moles EO	85	6 (10% in water)
OXETAL 800/85	Fatty alcohol with 8 moles EO	85	6 (10% in water)
OXETAL ID 104	Fatty alcohol with 4 moles EO	100	6 (10% in water)
<b>PHOSFETAL</b>			
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	100	1.5 (1% in water)
PHOSFETAL 213	Alkyl polyglycol ether phosphate, acid	100	2.5 (1% in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**



liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Regular granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Similar to Cublen K 3014 but with non-preferential origin; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale under weakly alkaline conditions, improves the hydrophilicity of surfaces and rinsing properties
liquid	Soap; also used to control the formation of foam in some formulations (e.g. to prevent overfoaming in washing machine)
liquid	Soap; selecting LX instead of K 38 is advised in case a substance is present to which LX is more stable, for example chlorine
liquid	Soap; different origin from LX and K 38, not based on palm oil
liquid	Concentrated surfactant blend with soap for cleaning formulations
flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
liquid	Surfactant blend for highly efficient and strongly degreasing cleaners
liquid	Emulsifier for solvents and the formulation of cold cleaners
liquid	Emulsifier for mineral oils
wax	Emulsifier for fatty acids and fatty alcohols
liquid	Emulsifier for natural oils / triglycerides
liquid	Emulsifier for white oils and paraffin oils
liquid	Degreasing and fast wetting surfactant
liquid	Strongly degreasing and wetting surfactant
liquid	Extremely fast wetting surfactant, especially suitable for metal surfaces
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Anionic surfactant with corrosion protection and antistatic effect

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>PROPETAL</b>			
PROPETAL 105	Alkyl polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 120	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 140	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 160	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 220	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
<b>PURTON</b>			
PURTON CFD	Coconut fatty acid diethanolamide	85	9–11 (1% in water)
PURTON CFM/F	Coconut fatty acid monoethanolamide	85	n/a
PURTON SFD	Soybean oil fatty acid diethanolamide	87	8.5–11 (1% in water)
<b>SULFETAL</b>			
SULFETAL 4069	Sodium alkyl (C8-C10) sulfate	43	10.5 (10 % in water)
SULFETAL 4105	Sodium 2-ethylhexyl sulfate	43	9 (10 % in water)
SULFETAL KT 400	Triethanol ammonium fatty alcohol sulfate	43	7.5 (10 % in water)
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27–70	7–9 (10 % in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27–40	11–11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5–7.5 (10 % in water)
<b>TRIUMPHNETZER</b>			
TRIUMPHNETZER ZSG *	Sulfosuccinic acid diisooctyl ester, sodium salt	67	5 (1% in water)
<b>TURKEY RED OIL</b>			
TURKEY RED OIL	Sodium sulfuricinate	82	7.5 (10 % in water)
<b>ZETESECO</b>			
ZETESECO HS 100	Disodium capryloyl glutamate	30	10 (original)
ZETESECO HS 200	Disodium cocoyl glutamate / sodium cocoyl glutamate	25	7 (original)
ZETESECO HS 300	Disodium cocoyl glutamate	25	10 (original)
<b>ZETESOL</b>			
ZETESOL 270/N	Sodium laureth sulfate	68	6–10 (10 % in water)
ZETESOL 370/N *	Sodium laureth sulfate	68	6–10 (10 % in water) 11–13 (10 % in water)
ZETESOL AN 27	Sodium laureth sulfate	27	10–11.5 (original)
ZETESOL AN/70	Sodium laureth sulfate	70	10–12 (10 % in water)
ZETESOL LES 11/7	Sodium undeceth-7 sulfate	27	6–8 (1% in water)
ZETESOL LES 117 HC	Sodium undeceth-7 sulfate	80	10.5–12.5 (10 % in water)
ZETESOL LES 2*	Sodium coceth sulfate	27	10.8–11.5 (original)
ZETESOL LES 3/SL	Sodium coceth sulfate	27	10.8–11.6 (original)
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1% in water)
ZETESOL ZN	Zinc coceth sulfate	23.5	3.5–4.5 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**



liquid	Low-foaming and extremely fast wetting surfactant
liquid	Low-foaming and wetting surfactant for applications at 20 °C
liquid	Low-foaming and wetting surfactant for applications at 40 °C
liquid	Low-foaming and wetting surfactant for applications at 60 °C
liquid	Extremely low-foaming surfactant for applications at 20 °C
liquid	Improves lathering power, foam stability and structure, increases viscosity of formulation
flakes	Improves lathering power, foam stability and structure, increases viscosity of formulation
liquid	Improves lathering power and viscosity
liquid	High-foaming and hydrotropic surfactant
liquid	Low-foaming and hydrotropic surfactant
liquid	High-foaming surfactant
liquid	Foaming surfactant for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in 2 different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in 2 different concentrations
liquid	Good solubility in hard water, stable foam
liquid	Excellent wetting agent
liquid	Natural, solubilising surfactant
liquid	Natural, low-foaming, hydrotropic and odour-preventing surfactant
liquid	Natural, foaming and hydrotropic surfactant with low salt content
liquid	Natural, foaming and hydrotropic surfactant
flowable paste	High-foaming surfactant suitable for many different applications, stable in hard water
paste	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	Excellent performance in hard water, possible alternative to alkylbenzene sulfonate in detergency for its less aggressive profile (for example in washing-up liquids)
flowable paste	Excellent performance in hard water, possible alternative to alkylbenzene sulfonate in detergency for its less aggressive profile (for example in washing-up liquids)
liquid	Anionic surfactant; tolerates hard water and cationic surfactants
viscous liquid	Highly concentrated anionic surfactant; tolerates hard water and cationic surfactants, allows the formulation of highly concentrated products with low viscosity
liquid	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	High-foaming surfactant with enhanced solvent compatibility
liquid	Anionic surfactant, can be also used in dual-purpose products (like "hand /dish") thanks to its mildness and anti-bacterial properties; must be used in a pH range between 4 and 8

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>ZUSOLAT</b>			
ZUSOLAT 1004	Fatty alcohol with 4 moles EO	100	6 (10 % in water)
ZUSOLAT 1005/85	Fatty alcohol with 5 moles EO	85	6 (10 % in water)
ZUSOLAT 1608/85	Fatty alcohol with 8 moles EO	85	6 (10 % in water)
<b>ZUTELAN</b>			
ZUTELAN GL 124	Alkyl polyglucoside	60	12 (original)
ZUTELAN GL 810	Alkyl polyglucoside	50	12 (original)

\* Different grades available

**PHYSICAL FORM**  
[AT 20 °C]

**FUNCTIONS AND PROPERTIES**

liquid	Medium-foaming, degreasing and fast wetting surfactant
liquid	Medium-foaming, degreasing and well-wetting surfactant
liquid	Medium-foaming, wetting and excellently degreasing surfactant
liquid	Natural, high-foaming, wetting and degreasing surfactant
liquid	Natural, medium-foaming, wetting and degreasing surfactant



# FLOORS/CARPET

The requirements for the cleaning and care of flooring materials are as diverse as the materials themselves. There is a difference between the professional cleaning of carpets in a public building and the thorough cleaning of a concrete floor in an industrial warehouse. Foaming capacity, cleaning power, sustainability and special applications, such as antistatic properties, are factors that vary depending on the application.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AMPHOTENSID</b>			
AMPHOTENSID D 1	N-alkylamino acid triethanol ammonium salt	40	8.5 (original)
AMPHOTENSID EH	Sodium salt of a short-chained alkylamine carboxylate	40	8 (original)
<b>AUTOPOON</b>			
AUTOPOON 4012	Blend of cationic surfactant and solvents	100	3 (10 % in water)
<b>CONTRASPUM</b>			
CONTRASPUM 1010 WEN	Combination of emulsifiers, paraffin oil, fatty alcohol, fatty acid derivatives and silicone compounds	97	5 (10 % in water)
CONTRASPUM 300	Alkyl polyalkylene glycol ether	100	4 (10 % in water)
CONTRASPUM W CONC	Thixotropic silicone oil emulsion	25	7 (original)
<b>CUBLEN</b>			
CUBLEN A 4015	ATMP: amino tris(methylene phosphonic acid), Na5-salt	29	10 (1% in water)
CUBLEN ACS 402	Nitriлотris(methylene phosphonic acid)-N-oxide, potassium salt	27	10 (1% in water)
CUBLEN AP 1	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN AP 5	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN BIT 721	Proprietary mixture of organophosphonic acids, sodium salts	35	10 (1% in water)
CUBLEN CAP 364	Phosphonate based on natural, renewable raw material	26	7 (1% in water)
CUBLEN D 3217 N	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 3217 S	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 4217	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	32	7 (1% in water)
CUBLEN D 5012	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-salt	51	2 (1% in water)
CUBLEN D 5113	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-3-salt	44	2–3 (1% in water)
CUBLEN D 900 GR	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	> 80	1–2 (1% in water)
CUBLEN DNC 450	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	45	1–2 (1% in water)

\* Different grades available


**PHYSICAL FORM  
[AT 20 °C]**
**FUNCTIONS AND PROPERTIES**

liquid	High-foaming and extremely stable surfactant
liquid	Low-foaming and hydrotropic surfactant
liquid	Hydrophobic rinsing agent
liquid	Defoamer and ventilator for aqueous systems
liquid	Defoamer for aqueous systems
liquid	Universal defoamer for aqueous systems
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite; good dispersion, scale inhibition and sequestering properties; excellent solubility in highly alkaline formulations
liquid	Peroxide-stabilising agent with low chloride content; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Unique and synergistic mixture which provides benefits in the stabilisation of water hardness, effective peroxide bleaching, stain and spot removal as well as corrosion inhibition on steel
liquid	Chloride- and alkaline-free, based on raw material with natural, vegetable origin; surface-active properties especially in pH-neutral formulations; strong hydrotropic effect; easily introduced into O/W-emulsions; effective corrosion inhibition on steel and aluminium; readily biodegradable with a degradation rate of 70% according to OECD 301 F
liquid	Outstanding coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding light-coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition unalloyed and high-grade steel
liquid	Highly concentrated, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts: peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
granules	Highly concentrated and purified solid, free from stabilising materials and typical impurities, low hygroscopicity, easy to handle; outstanding scale inhibitor, prevents the precipitation of hardly soluble alkaline earth salts, very calcium-tolerant, highest complex stability in alkaline formulations; stabilising agent for hydrogen peroxide
liquid	Chloride-free product; excellent universal scaling inhibitor, stabilising agent for hydrogen peroxide

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>CUBLEN</b>			
CUBLEN E 3115	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Na5-salt	25	7 (1% in water)
CUBLEN E 34135 P	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Ca5-Na6-salt, granules	34	12 (1% in water)
CUBLEN K 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN K 60	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN K 8514 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	60	12 (1% in water)
CUBLEN K 9012 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na2-salt (disodium etidronate)	81	5 (1% in water)
CUBLEN KT 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN KT 600	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN P 4014	PBTC: 2-phosphonobutane-1,2,4-tricarboxylic acid, Na4-salt	30	8 (1% in water)
CUBLEN P 50	PBTC: 2-Phosphonobutane-1,2,4-tricarboxylic acid	50	1–2 (1% in water)
CUBLEN R 60	HEMPA: hydroxyethylamino bis(methylene phosphonic acid)	60	1–2 (1% in water)
<b>FLEROGUM</b>			
FLEROGUM K 38	Potassium cocoate	30	10–12 (10% in water)
FLEROGUM LX	Potassium laurate	30	10–12 (10% in water)
FLEROGUM O 24 *	Potassium oleate	20	10–12 (10% in water)
<b>FLOOR FINISH</b>			
FLOOR FINISH CONCENTRATE A	Metal-bound styrene acrylic copolymer, wax emulsions	36	n/a
<b>LUMOROL</b>			
LUMOROL 4192 M	Combination of anionic and nonionic surfactants and soap	52	10 (10% in water)
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10% in water)
LUMOROL HSC	Blend of anionic and nonionic surfactants and soap	50	8.5–9.5 (10% in water)
LUMOROL VC-E 4376	Combination of nonionic surfactants	90	9 (10% in water)
<b>MULSIFAN</b>			
MULSIFAN K 326	Combination of anionic and nonionic surfactants	86	6 (10% in water)
MULSIFAN RT 133	Fatty alcohol polyglycol ether	100	6 (10% in water)
MULSIFAN RT 203/80	Fatty alcohol polyglycol ether	80	6 (10% in water)
MULSIFAN RT 410 G	Combination of fatty alcohol polyalkylene glycol ethers and fatty acid ester	96	7 (10% in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**



liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
granules	Regular granular structure; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent, retarded dissolution in water
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Regular granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Unique granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Similar to Cublen K 3014 but with non-preferential origin; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale under weakly alkaline conditions, improves the hydrophilicity of surfaces and rinsing properties
liquid	Soap; also used to control the formation of foam in some formulations (e.g. to prevent overfoaming in washing machine)
liquid	Soap; selecting LX instead of K 38 is advised in case a substance is present to which LX is more stable, for example chlorine
liquid	Soap; different origin from LX and K 38, not based on palm oil
liquid	Floor finish concentrate
liquid	Concentrated surfactant blend with soap for cleaning formulations
flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
viscous/pasty liquid	Surfactant blend specifically designed for hard-surface cleaning formulations
liquid	Surfactant blend for highly efficient and strongly degreasing cleaners
liquid	Emulsifier for solvents and the formulation of cold cleaners
wax	Emulsifier for natural and synthetic waxes
liquid	Solubiliser for perfumes and essential oils
liquid	Emulsifier for hydrocarbon solvents

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>OXETAL</b>			
OXETAL 500/85	Fatty alcohol with 5 moles EO	85	6 (10 % in water)
OXETAL 800/85	Fatty alcohol with 8 moles EO	85	6 (10 % in water)
OXETAL ID 104	Fatty alcohol with 4 moles EO	100	6 (10 % in water)
<b>PHOSFETAL</b>			
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	100	1.5 (1% in water)
PHOSFETAL 213	Alkyl polyglycol ether phosphate, acid	100	2.5 (1% in water)
<b>PROPETAL</b>			
PROPETAL 105	Alkyl polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 120	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 220	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
<b>SETACIN</b>			
SETACIN 103 *	Disodium laureth sulfosuccinate	38	6.5–7.5 (10 % in water)
<b>SULFETAL</b>			
SULFETAL 4069	Sodium alkyl (C8-C10) sulfate	43	10.5 (10 % in water)
SULFETAL 4105	Sodium 2-ethylhexyl sulfate	43	9 (10 % in water)
SULFETAL KT 400	Triethanol ammonium fatty alcohol sulfate	43	7.5 (10 % in water)
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27–70	7–9 (10 % in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27–40	11–11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5–7.5 (10 % in water)
<b>SYNTRAN®</b>			
SYNTRAN® 1076	Non-metal-bound, water-based styrene acrylate copolymer	40	8.0 (original)
SYNTRAN® 1079	Bimodal, non-metal-bound acrylic copolymer	40	9.0 (original)
SYNTRAN® 1101C	Metal-bound styrene acrylic copolymer, wax emulsions	35	8.3 (original)
SYNTRAN® 1274	Metal-bound styrene acrylic copolymer	38	8.1 (original)
SYNTRAN® 1292	Metal-bound styrene acrylic copolymer	38	8.5 (original)
SYNTRAN® 1299	Metal-bound styrene acrylic copolymer	38	8.6 (original)
SYNTRAN® 1501	Alkali-solubilised modified acrylic copolymer	25	8.2 (original)
SYNTRAN® 1555	Alkali-solubilised modified acrylic copolymer	25	8.0 (original)
SYNTRAN® 1560E	Alkali-solubilised modified acrylic copolymer	25	7.2 (original)
SYNTRAN® 1671	Bimodal, non-metal-bound modified acrylic copolymer	40	8.8 (original)
SYNTRAN® 1942	Styrene acrylate copolymer with proprietary cross-linking system	38	8.4 (original)
SYNTRAN® 4001C	Blend of polymers and surfactants	32	7.0–7.5 (original)
SYNTRAN® 4002C	Blend of polymers and surfactants	22	7.0–7.5 (original)
SYNTRAN® 4015 *	Modified polymer solution	30	7.5 (original)
SYNTRAN® 4020 *	Carboxylated acrylic copolymer	35	6.7 (original)
SYNTRAN® A-170	Metal-bound acrylate copolymer	38	8.3 (original)
SYNTRAN® MT220	Metal-bound styrene acrylic copolymer	38	8.2 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**



I&I | FLOORS/CARPET

liquid	Degreasing and fast wetting surfactant
liquid	Strongly degreasing and wetting surfactant
liquid	Extremely fast wetting surfactant, especially suitable for metal surfaces
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Low-foaming and extremely fast wetting surfactant
liquid	Low-foaming and wetting surfactant for applications at 20 °C
liquid	Extremely low-foaming surfactant for applications at 20 °C
liquid	Anionic surfactant, exceptionally mild to the skin, stable foam with fine bubbles, excellent rinsability
liquid	High-foaming and hydrotropic surfactant
liquid	Low-foaming and hydrotropic surfactant
liquid	High-foaming surfactant
liquid	Foaming surfactant for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in two different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in two different concentrations
liquid	Good solubility in hard water, stable foam
liquid	Binder for stone and concrete floor sealers
liquid	Binder for stone and concrete floor sealers
liquid	Floor polish concentrate
liquid	Binder for durable high-gloss floor polishes
liquid	Binder for durable high-gloss floor polishes
liquid	Binder for durable high-gloss floor polishes
liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Binder for permanent sealers
liquid	Binder for green floor polishes
liquid	Concentrate for carpet shampoos
liquid	Concentrate for spray-extraction cleaners for carpets
liquid	Cleaning booster, soil-suspending agent for carpet cleaners
liquid	Embrittling agent for milky carpet cleaners
liquid	Binder for highly durable floor polishes
liquid	Binder for durable high-gloss floor polishes

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>SYNTRAN®</b>			
SYNTRAN® MT228	Metal-bound styrene acrylic copolymer	38	8.5 (original)
SYNTRAN® MT240 *	Metal-bound styrene acrylic copolymer	38	8.2 (original)
SYNTRAN® PA1445 *	Grafted wax emulsion	40	9.2 (original)
SYNTRAN® WE1401	Ethylene copolymer emulsion	35	9.5 (original)
<b>TREOSAL</b>			
TREOSAL HE	PEG-7 glyceryl cocoate	100	5.7 – 7.3 (10 % in water)
<b>TRIUMPHNETZER</b>			
TRIUMPHNETZER ZSG *	Sulfosuccinic acid diisooctyl ester, sodium salt	67	5 (1% in water)
<b>WAXEMULSION</b>			
WAXEMULSION 1864	Nonionic carnauba wax emulsion	20	4 (10 % in water)
<b>ZETESECO</b>			
ZETESECO HS 100	Disodium capryloyl glutamate	30	10 (original)
ZETESECO HS 200	Disodium cocoyl glutamate / sodium cocoyl glutamate	25	7 (original)
ZETESECO HS 300	Disodium cocoyl glutamate	25	10 (original)
<b>ZETESOL</b>			
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1% in water)
<b>ZUSOLAT</b>			
ZUSOLAT 1004	Fatty alcohol with 4 moles EO	100	6 (10 % in water)
ZUSOLAT 1005/85	Fatty alcohol with 5 moles EO	85	6 (10 % in water)
ZUSOLAT 1608/85	Fatty alcohol with 8 moles EO	85	6 (10 % in water)
<b>ZUTELAN</b>			
ZUTELAN GL 124	Alkyl polyglucoside	60	12 (original)
ZUTELAN GL 810	Alkyl polyglucoside	50	12 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	Binder for durable high-gloss floor polishes
liquid	Binder for durable high-gloss floor polishes
liquid	Wax for floor polishes with a high coefficient of friction and good high-speed buffing response
liquid	Wax for floor polishes with very good mechanical resistance
liquid	Nonionic surfactant to be used in no-label detergents
liquid	Excellent wetting agent
liquid	Emulsion of carnauba wax for cleaning and caring applications
liquid	Natural, low-foaming, hydrotropic and odour-preventing surfactant
liquid	Natural, foaming and hydrotropic surfactant with low salt content
liquid	Natural, foaming and hydrotropic surfactant
liquid	High-foaming surfactant with enhanced solvent compatibility
liquid	Medium-foaming, degreasing and fast wetting surfactant
liquid	Medium-foaming, degreasing and well-wetting surfactant
liquid	Medium-foaming, wetting and excellently degreasing surfactant
liquid	Natural, high-foaming, wetting and degreasing surfactant
liquid	Natural, medium-foaming, wetting and degreasing surfactant



# HARD SURFACES

Surface cleaning is necessary for all types of hard surfaces, from plastic to wood and metal surfaces. These areas must be cleaned in the home as well as in professional and industrial areas. The specific requirements for the cleaning agents are as diverse as the surfaces themselves.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AMPHOTENSID</b>			
AMPHOTENSID AB	Coco-betaine	30	5 – 8 (original)
AMPHOTENSID B *	Cocamidopropyl betaine	30 – 40	5 (original)
AMPHOTENSID D 1	N-alkylamino acid triethanol ammonium salt	40	8.5 (original)
AMPHOTENSID EH	Sodium salt of a short-chained alkylamine carboxylate	40	8 (original)
<b>AUTOPOON</b>			
AUTOPOON 4012	Blend of cationic surfactant and solvents	100	3 (10% in water)
<b>CUBLEN</b>			
CUBLEN A 4015	ATMP: amino tris(methylene phosphonic acid), Na5-salt	29	10 (1% in water)
CUBLEN ACS 402	Nitrilotris(methylene phosphonic acid)-N-oxide, potassium salt	27	10 (1% in water)
CUBLEN AP 1	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN AP 5	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN BIT 721	Proprietary mixture of organophosphonic acids, sodium salts	35	10 (1% in water)
CUBLEN CAP 364	Phosphonate based on natural, renewable raw material	26	7 (1% in water)
CUBLEN D 3217 N	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 3217 S	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 4217	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	32	7 (1% in water)
CUBLEN D 5012	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-salt	51	2 (1% in water)
CUBLEN D 5113	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-3-salt	44	2–3 (1% in water)
CUBLEN D 900 GR	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	> 80	1–2 (1% in water)
CUBLEN DNC 450	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	45	1–2 (1% in water)
CUBLEN E 3115	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Na5-salt	25	7 (1% in water)
CUBLEN E 34135 P	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Ca5-Na6-salt, granules	34	12 (1% in water)
CUBLEN ED 351	Proprietary mixture of sodium salts of amino methylene phosphonic acids	33	7 (1% in water)

\* Different grades available

PHYSICAL FORM  
[AT 20 °C]

## FUNCTIONS AND PROPERTIES

liquid	Mild co-surfactant, improves foam stability
liquid	Mild co-surfactant with excellent foaming power and stability
liquid	High-foaming and extremely stable surfactant
liquid	Low-foaming and hydrotropic surfactant
liquid	Hydrophobic rinsing agent
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite; good dispersion, scale inhibition and sequestering properties; excellent solubility in highly alkaline formulations
liquid	Peroxide-stabilising agent with low chloride content; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Unique and synergistic mixture which provides benefits in the stabilisation of water hardness, effective peroxide bleaching, stain and spot removal as well as corrosion inhibition on steel
liquid	Chloride- and alkaline-free, based on raw material with natural, vegetable origin; surface-active properties especially in pH-neutral formulations; strong hydrotropic effect; easily introduced into O/W-emulsions; effective corrosion inhibition on steel and aluminium; readily biodegradable with a degradation rate of 70% according to OECD 301 F
liquid	Outstanding coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding light-coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition unalloyed and high-grade steel
liquid	Highly concentrated, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts: peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
granules	Highly concentrated and purified solid, free from stabilising materials and typical impurities, low hygroscopicity, easy to handle; outstanding scale inhibitor, prevents the precipitation of hardly soluble alkaline earth salts, very calcium-tolerant, highest complex stability in alkaline formulations; stabilising agent for hydrogen peroxide
liquid	Chloride-free product; excellent universal scaling inhibitor, stabilising agent for hydrogen peroxide
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
granules	Regular granular structure; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent, retarded dissolution in water
liquid	Inhibits both the precipitation and encrustation of hardly soluble salts of alkaline earth metals in substoichiometric amounts, excellent complexing behaviour; stabilising agent for hydrogen peroxide under neutral and alkaline conditions; corrosion inhibition on both unalloyed and high-grade steel

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>CUBLEN</b>			
CUBLEN F 3016	HDTMP: hexamethylenediamine tetra(methylene phosphonic acid), Na <sub>6</sub> -salt	24	6 (1% in water)
CUBLEN K 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na <sub>4</sub> -salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN K 60	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1 – 2 (1% in water)
CUBLEN K 8514 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na <sub>4</sub> -salt (tetrasodium etidronate)	60	12 (1% in water)
CUBLEN K 9012 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na <sub>2</sub> -salt (disodium etidronate)	81	5 (1% in water)
CUBLEN KT 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na <sub>4</sub> -salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN KT 600	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1 – 2 (1% in water)
CUBLEN P 4014	PBTC: 2-phosphonobutane-1,2,4-tricarboxylic acid, Na <sub>4</sub> -salt	30	8 (1% in water)
CUBLEN P 50	PBTC: 2-Phosphonobutane-1,2,4-tricarboxylic acid	50	1 – 2 (1% in water)
CUBLEN R 60	HEMPA: hydroxyethylamino bis(methylene phosphonic acid)	60	1 – 2 (1% in water)
<b>FLEROGUM</b>			
FLEROGUM K 38	Potassium cocoate	30	10 – 12 (10% in water)
FLEROGUM LX	Potassium laurate	30	10 – 12 (10% in water)
FLEROGUM O 24 *	Potassium oleate	20	10 – 12 (10% in water)
<b>LUMOROL</b>			
LUMOROL 4192 M	Combination of anionic and nonionic surfactants and soap	52	10 (10% in water)
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10% in water)
LUMOROL RK	Combination of anionic and amphoteric surfactants	28	6 (original)
LUMOROL VC-E 4376	Combination of nonionic surfactants	90	9 (10% in water)
<b>MULSIFAN</b>			
MULSIFAN K 326	Combination of anionic and nonionic surfactants	86	6 (10% in water)
MULSIFAN RT 1	Fatty acid polyglycol ester	100	6 (10% in water)
MULSIFAN RT 11	Fatty alcohol polyglycol ether	100	6 (10% in water)
MULSIFAN RT 110	Mixture of fatty alcohol polyglycol ethers	100	6 (10% in water)
MULSIFAN RT 133	Fatty alcohol polyglycol ether	100	6 (10% in water)
MULSIFAN RT 163	Ethoxylated triglyceride	100	8 (10% in water)
MULSIFAN RT 203/80	Fatty alcohol polyglycol ether	80	6 (10% in water)
MULSIFAN RT 24	Fatty alcohol polyglycol ether	100	6 (10% in water)
MULSIFAN RT 38	Fatty alcohol polyglycol ether	100	6 (10% in water)
MULSIFAN RT 410 G	Combination of fatty alcohol polyalkylene glycol ethers and fatty acid ester	96	7 (10% in water)

\* Different grades available



liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, especially calcium sulfate
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Regular granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Unique granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Similar to Cublen K 3014 but with non-preferential origin; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale under weakly alkaline conditions, improves the hydrophilicity of surfaces and rinsing properties

liquid	Soap; also used to control the formation of foam in some formulations (e.g. to prevent overfoaming in washing machine)
liquid	Soap; selecting LX instead of K 38 is advised in case a substance is present to which LX is more stable, for example chlorine
liquid	Soap; different origin from LX and K 38, not based on palm oil

liquid	Concentrated surfactant blend with soap for cleaning formulations
flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
liquid	Surfactant blend for mild cleaning formulations
liquid	Surfactant blend for highly efficient and strongly degreasing cleaners

liquid	Emulsifier for solvents and the formulation of cold cleaners
liquid	Emulsifier for mineral oils
wax	Emulsifier for fatty acids and fatty alcohols
wax	Emulsifier for paraffins and micro paraffin waxes
wax	Emulsifier for natural and synthetic waxes
liquid	Emulsifier for natural oils / triglycerides
liquid	Solubiliser for perfumes and essential oils
liquid	Emulsifier for white oils and paraffin oils
liquid	Emulsifier for silicone oil
liquid	Emulsifier for hydrocarbon solvents

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>OXETAL</b>			
OXETAL 500/85	Fatty alcohol with 5 moles EO	85	6 (10 % in water)
OXETAL 800/85	Fatty alcohol with 8 moles EO	85	6 (10 % in water)
OXETAL ID 104	Fatty alcohol with 4 moles EO	100	6 (10 % in water)
<b>PHOSFETAL</b>			
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	100	1.5 (1% in water)
PHOSFETAL 213	Alkyl polyglycol ether phosphate, acid	100	2.5 (1% in water)
<b>PROPETAL</b>			
PROPETAL 105	Alkyl polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 120	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 140	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 160	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 220	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
<b>PROTELAN</b>			
PROTELAN 1430	Sodium myristoyl sarcosinate	30	9–10 (original)
PROTELAN LS 9011 *	Sodium lauroyl sarcosinate	30	9.5–11 (original)
<b>PURTON</b>			
PURTON CFD	Coconut fatty acid diethanolamide	85	9–11 (1% in water)
PURTON CFM/F	Coconut fatty acid monoethanolamide	85	n/a
PURTON SFD	Soybean oil fatty acid diethanolamide	87	8.5–11 (1% in water)
<b>SULFETAL</b>			
SULFETAL 4069	Sodium alkyl (C8-C10) sulfate	43	10.5 (10 % in water)
SULFETAL 4105	Sodium 2-ethylhexyl sulfate	43	9 (10 % in water)
SULFETAL KT 400	Triethanol ammonium fatty alcohol sulfate	43	7.5 (10 % in water)
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27–70	7–9 (10 % in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27–40	11–11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5–7.5 (10 % in water)
<b>SYNTRAN®</b>			
SYNTRAN® 1501	Alkali-solubilised modified acrylic copolymer	25	8.2 (original)
SYNTRAN® 1555	Alkali-solubilised modified acrylic copolymer	25	8.0 (original)
SYNTRAN® 1560E	Alkali-solubilised modified acrylic copolymer	25	7.2 (original)
SYNTRAN® PA1445 *	Grafted wax emulsion	40	9.2 (original)
<b>TRIUMPHNETZER</b>			
TRIUMPHNETZER ZSG *	Sulfosuccinic acid diisooctyl ester, sodium salt	67	5 (1% in water)
<b>TURKEY RED OIL</b>			
TURKEY RED OIL	Sodium sulfuricinate	82	7.5 (10 % in water)
<b>WAXEMULSION</b>			
WAXEMULSION 1864	Nonionic carnauba wax emulsion	20	4 (10 % in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	Degreasing and fast wetting surfactant
liquid	Strongly degreasing and wetting surfactant
liquid	Extremely fast wetting surfactant, especially suitable for metal surfaces
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Low-foaming and extremely fast wetting surfactant
liquid	Low-foaming and wetting surfactant for applications at 20 °C
liquid	Low-foaming and wetting surfactant for applications at 40 °C
liquid	Low-foaming and wetting surfactant for applications at 60 °C
liquid	Extremely low-foaming surfactant for applications at 20 °C
liquid	Mild surfactant, excellent foaming, hydrotrope, slight anti-corrosion properties
liquid	Mild surfactant, excellent foaming, hydrotrope, slight anti-corrosion properties
liquid	Improves lathering power, foam stability and structure, increases viscosity of formulation
flakes	Improves lathering power, foam stability and structure, increases viscosity of formulation
liquid	Improves lathering power and viscosity
liquid	High-foaming and hydrotropic surfactant
liquid	Low-foaming and hydrotropic surfactant
liquid	High-foaming surfactant
liquid	Foaming surfactant for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in two different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in two different concentrations
liquid	Good solubility in hard water, stable foam
liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Wax for floor polishes with a high coefficient of friction and good high-speed buffing response
liquid	Excellent wetting agent
liquid	Natural, solubilising surfactant
liquid	Emulsion of carnauba wax for cleaning and caring applications



PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>ZETESECO</b>			
ZETESECO HS 100	Disodium capryloyl glutamate	30	10 (original)
ZETESECO HS 200	Disodium cocoyl glutamate / sodium cocoyl glutamate	25	7 (original)
ZETESECO HS 300	Disodium cocoyl glutamate	25	10 (original)
<b>ZETESOL</b>			
ZETESOL 270/N	Sodium laureth sulfate	68	6–10 (10% in water)
ZETESOL 370/N *	Sodium laureth sulfate	68	6–10 (10% in water) 11–13 (10% in water)
ZETESOL AN 27	Sodium laureth sulfate	27	10-11.5 (original)
ZETESOL AN/70	Sodium laureth sulfate	70	10–12 (10% in water)
ZETESOL LES 11/7	Sodium undeceth-7 sulfate	27	6–8 (1% in water)
ZETESOL LES 117 HC	Sodium undeceth-7 sulfate	80	10.5–12.5 (10% in water)
ZETESOL LES 2 *	Sodium coceth sulfate	27	10.8–11.5 (original)
ZETESOL LES 3/SL	Sodium coceth sulfate	27	10.8–11.6 (original)
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1% in water)
<b>ZUSOLAT</b>			
ZUSOLAT 1004	Fatty alcohol with 4 moles EO	100	6 (10% in water)
ZUSOLAT 1005/85	Fatty alcohol with 5 moles EO	85	6 (10% in water)
ZUSOLAT 1608/85	Fatty alcohol with 8 moles EO	85	6 (10% in water)
<b>ZUTELAN</b>			
ZUTELAN GL 124	Alkyl polyglucoside	60	12 (original)
ZUTELAN GL 810	Alkyl polyglucoside	50	12 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	Natural, low-foaming, hydrotropic and odour-preventing surfactant
liquid	Natural, foaming and hydrotropic surfactant with low salt content
liquid	Natural, foaming and hydrotropic surfactant
flowable paste	High-foaming surfactant suitable for many different applications, stable in hard water
paste	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	Excellent performance in hard water, possible alternative to alkylbenzene sulfonate in detergency for its less aggressive profile (for example in washing-up liquids)
flowable paste	Excellent performance in hard water, possible alternative to alkylbenzene sulfonate in detergency for its less aggressive profile (for example in washing-up liquids)
liquid	Anionic surfactant; tolerates hard water and cationic surfactants
viscous liquid	Highly concentrated anionic surfactant; tolerates hard water and cationic surfactants, allows the formulation of highly concentrated products with low viscosity
liquid	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	High-foaming surfactant with enhanced solvent compatibility
liquid	Medium-foaming, degreasing and fast wetting surfactant
liquid	Medium-foaming, degreasing and well-wetting surfactant
liquid	Medium-foaming, wetting and excellently degreasing surfactant
liquid	Natural, high-foaming, wetting and degreasing surfactant
liquid	Natural, medium-foaming, wetting and degreasing surfactant



# SANITARY

Sanitary facilities are particularly critical areas in the cleaning of commercial premises because they are highly frequented (toilets, showers, washrooms) and require the removal of specific types of soiling such as limescale, rust, skin grease and soap residues. In contrast to most other cleaning agents, sanitary cleaning agents have an acidic pH value.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AMPHOTENSID</b>			
AMPHOTENSID CCF	Alkyliminodipropionate, sodium salt	40	8 (original)
AMPHOTENSID D 1	N-alkylamino acid triethanol ammonium salt	40	8.5 (original)
AMPHOTENSID DMOX	Lauramine oxide	30	8 (original)
AMPHOTENSID EH	Sodium salt of a short-chained alkylamine carboxylate	40	8 (original)
AMPHOTENSID HPOX	Amines, C12-18(even numbered)-alkyl dimethyl, N-oxides	30	6–9 (original)
<b>CUBLEN</b>			
CUBLEN A 4015	ATMP: amino tris(methylene phosphonic acid), Na5-salt	29	10 (1% in water)
CUBLEN ACS 402	Nitriлотris(methylene phosphonic acid)-N-oxide, potassium salt	27	10 (1% in water)
CUBLEN AP 1	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN AP 5	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN D 3217 N	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 3217 S	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 4217	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	32	7 (1% in water)
CUBLEN D 5012	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-salt	51	2 (1% in water)
CUBLEN D 5113	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-3-salt	44	2–3 (1% in water)
CUBLEN DNC 450	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	45	1–2 (1% in water)
CUBLEN E 3115	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Na5-salt	25	7 (1% in water)
CUBLEN E 34135 P	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Ca5-Na6-salt, granules	34	12 (1% in water)
CUBLEN ED 351	Proprietary mixture of sodium salts of amino methylene phosphonic acids	33	7 (1% in water)
CUBLEN F 3016	HDTMP: hexamethylenediamine tetra(methylene phosphonic acid), Na6-salt	24	6 (1% in water)
CUBLEN K 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN K 60	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)

\* Different grades available



**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	High-foaming and hydrotropic surfactant
liquid	High-foaming and extremely stable surfactant
liquid	High and stable foam volume; adds viscosity to hypochlorite or active oxygen cleaners; cationic at acidic/neutral pH, nonionic at pH > 8.
liquid	Low-foaming and hydrotropic surfactant
liquid	High and stable foam volume; adds viscosity to both hydrogen peroxide and hypochlorite cleaners
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite; good dispersion, scale inhibition and sequestering properties; excellent solubility in highly alkaline formulations
liquid	Peroxide-stabilising agent with low chloride content; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding light-coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition unalloyed and high-grade steel
liquid	Highly concentrated, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Chloride-free product; excellent universal scaling inhibitor, stabilising agent for hydrogen peroxide
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
granules	Regular granular structure; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent, retarded dissolution in water
liquid	Inhibits both the precipitation and encrustation of hardly soluble salts of alkaline earth metals in substoichiometric amounts, excellent complexing behaviour; stabilising agent for hydrogen peroxide under neutral and alkaline conditions; corrosion inhibition on both unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, especially calcium sulfate
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>CUBLEN</b>			
CUBLEN K 8514 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na <sub>4</sub> -salt (tetrasodium etidronate)	60	12 (1% in water)
CUBLEN K 9012 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na <sub>2</sub> -salt (disodium etidronate)	81	5 (1% in water)
CUBLEN KT 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na <sub>4</sub> -salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN KT 600	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN P 4014	PBTC: 2-phosphonobutane-1,2,4-tricarboxylic acid, Na <sub>4</sub> -salt	30	8 (1% in water)
CUBLEN P 50	PBTC: 2-Phosphonobutane-1,2,4-tricarboxylic acid	50	1–2 (1% in water)
<b>FLEROGUM</b>			
FLEROGUM K 38	Potassium cocoate	30	10–12 (10% in water)
FLEROGUM LX	Potassium laurate	30	10–12 (10% in water)
FLEROGUM O 24 *	Potassium oleate	20	10–12 (10% in water)
<b>LUMOROL</b>			
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10% in water)
LUMOROL HSC	Blend of anionic and nonionic surfactants and soap	50	8.5–9.5 (10% in water)
LUMOROL VC-E 4376	Combination of nonionic surfactants	90	9 (10% in water)
<b>OXETAL</b>			
OXETAL 500/85	Fatty alcohol with 5 moles EO	85	6 (10% in water)
OXETAL 800/85	Fatty alcohol with 8 moles EO	85	6 (10% in water)
OXETAL ID 104	Fatty alcohol with 4 moles EO	100	6 (10% in water)
<b>PHOSFETAL</b>			
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	100	1.5 (1% in water)
PHOSFETAL 213	Alkyl polyglycol ether phosphate, acid	100	2.5 (1% in water)
<b>PROPETAL</b>			
PROPETAL 105	Alkyl polyalkylene glycol ether	100	6 (10% in water)
PROPETAL 120	Fatty alcohol polyalkylene glycol ether	100	6 (10% in water)
<b>SETACIN</b>			
SETACIN 103 *	Disodium laureth sulfosuccinate	38	6.5–7.5 (10% in water)
<b>SULFETAL</b>			
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27–70	7–9 (10% in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27–40	11–11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5–7.5 (10% in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**



I&I | SANITARY

granules	Regular granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Unique granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Similar to Cublen K 3014 but with non-preferential origin; Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Soap; also used to control the formation of foam in some formulations (e.g. to prevent overfoaming in washing machine)
liquid	Soap; selecting LX instead of K 38 is advised in case a substance is present to which LX is more stable, for example chlorine
liquid	Soap; different origin from LX and K 38, not based on palm oil
flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
viscous/pasty liquid	Surfactant blend specifically designed for hard-surface cleaning formulations
liquid	Surfactant blend for highly efficient and strongly degreasing cleaners
liquid	Degreasing and fast wetting surfactant
liquid	Strongly degreasing and wetting surfactant
liquid	Extremely fast wetting surfactant, especially suitable for metal surfaces
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Low-foaming and extremely fast wetting surfactant
liquid	Low-foaming and wetting surfactant for applications at 20 °C
liquid	Anionic surfactant, exceptionally mild to the skin, stable foam with fine bubbles, excellent rinsability
liquid	Foaming surfactant for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in two different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in two different concentrations
liquid	Good solubility in hard water, stable foam

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>ZETESECO</b>			
ZETESECO HS 100	Disodium capryloyl glutamate	30	10 (original)
<b>ZETESOL</b>			
ZETESOL 270/N	Sodium laureth sulfate	68	6–10 (10% in water)
ZETESOL 370/N *	Sodium laureth sulfate	68	6–10 (10% in water) 11–13 (10% in water)
ZETESOL AN 27	Sodium laureth sulfate	27	10-11.5 (original)
ZETESOL AN/70	Sodium laureth sulfate	70	10–12 (10% in water)
ZETESOL LES 11/7	Sodium undeceth-7 sulfate	27	6–8 (1% in water)
ZETESOL LES 117 HC	Sodium undeceth-7 sulfate	80	10.5–12.5 (10% in water)
ZETESOL LES 2 *	Sodium coceth sulfate	27	10.8–11.5 (original)
ZETESOL LES 3/SL	Sodium coceth sulfate	27	10.8–11.6 (original)
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1% in water)
<b>ZUSOLAT</b>			
ZUSOLAT 1004	Fatty alcohol with 4 moles EO	100	6 (10% in water)
ZUSOLAT 1005/85	Fatty alcohol with 5 moles EO	85	6 (10% in water)
ZUSOLAT 1608/85	Fatty alcohol with 8 moles EO	85	6 (10% in water)
<b>ZUTELAN</b>			
ZUTELAN GL 124	Alkyl polyglucoside	60	12 (original)
ZUTELAN GL 810	Alkyl polyglucoside	50	12 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	Natural, low-foaming, hydrotropic and odour-preventing surfactant
flowable paste	High-foaming surfactant suitable for many different applications, stable in hard water
paste	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	Excellent performance in hard water, possible alternative to alkylbenzene sulfonate in detergency for its less aggressive profile (for example in washing-up liquids)
flowable paste	Excellent performance in hard water, possible alternative to alkylbenzene sulfonate in detergency for its less aggressive profile (for example in washing-up liquids)
liquid	Anionic surfactant; tolerates hard water and cationic surfactants
viscous liquid	Highly concentrated anionic surfactant; tolerates hard water and cationic surfactants, allows the formulation of highly concentrated products with low viscosity
liquid	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	High-foaming surfactant suitable for many different applications, stable in hard water
liquid	High-foaming surfactant with enhanced solvent compatibility
liquid	Medium-foaming, degreasing and fast wetting surfactant
liquid	Medium-foaming, degreasing and well-wetting surfactant
liquid	Medium-foaming, wetting and excellently degreasing surfactant
liquid	Natural, high-foaming, wetting and degreasing surfactant
liquid	Natural, medium-foaming, wetting and degreasing surfactant



# FACADE

The first impression made by a building is to a large degree determined by its facade. This is why professional cleaning is extremely important for all companies. The facades and the materials they are made of are just as diverse as the companies behind them: glass, metal and stone must be cleaned and protected in a professional manner.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AMPHOTENSID</b>			
AMPHOTENSID CCF	Alkyliminodipropionate, sodium salt	40	8 (original)
AMPHOTENSID D 1	N-alkylamino acid triethanol ammonium salt	40	8.5 (original)
AMPHOTENSID DMOX	Lauramine oxide	30	8 (original)
AMPHOTENSID EH	Sodium salt of a short-chained alkylamine carboxylate	40	8 (original)
AMPHOTENSID HPOX	Amines, C12-18(even numbered)-alkyl dimethyl, N-oxides	30	6–9 (original)
<b>AUTOPOON</b>			
AUTOPOON 4012	Blend of cationic surfactant and solvents	100	3 (10 % in water)
<b>CONTRASPUM</b>			
CONTRASPUM 300	Alkyl polyalkylene glycol ether	100	4 (10 % in water)
<b>CUBLEN</b>			
CUBLEN A 4015	ATMP: amino tris(methylene phosphonic acid), Na5-salt	29	10 (1% in water)
CUBLEN AP 5	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN BIT 721	Proprietary mixture of organophosphonic acids, sodium salts	35	10 (1% in water)
CUBLEN CAP 364	Phosphonate based on natural, renewable raw material	26	7 (1% in water)
CUBLEN D 3217 N	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 3217 S	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 4217	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	32	7 (1% in water)
CUBLEN D 5012	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-salt	51	2 (1% in water)
CUBLEN D 5113	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-3-salt	44	2–3 (1% in water)
CUBLEN D 900 GR	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	> 80	1–2 (1% in water)
CUBLEN E 3115	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Na5-salt	25	7 (1% in water)
CUBLEN ED 351	Proprietary mixture of sodium salts of amino methylene phosphonic acids	33	7 (1% in water)

\* Different grades available



**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	High-foaming and hydrotropic surfactant
liquid	High-foaming and extremely stable surfactant
liquid	High and stable foam volume; adds viscosity to hypochlorite or active oxygen cleaners; cationic at acidic/neutral pH, nonionic at pH > 8.
liquid	Low-foaming and hydrotropic surfactant
liquid	High and stable foam volume; adds viscosity to both hydrogen peroxide and hypochlorite cleaners
liquid	Hydrophobic rinsing agent
liquid	Defoamer for aqueous systems
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Unique and synergistic mixture which provides benefits in the stabilisation of water hardness, effective peroxide bleaching, stain and spot removal as well as corrosion inhibition on steel
liquid	Chloride- and alkaline-free, based on raw material with natural, vegetable origin; surface-active properties especially in pH-neutral formulations; strong hydrotropic effect; easily introduced into O/W-emulsions; effective corrosion inhibition on steel and aluminium; readily biodegradable with a degradation rate of 70% according to OECD 301 F
liquid	Outstanding coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding light-coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition unalloyed and high-grade steel
liquid	Highly concentrated, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts: peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
granules	Highly concentrated and purified solid, free from stabilising materials and typical impurities, low hygroscopicity, easy to handle; outstanding scale inhibitor, prevents the precipitation of hardly soluble alkaline earth salts, very calcium-tolerant, highest complex stability in alkaline formulations; stabilising agent for hydrogen peroxide
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Inhibits both the precipitation and encrustation of hardly soluble salts of alkaline earth metals in substoichiometric amounts, excellent complexing behaviour; stabilising agent for hydrogen peroxide under neutral and alkaline conditions; corrosion inhibition on both unalloyed and high-grade steel

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>CUBLEN</b>			
CUBLEN F 3016	HDTMP: hexamethylenediamine tetra(methylene phosphonic acid), Na6-salt	24	6 (1% in water)
CUBLEN K 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN K 60	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN K 8514 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	60	12 (1% in water)
CUBLEN K 9012 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na2-salt (disodium etidronate)	81	5 (1% in water)
CUBLEN KT 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN KT 600	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN P 4014	PBTC: 2-phosphonobutane-1,2,4-tricarboxylic acid, Na4-salt	30	8 (1% in water)
CUBLEN R 60	HEMPA: hydroxyethylamino bis(methylene phosphonic acid)	60	1–2 (1% in water)
<b>FLEROGUM</b>			
FLEROGUM K 38	Potassium cocoate	30	10–12 (10% in water)
FLEROGUM LX	Potassium laurate	30	10–12 (10% in water)
FLEROGUM O 24 *	Potassium oleate	20	10–12 (10% in water)
<b>LUMOROL</b>			
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10% in water)
LUMOROL VC-E 4376	Combination of nonionic surfactants	90	9 (10% in water)
<b>MULSIFAN</b>			
MULSIFAN K 326	Combination of anionic and nonionic surfactants	86	6 (10% in water)
<b>OXETAL</b>			
OXETAL 500/85	Fatty alcohol with 5 moles EO	85	6 (10% in water)
OXETAL 800/85	Fatty alcohol with 8 moles EO	85	6 (10% in water)
OXETAL ID 104	Fatty alcohol with 4 moles EO	100	6 (10% in water)
<b>PHOSFETAL</b>			
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	100	1.5 (1% in water)
PHOSFETAL 213	Alkyl polyglycol ether phosphate, acid	100	2.5 (1% in water)
<b>PROPETAL</b>			
PROPETAL 105	Alkyl polyalkylene glycol ether	100	6 (10% in water)
PROPETAL 120	Fatty alcohol polyalkylene glycol ether	100	6 (10% in water)
PROPETAL 140	Fatty alcohol polyalkylene glycol ether	100	6 (10% in water)
PROPETAL 160	Fatty alcohol polyalkylene glycol ether	100	6 (10% in water)
PROPETAL 220	Fatty alcohol polyalkylene glycol ether	100	6 (10% in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, especially calcium sulfate
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Regular granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Unique granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Similar to Cublen K 3014 but with non-preferential origin; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale under weakly alkaline conditions, improves the hydrophilicity of surfaces and rinsing properties
liquid	Soap; also used to control the formation of foam in some formulations (e.g. to prevent overfoaming in washing machine)
liquid	Soap; selecting LX instead of K 38 is advised in case a substance is present to which LX is more stable, for example chlorine
liquid	Soap; different origin from LX and K 38, not based on palm oil
flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
liquid	Surfactant blend for highly efficient and strongly degreasing cleaners
liquid	Emulsifier for solvents and the formulation of cold cleaners
liquid	Degreasing and fast wetting surfactant
liquid	Strongly degreasing and wetting surfactant
liquid	Extremely fast wetting surfactant, especially suitable for metal surfaces
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Low-foaming and extremely fast wetting surfactant
liquid	Low-foaming and wetting surfactant for applications at 20 °C
liquid	Low-foaming and wetting surfactant for applications at 40 °C
liquid	Low-foaming and wetting surfactant for applications at 60 °C
liquid	Extremely low-foaming surfactant for applications at 20 °C



PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>PROTELAN</b>			
PROTELAN 1430	Sodium myristoyl sarcosinate	30	9–10 (original)
PROTELAN LS 9011 *	Sodium lauroyl sarcosinate	30	9.5–11 (original)
<b>SULFETAL</b>			
SULFETAL 4069	Sodium alkyl (C8-C10) sulfate	43	10.5 (10 % in water)
SULFETAL 4105	Sodium 2-ethylhexyl sulfate	43	9 (10 % in water)
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27–70	7–9 (10 % in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27–40	11–11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5–7.5 (10 % in water)
<b>SYNTRAN®</b>			
SYNTRAN® 1501	Alkali-solubilised modified acrylic copolymer	25	8.2 (original)
SYNTRAN® 1555	Alkali-solubilised modified acrylic copolymer	25	8.0 (original)
SYNTRAN® 1560E	Alkali-solubilised modified acrylic copolymer	25	7.2 (original)
<b>TRIUMPHNETZER</b>			
TRIUMPHNETZER ZSG *	Sulfosuccinic acid diisooctyl ester, sodium salt	67	5 (1% in water)
<b>ZETESECO</b>			
ZETESECO HS 100	Disodium capryloyl glutamate	30	10 (original)
ZETESECO HS 200	Disodium cocoyl glutamate / sodium cocoyl glutamate	25	7 (original)
ZETESECO HS 300	Disodium cocoyl glutamate	25	10 (original)
<b>ZETESOL</b>			
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1% in water)
<b>ZUSOLAT</b>			
ZUSOLAT 1004	Fatty alcohol with 4 moles EO	100	6 (10 % in water)
ZUSOLAT 1005/85	Fatty alcohol with 5 moles EO	85	6 (10 % in water)
ZUSOLAT 1608/85	Fatty alcohol with 8 moles EO	85	6 (10 % in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	Mild surfactant, excellent foaming, hydrotrope, slight anti-corrosion properties
liquid	Mild surfactant, excellent foaming, hydrotrope, slight anti-corrosion properties
liquid	High-foaming and hydrotropic surfactant
liquid	Low-foaming and hydrotropic surfactant
liquid	Foaming surfactant for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in two different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in two different concentrations
liquid	Good solubility in hard water, stable foam
liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Excellent wetting agent
liquid	Natural, low-foaming, hydrotropic and odour-preventing surfactant
liquid	Natural, foaming and hydrotropic surfactant with low salt content
liquid	Natural, foaming and hydrotropic surfactant
liquid	High-foaming surfactant with enhanced solvent compatibility
liquid	Medium-foaming, degreasing and fast wetting surfactant
liquid	Medium-foaming, degreasing and well-wetting surfactant
liquid	Medium-foaming, wetting and excellently degreasing surfactant



# MANUFACTURING AREAS

Cleanliness also plays an important role in industrial companies, not only in terms of the quality of the manufactured goods, but also for the safety of the employees. In each business, there is a unique set of materials which are exposed to varied types of soiling, which means that the ideal cleaning concept has to be identified in each individual case.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AMPHOTENSID</b>			
AMPHOTENSID CCF	Alkyliminodipropionate, sodium salt	40	8 (original)
AMPHOTENSID D 1	N-alkylamino acid triethanol ammonium salt	40	8.5 (original)
AMPHOTENSID EH	Sodium salt of a short-chained alkylamine carboxylate	40	8 (original)
<b>CONTRASPUM</b>			
CONTRASPUM 1010 WEN	Combination of emulsifiers, paraffin oil, fatty alcohol, fatty acid derivatives and silicone compounds	97	5 (10% in water)
CONTRASPUM 300	Alkyl polyalkylene glycol ether	100	4 (10% in water)
CONTRASPUM W CONC	Thixotropic silicone oil emulsion	25	7 (original)
<b>CUBLEN</b>			
CUBLEN A 4015	ATMP: amino tris(methylene phosphonic acid), Na5-salt	29	10 (1% in water)
CUBLEN ACS 402	Nitritotris(methylene phosphonic acid)-N-oxide, potassium salt	27	10 (1% in water)
CUBLEN AP 1	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN AP 5	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN BIT 721	Proprietary mixture of organophosphonic acids, sodium salts	35	10 (1% in water)
CUBLEN CAP 364	Phosphonate based on natural, renewable raw material	26	7 (1% in water)
CUBLEN D 3217 N	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 3217 S	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 4217	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	32	7 (1% in water)
CUBLEN D 5012	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-salt	51	2 (1% in water)
CUBLEN D 5113	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-3-salt	44	2–3 (1% in water)
CUBLEN D 900 GR	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	> 80	1–2 (1% in water)

\* Different grades available



**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	High-foaming and hydrotropic surfactant
liquid	High-foaming and extremely stable surfactant
liquid	Low-foaming and hydrotropic surfactant
liquid	Defoamer and ventilator for aqueous systems
liquid	Defoamer for aqueous systems
liquid	Universal defoamer for aqueous systems
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite; good dispersion, scale inhibition and sequestering properties; excellent solubility in highly alkaline formulations
liquid	Peroxide-stabilising agent with low chloride content; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Unique and synergistic mixture which provides benefits in the stabilisation of water hardness, effective peroxide bleaching, stain and spot removal as well as corrosion inhibition on steel
liquid	Chloride- and alkaline-free, based on raw material with natural, vegetable origin; surface-active properties especially in pH-neutral formulations; strong hydrotropic effect; easily introduced into O/W-emulsions; effective corrosion inhibition on steel and aluminium; readily biodegradable with a degradation rate of 70% according to OECD 301 F
liquid	Outstanding coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding light-coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition unalloyed and high-grade steel
liquid	Highly concentrated, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts: peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
granules	Highly concentrated and purified solid, free from stabilising materials and typical impurities, low hygroscopicity, easy to handle; outstanding scale inhibitor, prevents the precipitation of hardly soluble alkaline earth salts, very calcium-tolerant, highest complex stability in alkaline formulations; stabilising agent for hydrogen peroxide

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>CUBLEN</b>			
CUBLEN DNC 450	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	45	1–2 (1% in water)
CUBLEN E 3115	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Na5-salt	25	7 (1% in water)
CUBLEN E 34135 P	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Ca5-Na6-salt, granules	34	12 (1% in water)
CUBLEN ED 351	Proprietary mixture of sodium salts of amino methylene phosphonic acids	33	7 (1% in water)
CUBLEN F 3016	HDTMP: hexamethylenediamine tetra(methylene phosphonic acid), Na6-salt	24	6 (1% in water)
CUBLEN K 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN K 60	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN K 8514 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	60	12 (1% in water)
CUBLEN K 9012 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na2-salt (disodium etidronate)	81	5 (1% in water)
CUBLEN KT 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN KT 600	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN P 4014	PBTC: 2-phosphonobutane-1,2,4-tricarboxylic acid, Na4-salt	30	8 (1% in water)
CUBLEN P 50	PBTC: 2-Phosphonobutane-1,2,4-tricarboxylic acid	50	1–2 (1% in water)
CUBLEN R 60	HEMPA: hydroxyethylamino bis(methylene phosphonic acid)	60	1–2 (1% in water)
<b>LUMOROL</b>			
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10% in water)
LUMOROL VC-E 4376	Combination of nonionic surfactants	90	9 (10% in water)
<b>MULSIFAN</b>			
MULSIFAN K 326	Combination of anionic and nonionic surfactants	86	6 (10% in water)
MULSIFAN RT 1	Fatty acid polyglycol ester	100	6 (10% in water)
MULSIFAN RT 11	Fatty alcohol polyglycol ether	100	6 (10% in water)
MULSIFAN RT 163	Ethoxylated triglyceride	100	8 (10% in water)
MULSIFAN RT 24	Fatty alcohol polyglycol ether	100	6 (10% in water)
MULSIFAN RT 410 G	Combination of fatty alcohol polyalkylene glycol ethers and fatty acid ester	96	7 (10% in water)
<b>OXETAL</b>			
OXETAL 500/85	Fatty alcohol with 5 moles EO	85	6 (10% in water)
OXETAL 800/85	Fatty alcohol with 8 moles EO	85	6 (10% in water)
OXETAL ID 104	Fatty alcohol with 4 moles EO	100	6 (10% in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**



I&I | MANUFACTURING AREAS

liquid	Chloride-free product; excellent universal scaling inhibitor, stabilising agent for hydrogen peroxide
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
granules	Regular granular structure; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent, retarded dissolution in water
liquid	Inhibits both the precipitation and encrustation of hardly soluble salts of alkaline earth metals in substoichiometric amounts, excellent complexing behaviour; stabilising agent for hydrogen peroxide under neutral and alkaline conditions; corrosion inhibition on both unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, especially calcium sulfate
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Regular granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Unique granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Similar to Cublen K 3014 but with non-preferential origin; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale under weakly alkaline conditions, improves the hydrophilicity of surfaces and rinsing properties
flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
liquid	Surfactant blend for highly efficient and strongly degreasing cleaners
liquid	Emulsifier for solvents and the formulation of cold cleaners
liquid	Emulsifier for mineral oils
wax	Emulsifier for fatty acids and fatty alcohols
liquid	Emulsifier for natural oils / triglycerides
liquid	Emulsifier for white oils and paraffin oils
liquid	Emulsifier for hydrocarbon solvents
liquid	Degreasing and fast wetting surfactant
liquid	Strongly degreasing and wetting surfactant
liquid	Extremely fast wetting surfactant, especially suitable for metal surfaces

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>PHOSFETAL</b>			
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	100	1.5 (1% in water)
PHOSFETAL 213	Alkyl polyglycol ether phosphate, acid	100	2.5 (1% in water)
<b>PROPETAL</b>			
PROPETAL 105	Alkyl polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 120	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 140	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 160	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 220	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
<b>PROTELAN</b>			
PROTELAN 1430	Sodium myristoyl sarcosinate	30	9–10 (original)
PROTELAN LS 9011 *	Sodium lauroyl sarcosinate	30	9.5–11 (original)
<b>SULFETAL</b>			
SULFETAL 4069	Sodium alkyl (C8-C10) sulfate	43	10.5 (10 % in water)
SULFETAL 4105	Sodium 2-ethylhexyl sulfate	43	9 (10 % in water)
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27–70	7–9 (10 % in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27–40	11–11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5–7.5 (10 % in water)
<b>SYNTRAN®</b>			
SYNTRAN® 1501	Alkali-solubilised modified acrylic copolymer	25	8.2 (original)
SYNTRAN® 1555	Alkali-solubilised modified acrylic copolymer	25	8.0 (original)
SYNTRAN® 1560E	Alkali-solubilised modified acrylic copolymer	25	7.2 (original)
<b>TRIUMPHNETZER</b>			
TRIUMPHNETZER ZSG *	Sulfosuccinic acid diisooctyl ester, sodium salt	67	5 (1% in water)
<b>ZETESECO</b>			
ZETESECO HS 100	Disodium capryloyl glutamate	30	10 (original)
ZETESECO HS 200	Disodium cocoyl glutamate / sodium cocoyl glutamate	25	7 (original)
ZETESECO HS 300	Disodium cocoyl glutamate	25	10 (original)
<b>ZETESOL</b>			
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1% in water)
<b>ZUSOLAT</b>			
ZUSOLAT 1004	Fatty alcohol with 4 moles EO	100	6 (10 % in water)
ZUSOLAT 1005/85	Fatty alcohol with 5 moles EO	85	6 (10 % in water)
ZUSOLAT 1608/85	Fatty alcohol with 8 moles EO	85	6 (10 % in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Low-foaming and extremely fast wetting surfactant
liquid	Low-foaming and wetting surfactant for applications at 20 °C
liquid	Low-foaming and wetting surfactant for applications at 40 °C
liquid	Low-foaming and wetting surfactant for applications at 60 °C
liquid	Extremely low-foaming surfactant for applications at 20 °C
liquid	Mild surfactant, excellent foaming, hydrotrope, slight anti-corrosion properties
liquid	Mild surfactant, excellent foaming, hydrotrope, slight anti-corrosion properties
liquid	High-foaming and hydrotropic surfactant
liquid	Low-foaming and hydrotropic surfactant
liquid	Foaming surfactant for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in 2 different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in 2 different concentrations
liquid	Good solubility in hard water, stable foam
liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Excellent wetting agent
liquid	Natural, low-foaming, hydrotropic and odour-preventing surfactant
liquid	Natural, foaming and hydrotropic surfactant with low salt content
liquid	Natural, foaming and hydrotropic surfactant
liquid	High-foaming surfactant with enhanced solvent compatibility
liquid	Medium-foaming, degreasing and fast wetting surfactant
liquid	Medium-foaming, degreasing and well-wetting surfactant
liquid	Medium-foaming, wetting and excellently degreasing surfactant





# CAR CARE

GLASS



WHEELS



INTERIOR



EXTERIOR



COMMERCIAL  
VEHICLES



OTHER  
VEHICLES



In today's world, car cleaning and care call for high-performance products that are gentle on the materials as well as the environment. Zschimmer & Schwarz offers a wide range of solutions for the formulation of sophisticated products in many different areas, from manual and automated car cleaning to the removal of persistent dirt and restoring a car's paint to its original brilliance with long-lasting effect.

# GLASS

It is particularly important that the windscreen is clean and free of streaks. From the inside, it is often cleaned with glass cleaning agents. On the outside, windscreen wipers and windscreen wash ensure safe driving. Additional effects, such as anti-fogging, assist in keeping a clear view of the road ahead, even in wet weather conditions.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AUTOPOON</b>			
AUTOPOON 4012	Blend of cationic surfactant and solvents	100	3 (10 % in water)
<b>CUBLEN</b>			
CUBLEN R 60	HEMPA: hydroxyethylamino bis(methylene phosphonic acid)	60	1–2 (1% in water)
<b>LUMOROL</b>			
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10 % in water)
LUMOROL VC-E 4376	Combination of nonionic surfactants	90	9 (10 % in water)
<b>OXETAL</b>			
OXETAL ID 104	Fatty alcohol with 4 moles EO	100	6 (10 % in water)
<b>PHOSFETAL</b>			
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	100	1.5 (1% in water)
<b>SULFETAL</b>			
SULFETAL 4105	Sodium 2-ethylhexyl sulfate	43	9 (10 % in water)
SULFETAL KT 400	Triethanol ammonium fatty alcohol sulfate	43	7.5 (10 % in water)
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27–70	7–9 (10 % in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27–40	11–11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5–7.5 (10 % in water)
<b>SYNTRAN®</b>			
SYNTRAN® 1560E	Alkali-solubilised modified acrylic copolymer	25	7.2 (original)
<b>TRIUMPHNETZER</b>			
TRIUMPHNETZER ZSG *	Sulfosuccinic acid diisooctyl ester, sodium salt	67	5 (1% in water)
<b>ZETESOL</b>			
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1% in water)
<b>ZUTELAN</b>			
ZUTELAN GL 124	Alkyl polyglucoside	60	12 (original)
ZUTELAN GL 810	Alkyl polyglucoside	50	12 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]****FUNCTIONS AND PROPERTIES**

liquid	Hydrophobic rinsing agent
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale under weakly alkaline conditions, improves the hydrophilicity of surfaces and rinsing properties
flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
liquid	Surfactant blend for highly efficient and strongly degreasing cleaners
liquid	Extremely fast wetting surfactant, especially suitable for metal surfaces
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Low-foaming and hydrotropic surfactant
liquid	High-foaming surfactant
liquid	Foaming surfactant for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in 2 different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in 2 different concentrations
liquid	Good solubility in hard water, stable foam
liquid	Alkali-soluble resin for floor polishes and floor cleaners which offers improved wetting and shine
liquid	Excellent wetting agent
liquid	High-foaming surfactant with enhanced solvent compatibility
liquid	Natural, high-foaming, wetting and degreasing surfactant
liquid	Natural, medium-foaming, wetting and degreasing surfactant

# WHEELS

Wheels are composed of parts made from different materials, such as galvanised wheel bolts, steel or aluminium rims and rubber tyres. This is why cleaning agents must be compatible with all these different materials. Besides, they are required to quickly and effectively remove stubborn dirt such as brake dust, tar and rust.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AMPHOTENSID</b>			
AMPHOTENSID CCF	Alkyliminodipropionate, sodium salt	40	8 (original)
AMPHOTENSID D 1	N-alkylamino acid triethanol ammonium salt	40	8.5 (original)
<b>CUBLEN</b>			
CUBLEN A 4015	ATMP: amino tris(methylene phosphonic acid), Na5-salt	29	10 (1% in water)
CUBLEN AP 5	ATMP: amino tris(methylene phosphonic acid)	50	1 – 2 (1% in water)
CUBLEN CAP 364	Phosphonate based on natural, renewable raw material	26	7 (1% in water)
CUBLEN D 3217 N	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 5012	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-salt	51	2 (1% in water)
CUBLEN D 5113	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-3-salt	44	2 – 3 (1% in water)
CUBLEN DNC 450	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	45	1 – 2 (1% in water)
CUBLEN E 3115	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Na5-salt	25	7 (1% in water)
CUBLEN F 3016	HDTMP: hexamethylenediamine tetra(methylene phosphonic acid), Na6-salt	24	6 (1% in water)
CUBLEN K 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN K 60	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1 – 2 (1% in water)
CUBLEN KT 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN KT 600	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1 – 2 (1% in water)
CUBLEN P 4014	PBTC: 2-phosphonobutane-1,2,4-tricarboxylic acid, Na4-salt	30	8 (1% in water)
CUBLEN R 60	HEMPA: hydroxyethylamino bis(methylene phosphonic acid)	60	1 – 2 (1% in water)

\* Different grades available



**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	High-foaming and hydrotropic surfactant
liquid	High-foaming and extremely stable surfactant
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Chloride- and alkaline-free, based on raw material with natural, vegetable origin; surface-active properties especially in pH-neutral formulations; strong hydrotropic effect; easily introduced into O/W-emulsions; effective corrosion inhibition on steel and aluminium; readily biodegradable with a degradation rate of 70% according to OECD 301 F
liquid	Outstanding coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts: peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Chloride-free product; excellent universal scaling inhibitor, stabilising agent for hydrogen peroxide
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, especially calcium sulfate
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Similar to Cublen K 3014 but with non-preferential origin; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale under weakly alkaline conditions, improves the hydrophilicity of surfaces and rinsing properties

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>LUMOROL</b>			
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10 % in water)
LUMOROL VC-E 4376	Combination of nonionic surfactants	90	9 (10 % in water)
<b>MULSIFAN</b>			
MULSIFAN RT 269	Fatty alcohol polyglycol ether	100	6 (10% in water)
<b>OXETAL</b>			
OXETAL 500/85	Fatty alcohol with 5 moles EO	85	6 (10 % in water)
OXETAL 800/85	Fatty alcohol with 8 moles EO	85	6 (10 % in water)
OXETAL ID 104	Fatty alcohol with 4 moles EO	100	6 (10 % in water)
<b>PHOSFETAL</b>			
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	100	1.5 (1% in water)
PHOSFETAL 213	Alkyl polyglycol ether phosphate, acid	100	2.5 (1% in water)
<b>PROPETAL</b>			
PROPETAL 105	Alkyl polyalkylene glycol ether	100	6 (10 % in water)
<b>SULFETAL</b>			
SULFETAL 4069	Sodium alkyl (C8-C10) sulfate	43	10.5 (10 % in water)
SULFETAL KT 400	Triethanol ammonium fatty alcohol sulfate	43	7.5 (10 % in water)
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27 – 70	7 – 9 (10 % in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27 – 40	11 – 11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5 – 7.5 (10 % in water)
<b>SYNTRAN®</b>			
SYNTRAN® 6130	Bimodal, non-metal-bound modified acrylic copolymer	40	8.8 (original)
<b>TRIUMPHNETZER</b>			
TRIUMPHNETZER ZSG *	Sulfosuccinic acid diisooctyl ester, sodium salt	67	5 (1% in water)
<b>ZETESECO</b>			
ZETESECO HS 100	Disodium capryloyl glutamate	30	10 (original)
ZETESECO HS 200	Disodium cocoyl glutamate / sodium cocoyl glutamate	25	7 (original)
ZETESECO HS 300	Disodium cocoyl glutamate	25	10 (original)
<b>ZETESOL</b>			
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1% in water)
<b>ZUSOLAT</b>			
ZUSOLAT 1004	Fatty alcohol with 4 moles EO	100	6 (10 % in water)
ZUSOLAT 1005/85	Fatty alcohol with 5 moles EO	85	6 (10 % in water)
ZUSOLAT 1608/85	Fatty alcohol with 8 moles EO	85	6 (10 % in water)
<b>ZUTELAN</b>			
ZUTELAN GL 124	Alkyl polyglucoside	60	12 (original)
ZUTELAN GL 810	Alkyl polyglucoside	50	12 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
liquid	Surfactant blend for highly efficient and strongly degreasing cleaners
liquid	Co-emulsifier for microemulsions; thickener
liquid	Degreasing and fast wetting surfactant
liquid	Strongly degreasing and wetting surfactant
liquid	Extremely fast wetting surfactant, especially suitable for metal surfaces
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Low-foaming and extremely fast wetting surfactant
liquid	High-foaming and hydrotropic surfactant
liquid	High-foaming surfactant
liquid	Foaming surfactant for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in 2 different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in 2 different concentrations
liquid	Good solubility in hard water, stable foam
liquid	Binder for permanent sealers
liquid	Excellent wetting agent
liquid	Natural, low-foaming, hydrotropic and odour-preventing surfactant
liquid	Natural, foaming and hydrotropic surfactant with low salt content
liquid	Natural, foaming and hydrotropic surfactant
liquid	High-foaming surfactant with enhanced solvent compatibility
liquid	Medium-foaming, degreasing and fast wetting surfactant
liquid	Medium-foaming, degreasing and well-wetting surfactant
liquid	Medium-foaming, wetting and excellently degreasing surfactant
liquid	Natural, high-foaming, wetting and degreasing surfactant
liquid	Natural, medium-foaming, wetting and degreasing surfactant



# INTERIOR

Leather-upholstered sports seats, fleecy floor mats, robust rubber mats for the boot and a shiny cockpit: a car's interior creates a comfortable and pleasant atmosphere but is also exposed to dirt such as road dust, mud or melted chocolate. A range of different products is available for the successful cleaning and preventive care of the interior.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AMPHOTENSID</b>			
AMPHOTENSID AB	Coco-betaine	30	5–8 (original)
AMPHOTENSID B *	Cocamidopropyl betaine	30–40	5 (original)
AMPHOTENSID CCF	Alkyliminodipropionate, sodium salt	40	8 (original)
AMPHOTENSID D 1	N-alkylamino acid triethanol ammonium salt	40	8.5 (original)
<b>CUBLEN</b>			
CUBLEN AP 5	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN BIT 721	Proprietary mixture of organophosphonic acids, sodium salts	35	10 (1% in water)
CUBLEN CAP 364	Phosphonate based on natural, renewable raw material	26	7 (1% in water)
CUBLEN D 3217 N	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 5113	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-3-salt	44	2–3 (1% in water)
CUBLEN D 900 GR	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	> 80	1–2 (1% in water)
CUBLEN ED 351	Proprietary mixture of sodium salts of amino methylene phosphonic acids	33	7 (1% in water)
CUBLEN F 3016	HDTMP: hexamethylenediamine tetra(methylene phosphonic acid), Na6-salt	24	6 (1% in water)
CUBLEN K 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN K 60	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN KT 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN R 60	HEMPA: hydroxyethylamino bis(methylene phosphonic acid)	60	1–2 (1% in water)
<b>FLEROGUM</b>			
FLEROGUM K 38	Potassium cocoate	30	10–12 (10% in water)
FLEROGUM LX	Potassium laurate	30	10–12 (10% in water)
FLEROGUM O 24 *	Potassium oleate	20	10–12 (10% in water)

\* Different grades available

PHYSICAL FORM  
[AT 20 °C]

## FUNCTIONS AND PROPERTIES

liquid	Mild co-surfactant, improves foam stability
liquid	Mild co-surfactant with excellent foaming power and stability
liquid	High-foaming and hydrotropic surfactant
liquid	High-foaming and extremely stable surfactant
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Unique and synergistic mixture which provides benefits in the stabilisation of water hardness, effective peroxide bleaching, stain and spot removal as well as corrosion inhibition on steel
liquid	Chloride- and alkaline-free, based on raw material with natural, vegetable origin; surface-active properties especially in pH-neutral formulations; strong hydrotropic effect; easily introduced into O/W-emulsions; effective corrosion inhibition on steel and aluminium; readily biodegradable with a degradation rate of 70 % according to OECD 301 F
liquid	Outstanding coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
granules	Highly concentrated and purified solid, free from stabilising materials and typical impurities, low hygroscopicity, easy to handle; outstanding scale inhibitor, prevents the precipitation of hardly soluble alkaline earth salts, very calcium-tolerant, highest complex stability in alkaline formulations; stabilising agent for hydrogen peroxide
liquid	Inhibits both the precipitation and encrustation of hardly soluble salts of alkaline earth metals in substoichiometric amounts, excellent complexing behaviour; stabilising agent for hydrogen peroxide under neutral and alkaline conditions; corrosion inhibition on both unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, especially calcium sulfate
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Similar to Cublen K 3014 but with non-preferential origin; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale under weakly alkaline conditions, improves the hydrophilicity of surfaces and rinsing properties
liquid	Soap; also used to control the formation of foam in some formulations (e.g. to prevent overfoaming in washing machine)
liquid	Soap; selecting LX instead of K 38 is advised in case a substance is present to which LX is more stable, for example chlorine
liquid	Soap; different origin from LX and K 38, not based on palm oil

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>LUMOROL</b>			
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10 % in water)
LUMOROL RK	Combination of anionic and amphoteric surfactants	28	6 (original)
LUMOROL VC-E 4376	Combination of nonionic surfactants	90	9 (10 % in water)
<b>MULSIFAN</b>			
MULSIFAN RT 1	Fatty acid polyglycol ester	100	6 (10 % in water)
MULSIFAN RT 11	Fatty alcohol polyglycol ether	100	6 (10 % in water)
MULSIFAN RT 110	Mixture of fatty alcohol polyglycol ethers	100	6 (10 % in water)
MULSIFAN RT 133	Fatty alcohol polyglycol ether	100	6 (10 % in water)
MULSIFAN RT 24	Fatty alcohol polyglycol ether	100	6 (10 % in water)
MULSIFAN RT 38	Fatty alcohol polyglycol ether	100	6 (10 % in water)
<b>PHOSFETAL</b>			
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	100	1.5 (1% in water)
<b>PROPETAL</b>			
PROPETAL 105	Alkyl polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 120	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
<b>PURTON</b>			
PURTON CFD	Coconut fatty acid diethanolamide	85	9–11 (1% in water)
PURTON CFM/F	Coconut fatty acid monoethanolamide	85	n/a
PURTON SFD	Soybean oil fatty acid diethanolamide	87	8.5–11 (1% in water)
<b>SULFETAL</b>			
SULFETAL 4069	Sodium alkyl (C8-C10) sulfate	43	10.5 (10 % in water)
SULFETAL KT 400	Triethanol ammonium fatty alcohol sulfate	43	7.5 (10 % in water)
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27–70	7–9 (10 % in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27–40	11–11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5–7.5 (10 % in water)
<b>SYNTRAN®</b>			
SYNTRAN® 2812	Bimodal, non-metal-bound acrylic copolymer	40	7.5 (original)
SYNTRAN® 4001C	Blend of polymers and surfactants	32	7.0–7.5 (original)
SYNTRAN® 4002C	Blend of polymers and surfactants	22	7.0–7.5 (original)
SYNTRAN® 4015 *	Modified polymer solution	30	7.5 (original)
SYNTRAN® 4020	Carboxylated acrylic copolymer	35	6.7 (original)
SYNTRAN® PA1445 *	Grafted wax emulsion	40	9.2 (original)
SYNTRAN® WE1401	Ethylene copolymer emulsion	35	9.5 (original)
<b>TREOSAL</b>			
TREOSAL 288	Ethoxylated olive oil	100	6 (10 % in water)
TREOSAL 401	Ethoxylated coconut oil	100	6 (10 % in water)
<b>TRIUMPHNETZER</b>			
TRIUMPHNETZER ZSG *	Sulfosuccinic acid diisooctyl ester, sodium salt	67	5 (1% in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
liquid	Surfactant blend for mild cleaning formulations
liquid	Surfactant blend for highly efficient and strongly degreasing cleaners
liquid	Emulsifier for mineral oils
wax	Emulsifier for fatty acids and fatty alcohols
wax	Emulsifier for paraffins and micro paraffin waxes
wax	Emulsifier for natural and synthetic waxes
liquid	Emulsifier for white oils and paraffin oils
liquid	Emulsifier for silicone oil
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Low-foaming and extremely fast wetting surfactant
liquid	Low-foaming and wetting surfactant for applications at 20 °C
liquid	Improves lathering power, foam stability and structure, increases viscosity of formulation
flakes	Improves lathering power, foam stability and structure, increases viscosity of formulation
liquid	Improves lathering power and viscosity
liquid	High-foaming and hydrotropic surfactant
liquid	High-foaming surfactant
liquid	Foaming surfactant for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in two different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in two different concentrations
liquid	Good solubility in hard water, stable foam
liquid	Binder for automotive leather seats
liquid	Concentrate for carpet shampoos
liquid	Concentrate for spray-extraction cleaners for carpets
liquid	Cleaning booster, soil-suspending agent for carpet cleaners
liquid	Embrittling agent for milky carpet cleaners
liquid	Wax for polishes with a high coefficient of friction and good high-speed buffing response
liquid	Wax for polishes with very good mechanical resistance
liquid	Mild solubiliser for essential oils and triglycerides
liquid	Mild solubiliser for essential oils and triglycerides
liquid	Excellent wetting agent



PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>ZETESECO</b>			
ZETESECO HS 100	Disodium capryloyl glutamate	30	10 (original)
ZETESECO HS 200	Disodium cocoyl glutamate / sodium cocoyl glutamate	25	7 (original)
ZETESECO HS 300	Disodium cocoyl glutamate	25	10 (original)
<b>ZETESOL</b>			
ZETESOL LES 11/7	Sodium undeceth-7 sulfate	27	6–8 (1% in water)
ZETESOL LES 117 HC	Sodium undeceth-7 sulfate	80	10.5–12.5 (10% in water)
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1% in water)
<b>ZUSOLAT</b>			
ZUSOLAT 1004	Fatty alcohol with 4 moles EO	100	6 (10% in water)
ZUSOLAT 1608/85	Fatty alcohol with 8 moles EO	85	6 (10% in water)
<b>ZUTELAN</b>			
ZUTELAN GL 124	Alkyl polyglucoside	60	12 (original)
ZUTELAN GL 810	Alkyl polyglucoside	50	12 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid Natural, low-foaming, hydrotropic and odour-preventing surfactant

liquid Natural, foaming and hydrotropic surfactant with low salt content

liquid Natural, foaming and hydrotropic surfactant

liquid Anionic surfactant; tolerates hard water and cationic surfactants

viscous liquid Highly concentrated anionic surfactant; tolerates hard water and cationic surfactants, allows the formulation of highly concentrated products with low viscosity

liquid High-foaming surfactant with enhanced solvent compatibility

liquid Medium-foaming, degreasing and fast wetting surfactant

liquid Medium-foaming, wetting and excellently degreasing surfactant

liquid Natural, high-foaming, wetting and degreasing surfactant

liquid Natural, medium-foaming, wetting and degreasing surfactant



# EXTERIOR

A car wash not only lets the car's paint shine but also guarantees the safety of the vehicle and preserves the materials. Optimum cleaning and care therefore require special ingredients.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AMPHOTENSID</b>			
AMPHOTENSID AB	Coco-betaine	30	5–8 (original)
AMPHOTENSID B *	Cocamidopropyl betaine	30–40	5 (original)
AMPHOTENSID CCF	Alkyliminodipropionate, sodium salt	40	8 (original)
AMPHOTENSID D 1	N-alkylamino acid triethanol ammonium salt	40	8.5 (original)
<b>AUTOPOON</b>			
AUTOPOON 4012	Blend of cationic surfactant and solvents	100	3 (10 % in water)
<b>CUBLEN</b>			
CUBLEN D 3217 N	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 3217 S	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 4217	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	32	7 (1% in water)
CUBLEN D 5012	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-salt	51	2 (1% in water)
CUBLEN D 5113	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-3-salt	44	2–3 (1% in water)
CUBLEN D 900 GR	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	> 80	1–2 (1% in water)
CUBLEN E 3115	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Na5-salt	25	7 (1% in water)
CUBLEN K 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN K 60	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN KT 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN KT 600	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN R 60	HEMPA: hydroxyethylamino bis(methylene phosphonic acid)	60	1–2 (1% in water)
<b>LUMOROL</b>			
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10 % in water)
LUMOROL RK	Combination of anionic and amphoteric surfactants	28	6 (original)
LUMOROL VC-E 4376	Combination of nonionic surfactants	90	9 (10 % in water)

\* Different grades available

PHYSICAL FORM  
[AT 20 °C]

## FUNCTIONS AND PROPERTIES

liquid	Mild co-surfactant, improves foam stability
liquid	Mild co-surfactant with excellent foaming power and stability
liquid	High-foaming and hydrotropic surfactant
liquid	High-foaming and extremely stable surfactant
liquid	Hydrophobic rinsing agent
liquid	Outstanding coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding light-coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition unalloyed and high-grade steel
liquid	Highly concentrated, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts: peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
granules	Highly concentrated and purified solid, free from stabilising materials and typical impurities, low hygroscopicity, easy to handle; outstanding scale inhibitor, prevents the precipitation of hardly soluble alkaline earth salts, very calcium-tolerant, highest complex stability in alkaline formulations; stabilising agent for hydrogen peroxide
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Similar to Cublen K 3014 but with non-preferential origin; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale under weakly alkaline conditions, improves the hydrophilicity of surfaces and rinsing properties
flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
liquid	Surfactant blend for mild cleaning formulations
liquid	Surfactant blend for highly efficient and strongly degreasing cleaners

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>MULSIFAN</b>			
MULSIFAN RT 1	Fatty acid polyglycol ester	100	6 (10 % in water)
MULSIFAN RT 133	Fatty alcohol polyglycol ether	100	6 (10 % in water)
MULSIFAN RT 24	Fatty alcohol polyglycol ether	100	6 (10 % in water)
MULSIFAN RT 269	Fatty alcohol polyglycol ether	100	6 (10 % in water)
MULSIFAN RT 38	Fatty alcohol polyglycol ether	100	6 (10 % in water)
<b>PHOSFETAL</b>			
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	100	1.5 (1% in water)
PHOSFETAL 213	Alkyl polyglycol ether phosphate, acid	100	2.5 (1% in water)
<b>PURTON</b>			
PURTON CFD	Coconut fatty acid diethanolamide	85	9–11 (1% in water)
PURTON CFM/F	Coconut fatty acid monoethanolamide	85	n/a
PURTON SFD	Soybean oil fatty acid diethanolamide	87	8.5–11 (1% in water)
<b>SULFETAL</b>			
SULFETAL 4069	Sodium alkyl (C8-C10) sulfate	43	10.5 (10 % in water)
SULFETAL 4105	Sodium 2-ethylhexyl sulfate	43	9 (10 % in water)
SULFETAL KT 400	Triethanol ammonium fatty alcohol sulfate	43	7.5 (10 % in water)
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27–70	7–9 (10 % in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27–40	11–11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5–7.5 (10 % in water)
<b>TREOSAL</b>			
TREOSAL 288	Ethoxylated olive oil	100	6 (10 % in water)
TREOSAL 401	Ethoxylated coconut oil	100	6 (10 % in water)
<b>TRIUMPHNETZER</b>			
TRIUMPHNETZER ZSG *	Sulfosuccinic acid diisooctyl ester, sodium salt	67	5 (1% in water)
<b>WAXEMULSION</b>			
WAXEMULSION 1864	Nonionic carnauba wax emulsion	20	4 (10 % in water)
<b>ZETESECO</b>			
ZETESECO HS 100	Disodium capryloyl glutamate	30	10 (original)
ZETESECO HS 200	Disodium cocoyl glutamate / sodium cocoyl glutamate	25	7 (original)
ZETESECO HS 300	Disodium cocoyl glutamate	25	10 (original)
<b>ZETESOL</b>			
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1% in water)
<b>ZUTELAN</b>			
ZUTELAN GL 124	Alkyl polyglucoside	60	12 (original)
ZUTELAN GL 810	Alkyl polyglucoside	50	12 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	Emulsifier for mineral oils
wax	Emulsifier for natural and synthetic waxes
liquid	Emulsifier for white oils and paraffin oils
liquid	Co-emulsifier for microemulsions; thickener
liquid	Emulsifier for silicone oil
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Improves lathering power, foam stability and structure, increases viscosity of formulation
flakes	Improves lathering power, foam stability and structure, increases viscosity of formulation
liquid	Improves lathering power and viscosity
liquid	High-foaming and hydrotropic surfactant
liquid	Low-foaming and hydrotropic surfactant
liquid	High-foaming surfactant
liquid	Foaming surfactant for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in 2 different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in 2 different concentrations
liquid	Good solubility in hard water, stable foam
liquid	Mild solubiliser for essential oils and triglycerides
liquid	Mild solubiliser for essential oils and triglycerides
liquid	Excellent wetting agent
liquid	Emulsion of carnauba wax for cleaning and caring applications
liquid	Natural, low-foaming, hydrotropic and odour-preventing surfactant
liquid	Natural, foaming and hydrotropic surfactant with low salt content
liquid	Natural, foaming and hydrotropic surfactant
liquid	High-foaming surfactant with enhanced solvent compatibility
liquid	Natural, high-foaming, wetting and degreasing surfactant
liquid	Natural, medium-foaming, wetting and degreasing surfactant



# COMMERCIAL VEHICLES

Commercial vehicles used for the transportation of persons or goods must meet high demands. Cleaning and care play a crucial role: for the clear visibility of advertising printed on a truck tarpaulin just as much as for the cleanliness and thus the comfort of the passengers on board a bus.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AMPHOTENSID</b>			
AMPHOTENSID CCF	Alkyliminodipropionate, sodium salt	40	8 (original)
AMPHOTENSID D 1	N-alkylamino acid triethanol ammonium salt	40	8.5 (original)
AMPHOTENSID EH	Sodium salt of a short-chained alkylamine carboxylate	40	8 (original)
<b>AUTOPOON</b>			
AUTOPOON 4012	Blend of cationic surfactant and solvents	100	3 (10 % in water)
<b>CONTRASPUM</b>			
CONTRASPUM 1010 WEN	Combination of emulsifiers, paraffin oil, fatty alcohol, fatty acid derivatives and silicone compounds	97	5 (10 % in water)
CONTRASPUM 300	Alkyl polyalkylene glycol ether	100	4 (10 % in water)
CONTRASPUM W CONC	Thixotropic silicone oil emulsion	25	7 (original)
<b>CUBLEN</b>			
CUBLEN A 4015	ATMP: amino tris(methylene phosphonic acid), Na5-salt	29	10 (1% in water)
CUBLEN AP 5	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN BIT 721	Proprietary mixture of organophosphonic acids, sodium salts	35	10 (1% in water)
CUBLEN CAP 364	Phosphonate based on natural, renewable raw material	26	7 (1% in water)
CUBLEN D 3217 N	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 4217	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	32	7 (1% in water)
CUBLEN D 5012	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-salt	51	2 (1% in water)
CUBLEN D 5113	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-3-salt	44	2–3 (1% in water)
CUBLEN D 900 GR	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	> 80	1–2 (1% in water)
CUBLEN DNC 450	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	45	1–2 (1% in water)
CUBLEN E 3115	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Na5-salt	25	7 (1% in water)
CUBLEN ED 351	Proprietary mixture of sodium salts of amino methylene phosphonic acids	33	7 (1% in water)

\* Different grades available



**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	High-foaming and hydrotropic surfactant
liquid	High-foaming and extremely stable surfactant
liquid	Low-foaming and hydrotropic surfactant
liquid	Hydrophobic rinsing agent
liquid	Defoamer and ventilator for aqueous systems
liquid	Defoamer for aqueous systems
liquid	Universal defoamer for aqueous systems
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Unique and synergistic mixture which provides benefits in the stabilisation of water hardness, effective peroxide bleaching, stain and spot removal as well as corrosion inhibition on steel
liquid	Chloride- and alkaline-free, based on raw material with natural, vegetable origin; surface-active properties especially in pH-neutral formulations; strong hydrotropic effect; easily introduced into O/W-emulsions; effective corrosion inhibition on steel and aluminium; readily biodegradable with a degradation rate of 70% according to OECD 301 F
liquid	Outstanding coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Highly concentrated, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts: peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
granules	Highly concentrated and purified solid, free from stabilising materials and typical impurities, low hygroscopicity, easy to handle; outstanding scale inhibitor, prevents the precipitation of hardly soluble alkaline earth salts, very calcium-tolerant, highest complex stability in alkaline formulations; stabilising agent for hydrogen peroxide
liquid	Chloride-free product; excellent universal scaling inhibitor, stabilising agent for hydrogen peroxide
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Inhibits both the precipitation and encrustation of hardly soluble salts of alkaline earth metals in substoichiometric amounts, excellent complexing behaviour; stabilising agent for hydrogen peroxide under neutral and alkaline conditions; corrosion inhibition on both unalloyed and high-grade steel

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>CUBLEN</b>			
CUBLEN F 3016	HDTMP: hexamethylenediamine tetra(methylene phosphonic acid), Na6-salt	24	6 (1% in water)
CUBLEN K 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN K 60	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN K 8514 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	60	12 (1% in water)
CUBLEN KT 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN KT 600	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN P 4014	PBTC: 2-phosphonobutane-1,2,4-tricarboxylic acid, Na4-salt	30	8 (1% in water)
CUBLEN P 50	PBTC: 2-Phosphonobutane-1,2,4-tricarboxylic acid	50	1–2 (1% in water)
CUBLEN R 60	HEMPA: hydroxyethylamino bis(methylene phosphonic acid)	60	1–2 (1% in water)
<b>LUMOROL</b>			
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10 % in water)
LUMOROL VC-E 4376	Combination of nonionic surfactants	90	9 (10 % in water)
<b>MULSIFAN</b>			
MULSIFAN K 326	Combination of anionic and nonionic surfactants	86	6 (10 % in water)
MULSIFAN RT 1	Fatty acid polyglycol ester	100	6 (10 % in water)
MULSIFAN RT 24	Fatty alcohol polyglycol ether	100	6 (10 % in water)
MULSIFAN RT 269	Fatty alcohol polyglycol ether	100	6 (10 % in water)
MULSIFAN RT 410 G	Combination of fatty alcohol polyalkylene glycol ethers and fatty acid ester	96	7 (10 % in water)
<b>OXETAL</b>			
OXETAL 500/85	Fatty alcohol with 5 moles EO	85	6 (10 % in water)
OXETAL 800/85	Fatty alcohol with 8 moles EO	85	6 (10 % in water)
OXETAL ID 104	Fatty alcohol with 4 moles EO	100	6 (10 % in water)
<b>PHOSFETAL</b>			
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	100	1.5 (1% in water)
PHOSFETAL 213	Alkyl polyglycol ether phosphate, acid	100	2.5 (1% in water)
<b>PROPETAL</b>			
PROPETAL 105	Alkyl polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 120	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 140	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 160	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)
PROPETAL 220	Fatty alcohol polyalkylene glycol ether	100	6 (10 % in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, especially calcium sulfate
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Regular granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Similar to Cublen K 3014 but with non-preferential origin; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Stable against hypochlorite, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale under weakly alkaline conditions, improves the hydrophilicity of surfaces and rinsing properties
flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
liquid	Surfactant blend for highly efficient and strongly degreasing cleaners
liquid	Emulsifier for solvents and the formulation of cold cleaners
liquid	Emulsifier for mineral oils
liquid	Emulsifier for white oils and paraffin oils
liquid	Co-emulsifier for microemulsions; thickener
liquid	Emulsifier for hydrocarbon solvents
liquid	Degreasing and fast wetting surfactant
liquid	Strongly degreasing and wetting surfactant
liquid	Extremely fast wetting surfactant, especially suitable for metal surfaces
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Low-foaming and extremely fast wetting surfactant
liquid	Low-foaming and wetting surfactant for applications at 20 °C
liquid	Low-foaming and wetting surfactant for applications at 40 °C
liquid	Low-foaming and wetting surfactant for applications at 60 °C
liquid	Extremely low-foaming surfactant for applications at 20 °C



PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>SULFETAL</b>			
SULFETAL 4069	Sodium alkyl (C8-C10) sulfate	43	10.5 (10 % in water)
SULFETAL 4105	Sodium 2-ethylhexyl sulfate	43	9 (10 % in water)
SULFETAL KT 400	Triethanol ammonium fatty alcohol sulfate	43	7.5 (10 % in water)
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27–70	7–9 (10 % in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27–40	11–11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5–7.5 (10 % in water)
<b>TRIUMPHNETZER</b>			
TRIUMPHNETZER ZSG *	Sulfosuccinic acid diisooctyl ester, sodium salt	67	5 (1% in water)
<b>WAXEMULSION</b>			
WAXEMULSION 1864	Nonionic carnauba wax emulsion	20	4 (10 % in water)
<b>ZETESECO</b>			
ZETESECO HS 100	Disodium capryloyl glutamate	30	10 (original)
ZETESECO HS 200	Disodium cocoyl glutamate / sodium cocoyl glutamate	25	7 (original)
ZETESECO HS 300	Disodium cocoyl glutamate	25	10 (original)
<b>ZETESOL</b>			
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1% in water)
<b>ZUSOLAT</b>			
ZUSOLAT 1004	Fatty alcohol with 4 moles EO	100	6 (10 % in water)
ZUSOLAT 1005/85	Fatty alcohol with 5 moles EO	85	6 (10 % in water)
ZUSOLAT 1608/85	Fatty alcohol with 8 moles EO	85	6 (10 % in water)
<b>ZUTELAN</b>			
ZUTELAN GL 124	Alkyl polyglucoside	60	12 (original)
ZUTELAN GL 810	Alkyl polyglucoside	50	12 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	High-foaming and hydrotropic surfactant
liquid	Low-foaming and hydrotropic surfactant
liquid	High-foaming surfactant
liquid	Foaming surfactant for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in two different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in two different concentrations
liquid	Good solubility in hard water, stable foam
liquid	Excellent wetting agent
liquid	Emulsion of carnauba wax for cleaning and caring applications
liquid	Natural, low-foaming, hydrotropic and odour-preventing surfactant
liquid	Natural, foaming and hydrotropic surfactant with low salt content
liquid	Natural, foaming and hydrotropic surfactant
liquid	High-foaming surfactant with enhanced solvent compatibility
liquid	Medium-foaming, degreasing and fast wetting surfactant
liquid	Medium-foaming, degreasing and well-wetting surfactant
liquid	Medium-foaming, wetting and excellently degreasing surfactant
liquid	Natural, high-foaming, wetting and degreasing surfactant
liquid	Natural, medium-foaming, wetting and degreasing surfactant



# OTHER VEHICLES

Special vehicles like motorbikes, bicycles, boats or trains come with special challenges for their users. The materials they are made of and the dirt they are exposed to are highly specific and must be taken into account when selecting cleaning and care products.

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>AMPHOTENSID</b>			
AMPHOTENSID AB	Coco-betaine	30	5–8 (original)
AMPHOTENSID B *	Cocamidopropyl betaine	30–40	5 (original)
AMPHOTENSID CCF	Alkyliminodipropionate, sodium salt	40	8 (original)
AMPHOTENSID D 1	N-alkylamino acid triethanol ammonium salt	40	8.5 (original)
AMPHOTENSID EH	Sodium salt of a short-chained alkylamine carboxylate	40	8 (original)
<b>AUTOPOON</b>			
AUTOPOON 4012	Blend of cationic surfactant and solvents	100	3 (10 % in water)
<b>CUBLEN</b>			
CUBLEN A 4015	ATMP: amino tris(methylene phosphonic acid), Na5-salt	29	10 (1% in water)
CUBLEN AP 5	ATMP: amino tris(methylene phosphonic acid)	50	1–2 (1% in water)
CUBLEN BIT 721	Proprietary mixture of organophosphonic acids, sodium salts	35	10 (1% in water)
CUBLEN D 3217 N	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 3217 S	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	25	7 (1% in water)
CUBLEN D 4217	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	32	7 (1% in water)
CUBLEN D 5012	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-salt	51	2 (1% in water)
CUBLEN D 5113	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-3-salt	44	2–3 (1% in water)
CUBLEN D 900 GR	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	> 80	1–2 (1% in water)
CUBLEN DNC 450	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	45	1–2 (1% in water)
CUBLEN E 3115	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Na5-salt	25	7 (1% in water)
CUBLEN E 34135 P	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Ca5-Na6-salt, granules	34	12 (1% in water)
CUBLEN ED 351	Proprietary mixture of sodium salts of amino methylene phosphonic acids	33	7 (1% in water)
CUBLEN K 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN K 60	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN K 8514 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	60	12 (1% in water)

\* Different grades available



**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	Mild co-surfactant, improves foam stability
liquid	Mild co-surfactant with excellent foaming power and stability
liquid	High-foaming and hydrotropic surfactant
liquid	High-foaming and extremely stable surfactant
liquid	Low-foaming and hydrotropic surfactant
liquid	Hydrophobic rinsing agent
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed steel
liquid	Unique and synergistic mixture which provides benefits in the stabilisation of water hardness, effective peroxide bleaching, stain and spot removal as well as corrosion inhibition on steel
liquid	Outstanding coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding light-coloured scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent; corrosion inhibition unalloyed and high-grade steel
liquid	Highly concentrated, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts: peroxide stabilising agent; corrosion inhibition on unalloyed and high-grade steel
granules	Highly concentrated and purified solid, free from stabilising materials and typical impurities, low hygroscopicity, easy to handle; outstanding scale inhibitor, prevents the precipitation of hardly soluble alkaline earth salts, very calcium-tolerant, highest complex stability in alkaline formulations; stabilising agent for hydrogen peroxide
liquid	Chloride-free product; excellent universal scaling inhibitor, stabilising agent for hydrogen peroxide
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide stabilising agent; corrosion inhibition on unalloyed steel
granules	Regular granular structure; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts; peroxide-stabilising agent, retarded dissolution in water
liquid	Inhibits both the precipitation and encrustation of hardly soluble salts of alkaline earth metals in substoichiometric amounts, excellent complexing behaviour; stabilising agent for hydrogen peroxide under neutral and alkaline conditions; corrosion inhibition on both unalloyed and high-grade steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
granules	Regular granular structure, easy to handle, low hygroscopicity, outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel

PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>CUBLEN</b>			
CUBLEN KT 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na <sub>4</sub> -salt (tetrasodium etidronate)	20	12 (1% in water)
CUBLEN KT 600	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	60	1–2 (1% in water)
CUBLEN R 60	HEMPA: hydroxyethylamino bis(methylene phosphonic acid)	60	1–2 (1% in water)
<b>LUMOROL</b>			
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	51	9 (10% in water)
LUMOROL RK	Combination of anionic and amphoteric surfactants	28	6 (original)
LUMOROL VC-E 4376	Combination of nonionic surfactants	90	9 (10% in water)
<b>MULSIFAN</b>			
MULSIFAN K 326	Combination of anionic and nonionic surfactants	86	6 (10% in water)
MULSIFAN RT 1	Fatty acid polyglycol ester	100	6 (10% in water)
MULSIFAN RT 24	Fatty alcohol polyglycol ether	100	6 (10% in water)
MULSIFAN RT 269	Fatty alcohol polyglycol ether	100	6 (10% in water)
MULSIFAN RT 410 G	Combination of fatty alcohol polyalkylene glycol ethers and fatty acid ester	96	7 (10% in water)
<b>OXETAL</b>			
OXETAL 500/85	Fatty alcohol with 5 moles EO	85	6 (10% in water)
OXETAL 800/85	Fatty alcohol with 8 moles EO	85	6 (10% in water)
OXETAL ID 104	Fatty alcohol with 4 moles EO	100	6 (10% in water)
<b>PHOSFETAL</b>			
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	100	1.5 (1% in water)
PHOSFETAL 213	Alkyl polyglycol ether phosphate, acid	100	2.5 (1% in water)
<b>PROPETAL</b>			
PROPETAL 105	Alkyl polyalkylene glycol ether	100	6 (10% in water)
PROPETAL 120	Fatty alcohol polyalkylene glycol ether	100	6 (10% in water)
PROPETAL 140	Fatty alcohol polyalkylene glycol ether	100	6 (10% in water)
PROPETAL 160	Fatty alcohol polyalkylene glycol ether	100	6 (10% in water)
PROPETAL 220	Fatty alcohol polyalkylene glycol ether	100	6 (10% in water)
<b>PURTON</b>			
PURTON CFD	Coconut fatty acid diethanolamide	85	9–11 (1% in water)
PURTON CFM/F	Coconut fatty acid monoethanolamide	85	n/a
PURTON SFD	Soybean oil fatty acid diethanolamide	87	8.5–11 (1% in water)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	Similar to Cublen K 3014 but with non-preferential origin; outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale, excellent stain remover; corrosion inhibition on unalloyed steel
liquid	Outstanding scaling inhibitor, avoids precipitation of hardly soluble alkaline earth salts, very effective in removing scale under weakly alkaline conditions, improves the hydrophilicity of surfaces and rinsing properties
flowable paste	Universal and well-balanced surfactant blend for all foaming cleaning formulations
liquid	Surfactant blend for mild cleaning formulations
liquid	Surfactant blend for highly efficient and strongly degreasing cleaners
liquid	Emulsifier for solvents and the formulation of cold cleaners
liquid	Emulsifier for mineral oils
liquid	Emulsifier for white oils and paraffin oils
liquid	Co-emulsifier for microemulsions; thickener
liquid	Emulsifier for hydrocarbon solvents
liquid	Degreasing and fast wetting surfactant
liquid	Strongly degreasing and wetting surfactant
liquid	Extremely fast wetting surfactant, especially suitable for metal surfaces
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Anionic surfactant with corrosion protection and antistatic effect
liquid	Low-foaming and extremely fast wetting surfactant
liquid	Low-foaming and wetting surfactant for applications at 20 °C
liquid	Low-foaming and wetting surfactant for applications at 40 °C
liquid	Low-foaming and wetting surfactant for applications at 60 °C
liquid	Extremely low-foaming surfactant for applications at 20 °C
liquid	Improves lathering power, foam stability and structure, increases viscosity of formulation
flakes	Improves lathering power, foam stability and structure, increases viscosity of formulation
liquid	Improves lathering power and viscosity



PRODUCT	CHEMICAL DESCRIPTION	CONCENTRATION [%]	pH
<b>SULFETAL</b>			
SULFETAL 4069	Sodium alkyl (C8-C10) sulfate	43	10.5 (10 % in water)
SULFETAL 4105	Sodium 2-ethylhexyl sulfate	43	9 (10 % in water)
SULFETAL KT 400	Triethanol ammonium fatty alcohol sulfate	43	7.5 (10 % in water)
SULFETAL LA *	Ammonium lauryl sulfate	27	4.5 (original)
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	27–70	7–9 (10 % in water)
SULFETAL LS *	Sodium fatty alcohol sulfate	27–40	11–11.5 (original)
SULFETAL LT *	Triethanol ammonium lauryl sulfate	40	6.5–7.5 (10 % in water)
<b>TREOSAL</b>			
TREOSAL 288	Ethoxylated olive oil	100	6 (10 % in water)
TREOSAL 401	Ethoxylated coconut oil	100	6 (10 % in water)
<b>TRIUMPHNETZER</b>			
TRIUMPHNETZER ZSG *	Sulfosuccinic acid diisooctyl ester, sodium salt	67	5 (1% in water)
<b>TURKEY RED OIL</b>			
TURKEY RED OIL	Sodium sulfuricinate	82	7.5 (10 % in water)
<b>WAXEMULSION</b>			
WAXEMULSION 1864	Nonionic carnauba wax emulsion	20	4 (10 % in water)
<b>ZETESECO</b>			
ZETESECO HS 100	Disodium capryloyl glutamate	30	10 (original)
ZETESECO HS 200	Disodium cocoyl glutamate / sodium cocoyl glutamate	25	7 (original)
ZETESECO HS 300	Disodium cocoyl glutamate	25	10 (original)
<b>ZETESOL</b>			
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	89	7 (1% in water)
<b>ZUSOLAT</b>			
ZUSOLAT 1004	Fatty alcohol with 4 moles EO	100	6 (10 % in water)
ZUSOLAT 1005/85	Fatty alcohol with 5 moles EO	85	6 (10 % in water)
ZUSOLAT 1608/85	Fatty alcohol with 8 moles EO	85	6 (10 % in water)
<b>ZUTELAN</b>			
ZUTELAN GL 124	Alkyl polyglucoside	60	12 (original)
ZUTELAN GL 810	Alkyl polyglucoside	50	12 (original)

\* Different grades available

**PHYSICAL FORM  
[AT 20 °C]**

**FUNCTIONS AND PROPERTIES**

liquid	High-foaming and hydrotropic surfactant
liquid	Low-foaming and hydrotropic surfactant
liquid	High-foaming surfactant
liquid	Foaming surfactants for all kinds of cleaning formulations with a pH < 8.5
liquid	Good solubility in hard water, stable foam; available in two different concentrations
liquid	High-foaming surfactant suitable for many different applications; available in two different concentrations
liquid	Good solubility in hard water, stable foam
liquid	Mild solubiliser for essential oils and triglycerides
liquid	Mild solubiliser for essential oils and triglycerides
liquid	Excellent wetting agent
liquid	Natural, solubilising surfactant
liquid	Emulsion of carnauba wax for cleaning and caring applications
liquid	Natural, low-foaming, hydrotropic and odour-preventing surfactant
liquid	Natural, foaming and hydrotropic surfactant with low salt content
liquid	Natural, foaming and hydrotropic surfactant
liquid	High-foaming surfactant with enhanced solvent compatibility
liquid	Medium-foaming, degreasing and fast wetting surfactant
liquid	Medium-foaming, degreasing and well-wetting surfactant
liquid	Medium-foaming, wetting and excellently degreasing surfactant
liquid	Natural, high-foaming, wetting and degreasing surfactant
liquid	Natural, medium-foaming, wetting and degreasing surfactant





# PRODUCT REGISTER

# PRODUCT REGISTER

PRODUCT NAME	HOME CARE						I & I						CAR CARE					
	Dishes	Floors / Carpet	Hard surfaces	Glass	Textiles	Sanitary	Commercial kitchen	Floors / Carpet	Hard surfaces	Sanitary	Facade	Manufacturing areas	Glass	Wheels	Interior	Exterior	Commercial vehicles	Other vehicles
AMPHOTENSID AB	•	•	•		•	•	•										•	
AMPHOTENSID B *	•	•	•		•	•	•										•	
AMPHOTENSID CCF		•	•		•	•	•		•	•	•			•	•	•	•	
AMPHOTENSID D 1			•	•		•	•	•	•	•	•			•	•	•	•	
AMPHOTENSID DMOX					•	•	•		•	•	•							
AMPHOTENSID EH	•				•	•	•	•	•	•	•					•	•	
AMPHOTENSID HPOX					•	•	•		•	•	•							
AUTOPOON 4012			•	•		•	•	•		•	•			•		•	•	
CONTRASPUM 1010 WEN							•										•	
CONTRASPUM 300					•		•										•	
CONTRASPUM W CONC							•										•	
CUBLEN A 4015	•	•	•		•	•	•	•	•	•	•		•			•	•	
CUBLEN ACS 402						•	•	•	•	•	•							
CUBLEN AP 1			•			•	•	•	•	•	•							
CUBLEN AP 5	•	•	•		•	•	•	•	•	•	•		•	•		•	•	
CUBLEN BIT 721	•	•	•		•	•	•	•	•	•	•					•	•	
CUBLEN CAP 364			•				•			•	•		•	•		•		
CUBLEN D 3217 N		•	•		•	•	•	•	•	•	•		•	•	•	•	•	
CUBLEN D 3217 S		•	•		•	•	•	•	•	•	•					•	•	
CUBLEN D 4217		•	•		•	•	•	•	•	•	•					•	•	
CUBLEN D 5012		•	•		•	•	•	•	•	•	•		•		•	•	•	
CUBLEN D 5113		•	•		•	•	•	•	•	•	•		•	•	•	•	•	
CUBLEN D 900 GR			•		•	•	•	•		•	•			•	•	•	•	
CUBLEN DNC 450						•	•	•	•	•	•		•			•	•	
CUBLEN E 3115		•	•		•	•	•	•	•	•	•		•		•	•	•	
CUBLEN E 34135 P		•			•	•	•	•	•	•	•						•	
CUBLEN ED 351	•	•	•		•	•	•	•	•	•	•			•		•	•	
CUBLEN F 3016			•				•	•	•	•	•		•	•		•		
CUBLEN K 3014	•	•	•		•	•	•	•	•	•	•		•	•	•	•	•	
CUBLEN K 60	•	•	•		•	•	•	•	•	•	•		•	•	•	•	•	
CUBLEN K 8514 GR	•	•			•	•	•	•	•	•	•					•	•	
FLEROGUM K 38		•	•		•	•	•	•	•	•	•			•				
FLEROGUM LX		•	•		•	•	•	•	•	•	•			•				
FLEROGUM O 24 *		•	•		•	•	•	•	•	•	•			•				
FLOOR FINISH CONCENTRATE A							•											

\* Different grades available

PRODUCT NAME	HOME CARE						I & I						CAR CARE					
	Dishes	Floors / Carpet	Hard surfaces	Glass	Textiles	Sanitary	Commercial kitchen	Floors / Carpet	Hard surfaces	Sanitary	Facade	Manufacturing areas	Glass	Wheels	Interior	Exterior	Commercial vehicles	Other vehicles
LUMOROL 4192 M	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
LUMOROL 4339 M	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
LUMOROL 54/SPEZIAL	•				•	•									•			
LUMOROL FMO *					•													
LUMOROL HSC			•			•	•		•									
LUMOROL RK	•	•	•	•	•	•		•						•	•			•
LUMOROL VC-E 4376							•	•	•	•	•	•	•	•	•	•	•	•
MULSIFAN K 326			•		•		•	•	•		•	•					•	•
MULSIFAN RT 1			•				•		•					•	•	•	•	
MULSIFAN RT 11			•				•		•									
MULSIFAN RT 110			•						•					•				
MULSIFAN RT 133		•	•		•			•	•					•	•			
MULSIFAN RT 163		•	•		•		•		•									
MULSIFAN RT 203/80			•		•	•		•	•									
MULSIFAN RT 24			•				•		•					•	•	•	•	•
MULSIFAN RT 269	•		•										•		•	•	•	•
MULSIFAN RT 38			•						•					•	•			
MULSIFAN RT 410 G			•				•	•									•	•
OXETAL 500/85							•	•	•	•	•	•	•	•			•	•
OXETAL 800/85							•	•	•	•	•	•	•	•			•	•
OXETAL ID 104			•	•			•	•	•	•	•	•	•	•			•	•
PHOSFETAL 201		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PHOSFETAL 213							•	•	•	•	•	•	•	•	•	•	•	•
PROPETAL 105	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•
PROPETAL 120		•	•				•	•	•	•	•	•	•	•			•	•
PROPETAL 140	•				•		•		•								•	•
PROPETAL 160	•				•		•		•								•	•
PROPETAL 220	•	•	•		•		•	•	•	•	•	•	•	•			•	•
PROTELAN 1430				•					•		•	•	•					
PROTELAN LS 9011 *				•					•			•	•					
PROTELAN VE/K NP	•				•													
PURTON CFD	•	•	•	•	•		•		•					•	•			•
PURTON CFM/F	•	•	•	•	•		•		•					•	•			•
PURTON SFD	•	•	•	•	•		•		•					•	•			•

# PRODUCT REGISTER

PRODUCT NAME	HOME CARE						I & I						CAR CARE					
	Dishes	Floors / Carpet	Hard surfaces	Glass	Textiles	Sanitary	Commercial kitchen	Floors / Carpet	Hard surfaces	Sanitary	Facade	Manufacturing areas	Glass	Wheels	Interior	Exterior	Commercial vehicles	Other vehicles
SETACIN 103 *	•	•			•	•		•		•								
SULFETAL 4069	•	•	•		•	•	•	•		•	•		•	•	•	•	•	•
SULFETAL 4105	•	•	•	•	•	•	•	•		•	•		•		•	•	•	•
SULFETAL KT 400	•	•	•	•	•	•	•	•		•	•		•	•	•	•	•	•
SULFETAL LA *	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•
SULFETAL LM *	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•
SULFETAL LS *	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•
SULFETAL LT *	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•
SULFETAL ZN	•		•															
SYNTRAN® 1076							•											
SYNTRAN® 1079							•											
SYNTRAN® 1101C							•											
SYNTRAN® 1274							•											
SYNTRAN® 1292							•											
SYNTRAN® 1299							•											
SYNTRAN® 1501					•		•	•		•	•		•					
SYNTRAN® 1555					•		•	•		•	•		•					
SYNTRAN® 1560E		•	•	•			•	•		•	•		•					
SYNTRAN® 1671		•					•											
SYNTRAN® 1942							•											
SYNTRAN® 1950 *		•																
SYNTRAN® 2812														•				
SYNTRAN® 4001C		•					•							•				
SYNTRAN® 4002C		•					•							•				
SYNTRAN® 4015 *		•					•							•				
SYNTRAN® 4020 *		•					•							•				
SYNTRAN® 6130													•					
SYNTRAN® A-170							•											
SYNTRAN® MT220							•											
SYNTRAN® MT228							•											
SYNTRAN® MT240							•											
SYNTRAN® PA1445 *		•	•				•	•						•				
SYNTRAN® WE1401		•					•							•				
TREOSAL 288	•		•		•	•								•	•		•	
TREOSAL 401	•		•		•	•								•	•		•	
TREOSAL HE	•				•	•	•											
TRIUMPHNETZER ZSG *	•	•	•	•	•	•	•	•		•	•		•	•	•	•	•	•
TURKEY RED OIL	•	•	•		•	•	•											•

\* Different grades available

PRODUCT NAME	HOME CARE						I & I						CAR CARE					
	Dishes	Floors / Carpet	Hard surfaces	Glass	Textiles	Sanitary	Commercial kitchen	Floors / Carpet	Hard surfaces	Sanitary	Facade	Manufacturing areas	Glass	Wheels	Interior	Exterior	Commercial vehicles	Other vehicles
WAXEMULSION 1864	•	•					•	•							•	•	•	
ZETESOCO HS 100	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	
ZETESOCO HS 200	•	•	•	•	•		•	•	•		•	•		•	•	•	•	
ZETESOCO HS 300	•	•	•	•	•		•	•	•		•	•		•	•	•	•	
ZETESOL 270/N	•		•		•	•	•		•	•								
ZETESOL 370/N *	•		•		•	•	•		•	•								
ZETESOL AN 27	•		•		•	•	•		•	•								
ZETESOL AN/70	•		•		•	•	•		•	•								
ZETESOL LA	•			•			•											
ZETESOL LES 111/7	•		•		•	•	•		•	•				•				
ZETESOL LES 117 HC	•		•		•	•	•		•	•				•				
ZETESOL LES 2 *	•		•		•	•	•		•	•								
ZETESOL LES 3/SL	•		•		•	•	•		•	•								
ZETESOL LME	•				•		•											
ZETESOL TP 300	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
ZETESOL ZN	•				•		•											
ZUSOLAT 1004	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
ZUSOLAT 1005/85	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
ZUSOLAT 1608/85	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
ZUTELAN GL 124	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	
ZUTELAN GL 810	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	



# LIST OF PRODUCT NAMES

# LIST OF PRODUCT NAMES

PRODUCT NAME	CHEMICAL DESCRIPTION	PAGE
AMPHOTENSID AB	Coco-betaine	8, 14, 20, 32, 40, 48, 64, 98, 104, 114
AMPHOTENSID B *	Cocamidopropyl betaine	8, 14, 20, 32, 40, 48, 64, 98, 104, 114
AMPHOTENSID CCF	Alkyliminodipropionate, sodium salt	14, 20, 32, 40, 48, 72, 78, 84, 94, 98, 104, 108, 114
AMPHOTENSID D 1	N-alkylamino acid triethanol ammonium salt	20, 28, 40, 48, 56, 64, 72, 78, 84, 94, 98, 104, 108, 114
AMPHOTENSID DMOX	Lauramine oxide	20, 32, 40, 48, 72, 78
AMPHOTENSID EH	Sodium salt of a short-chained alkylamine carboxylate	8, 32, 40, 48, 56, 64, 72, 78, 84, 108, 114
AMPHOTENSID HPOX	Amines, C12-18(even numbered)-alkyl dimethyl, N-oxides	32, 40, 48, 72, 78
AUTOPOON 4012	Blend of cationic surfactant and solvents	20, 28, 40, 56, 64, 78, 92, 104, 108, 114
CONTRASPUM 1010 WEN	Combination of emulsifiers, paraffin oil, fatty alcohol, fatty acid derivatives and silicone compounds	56, 84, 108
CONTRASPUM 300	Alkyl polyalkylene glycol ether	32, 56, 78, 84, 108
CONTRASPUM W CONC	Thixotropic silicone oil emulsion	56, 84, 108
CUBLEN A 4015	ATMP: amino tris(methylene phosphonic acid), Na5-salt	8, 14, 20, 32, 40, 48, 56, 64, 72, 78, 84, 94, 108, 114
CUBLEN ACS 402	Nitrilotris(methylene phosphonic acid)-N-oxide, potassium salt	40, 48, 56, 64, 72, 84
CUBLEN AP 1	ATMP: amino tris(methylene phosphonic acid)	20, 40, 48, 56, 64, 72, 84
CUBLEN AP 5	ATMP: amino tris(methylene phosphonic acid)	8, 14, 20, 32, 40, 48, 56, 64, 72, 78, 84, 94, 98, 108, 114
CUBLEN BIT 721	Proprietary mixture of organophosphonic acids, sodium salts	8, 14, 20, 32, 40, 48, 56, 64, 78, 84, 98, 108, 114
CUBLEN CAP 364	Phosphonate based on natural, renewable raw material	20, 56, 64, 78, 84, 94, 98, 108
CUBLEN D 3217 N	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	14, 20, 32, 40, 48, 56, 64, 72, 78, 84, 94, 98, 104, 108, 114
CUBLEN D 3217 S	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	14, 20, 32, 40, 48, 56, 64, 72, 78, 84, 104, 114
CUBLEN D 4217	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na7-salt	14, 20, 32, 40, 48, 56, 64, 72, 78, 84, 104, 108, 114
CUBLEN D 5012	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-salt	14, 20, 32, 40, 48, 56, 64, 72, 78, 84, 94, 104, 108, 114
CUBLEN D 5113	DTPMP: diethylenetriamine penta(methylene phosphonic acid), Na2-3-salt	14, 20, 32, 40, 48, 56, 64, 72, 78, 84, 94, 98, 104, 108, 114
CUBLEN D 900 GR	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	20, 32, 40, 48, 56, 64, 78, 84, 98, 104, 108, 114
CUBLEN DNC 450	DTPMP: diethylenetriamine penta(methylene phosphonic acid)	42, 56, 64, 72, 86, 94, 108, 114
CUBLEN E 3115	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Na5-salt	14, 20, 32, 42, 48, 58, 64, 72, 78, 86, 94, 104, 108, 114
CUBLEN E 34135 P	EDTMP: ethylenediamine tetra(methylene phosphonic acid), Ca5-Na6-salt, granules	14, 32, 42, 58, 64, 72, 86, 114
CUBLEN ED 351	Proprietary mixture of sodium salts of amino methylene phosphonic acids	8, 14, 22, 34, 42, 64, 72, 78, 86, 98, 108, 114
CUBLEN F 3016	HDTMP: hexamethylenediamine tetra(methylene phosphonic acid), Na6-salt	22, 66, 72, 80, 86, 94, 98, 110
CUBLEN K 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	8, 14, 22, 34, 42, 50, 58, 66, 72, 80, 86, 94, 98, 104, 110, 114

\* Different grades available

PRODUCT NAME	CHEMICAL DESCRIPTION	PAGE
CUBLEN K 60	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	8, 14, 22, 34, 42, 50, 58, 66, 72, 80, 86, 94, 98, 104, 110, 114
CUBLEN K 8514 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	8, 14, 34, 42, 50, 58, 66, 74, 80, 86, 110, 114
CUBLEN K 9012 GR	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na2-salt (disodium etidronate)	8, 16, 34, 42, 58, 66, 74, 80, 86
CUBLEN KT 3014	HEDP: 1-hydroxyethane 1,1-diphosphonic acid, Na4-salt (tetrasodium etidronate)	8, 16, 22, 34, 42, 50, 58, 66, 74, 80, 86, 94, 98, 104, 110, 116
CUBLEN KT 600	HEDP: 1-hydroxyethane 1,1-diphosphonic acid (etidronic acid)	8, 16, 22, 34, 42, 50, 58, 66, 74, 80, 86, 94, 104, 110, 116
CUBLEN P 4014	PBTC: 2-phosphonobutane-1,2,4-tricarboxylic acid, Na4-salt	22, 34, 42, 50, 58, 66, 74, 80, 86, 94, 110
CUBLEN P 50	PBTC: 2-Phosphonobutane-1,2,4-tricarboxylic acid	22, 34, 42, 50, 58, 66, 74, 86, 110
CUBLEN R 60	HEMPA: hydroxyethylamino bis(methylene phosphonic acid)	8, 28, 50, 58, 66, 80, 86, 92, 94, 98, 104, 110, 116
FLEROGUM K 38	Potassium cocoate	16, 22, 34, 42, 50, 58, 66, 74, 80, 98
FLEROGUM LX	Potassium laurate	16, 22, 34, 42, 50, 58, 66, 74, 80, 98
FLEROGUM O 24 *	Potassium oleate	16, 22, 34, 42, 50, 58, 66, 74, 80, 98
FLOOR FINISH CONCENTRATE A	Metal-bound styrene acrylic copolymer, wax emulsions	58
LUMOROL 4192 M	Combination of anionic and nonionic surfactants and soap	16, 22, 34, 50, 58, 66
LUMOROL 4339 M	Combination of linear alkyl benzene sulfonate, fatty alcohol ether sulfate, fatty alcohol ethoxylate and fatty acid diethanolamide	8, 16, 22, 28, 34, 42, 50, 58, 66, 74, 80, 86, 92, 96, 100, 104, 110, 116
LUMOROL 54/SPEZIAL	Blend of anionic and nonionic surfactants	8, 34
LUMOROL FMO *	Blend of anionic and nonionic surfactants and soap	34
LUMOROL HSC	Blend of anionic and nonionic surfactants and soap	22, 42, 58, 74
LUMOROL RK	Combination of anionic and amphoteric surfactants	8, 16, 22, 28, 34, 42, 66, 100, 104, 116
LUMOROL VC-E 4376	Combination of nonionic surfactants	50, 58, 66, 74, 80, 86, 92, 96, 100, 104, 110, 116
MULSIFAN K 326	Combination of anionic and nonionic surfactants	22, 34, 50, 58, 66, 80, 86, 110, 116
MULSIFAN RT 1	Fatty acid polyglycol ester	22, 50, 66, 86, 100, 106, 110, 116
MULSIFAN RT 11	Fatty alcohol polyglycol ether	22, 50, 66, 86, 100
MULSIFAN RT 110	Mixture of fatty alcohol polyglycol ethers	22, 66, 100
MULSIFAN RT 133	Fatty alcohol polyglycol ether	16, 22, 34, 58, 66, 100, 106
MULSIFAN RT 163	Ethoxylated triglyceride	16, 22, 34, 50, 66, 86
MULSIFAN RT 203/80	Fatty alcohol polyglycol ether	22, 34, 42, 58, 66
MULSIFAN RT 24	Fatty alcohol polyglycol ether	22, 50, 66, 86, 100, 106, 110, 116
MULSIFAN RT 269	Fatty alcohol polyglycol ether	8, 22, 96, 106, 110, 116
MULSIFAN RT 38	Fatty alcohol polyglycol ether	22, 66, 100, 106
MULSIFAN RT 410 G	Combination of fatty alcohol polyalkylene glycol ethers and fatty acid ester	22, 58, 66, 86, 110, 116
OXETAL 500/85	Fatty alcohol with 5 moles EO	50, 60, 68, 74, 80, 86, 96, 110, 116
OXETAL 800/85	Fatty alcohol with 8 moles EO	50, 60, 68, 74, 80, 86, 96, 110, 116
OXETAL ID 104	Fatty alcohol with 4 moles EO	24, 28, 50, 60, 68, 74, 80, 86, 92, 96, 110, 116

# LIST OF PRODUCT NAMES

PRODUCT NAME	CHEMICAL DESCRIPTION	PAGE
PHOSFETAL 201	Alkyl polyglycol ether phosphate, acid	16, 24, 28, 36, 42, 50, 60, 68, 74, 80, 88, 92, 96, 100, 106, 110, 116
PHOSFETAL 213	Alkyl polyglycol ether phosphate, acid	50, 60, 68, 74, 80, 88, 96, 106, 110, 116
PROPETAL 105	Alkyl polyalkylene glycol ether	10, 16, 24, 28, 36, 44, 52, 60, 68, 74, 80, 88, 96, 100, 110, 116
PROPETAL 120	Fatty alcohol polyalkylene glycol ether	16, 24, 52, 60, 68, 74, 80, 88, 100, 110, 116
PROPETAL 140	Fatty alcohol polyalkylene glycol ether	10, 36, 52, 68, 80, 88, 110, 116
PROPETAL 160	Fatty alcohol polyalkylene glycol ether	10, 36, 52, 68, 80, 88, 110, 116
PROPETAL 220	Fatty alcohol polyalkylene glycol ether	10, 16, 24, 36, 52, 60, 68, 80, 88, 110, 116
PROTELAN 1430	Sodium myristoyl sarcosinate	28, 68, 82, 88
PROTELAN LS 9011 *	Sodium lauroyl sarcosinate	28, 68, 82, 88
PROTELAN VE/K NP	Sodium cocoyl hydrolysed wheat protein and disodium cocoyl glutamate	10, 36
PURTON CFD	Coconut fatty acid diethanolamide	10, 16, 24, 28, 36, 52, 68, 100, 106, 116
PURTON CFM/F	Coconut fatty acid monoethanolamide	10, 16, 24, 28, 36, 52, 68, 100, 106, 116
PURTON SFD	Soybean oil fatty acid diethanolamide	10, 16, 24, 28, 36, 52, 68, 100, 106, 116
SETACIN 103 *	Disodium laureth sulfosuccinate	10, 16, 36, 44, 60, 74
SULFETAL 4069	Sodium alkyl (C8-C10) sulfate	10, 18, 24, 36, 52, 60, 68, 82, 88, 96, 100, 106, 112, 118
SULFETAL 4105	Sodium 2-ethylhexyl sulfate	10, 18, 24, 28, 36, 52, 60, 68, 82, 88, 92, 106, 112, 118
SULFETAL KT 400	Triethanol ammonium fatty alcohol sulfate	10, 18, 24, 28, 36, 52, 60, 68, 92, 96, 100, 106, 112, 118
SULFETAL LA *	Ammonium lauryl sulfate	10, 18, 24, 28, 36, 44, 52, 60, 68, 74, 82, 88, 92, 96, 100, 106, 112, 118
SULFETAL LM *	Monoethanol ammonium lauryl sulfate	10, 18, 24, 28, 36, 44, 52, 60, 68, 74, 82, 88, 92, 96, 100, 106, 112, 118
SULFETAL LS *	Sodium fatty alcohol sulfate	10, 18, 24, 28, 36, 44, 52, 60, 68, 74, 82, 88, 92, 96, 100, 106, 112, 118
SULFETAL LT *	Triethanol ammonium lauryl sulfate	10, 18, 24, 28, 36, 44, 52, 60, 68, 74, 82, 88, 92, 96, 100, 106, 112, 118
SULFETAL ZN	Zinc coco-sulfate	10, 24
SYNTRAN® 1076	Non-metal-bound, water-based styrene acrylate copolymer	60
SYNTRAN® 1079	Bimodal, non-metal-bound acrylic copolymer	60
SYNTRAN® 1101C	Metal-bound styrene acrylic copolymer, wax emulsions	60
SYNTRAN® 1274	Metal-bound styrene acrylic copolymer	60
SYNTRAN® 1292	Metal-bound styrene acrylic copolymer	60
SYNTRAN® 1299	Metal-bound styrene acrylic copolymer	60
SYNTRAN® 1501	Alkali-solubilised modified acrylic copolymer	30, 60, 68, 82, 88
SYNTRAN® 1555	Alkali-solubilised modified acrylic copolymer	30, 60, 68, 82, 88
SYNTRAN® 1560E	Alkali-solubilised modified acrylic copolymer	18, 24, 30, 60, 68, 82, 88, 92
SYNTRAN® 1671	Bimodal, non-metal-bound modified acrylic copolymer	18, 60
SYNTRAN® 1942	Styrene acrylate copolymer with proprietary cross-linking system	60
SYNTRAN® 1950 *	Non-metal-bound, water-based styrene acrylate copolymer	18
SYNTRAN® 2812	Bimodal, non-metal-bound acrylic copolymer	100
SYNTRAN® 4001C	Blend of polymers and surfactants	18, 60, 100
SYNTRAN® 4002C	Blend of polymers and surfactants	18, 60, 100

\* Different grades available

PRODUCT NAME	CHEMICAL DESCRIPTION	PAGE
SYNTRAN® 4015 *	Modified polymer solution	18, 60, 100
SYNTRAN® 4020 *	Carboxylated acrylic copolymer	18, 60, 100
SYNTRAN® 6130	Bimodal, non-metal-bound modified acrylic copolymer	96
SYNTRAN® A-170	Metal-bound acrylate copolymer	60
SYNTRAN® MT220	Metal-bound styrene acrylic copolymer	60
SYNTRAN® MT228	Metal-bound styrene acrylic copolymer	62
SYNTRAN® MT240	Metal-bound styrene acrylic copolymer	62
SYNTRAN® PA1445 *	Grafted wax emulsion	18, 24, 62, 68, 100
SYNTRAN® WE1401	Ethylene copolymer emulsion	18, 62, 100
TREOSAL 288	Ethoxylated olive oil	10, 24, 36, 100, 106, 118
TREOSAL 401	Ethoxylated coconut oil	10, 24, 36, 100, 106, 118
TREOSAL HE	PEG-7 glyceryl cocoate	10, 36, 44, 62
TRIUMPHNETZER ZSG *	Sulfosuccinic acid diisooctyl ester, sodium salt	10, 18, 24, 30, 36, 52, 62, 68, 82, 88, 92, 96, 100, 106, 112, 118
TURKEY RED OIL	Sodium sulforicinoleate	10, 18, 24, 36, 52, 68, 118
WAXEMULSION 1864	Nonionic carnauba wax emulsion	18, 24, 62, 68, 106, 112, 118
ZETESECO HS 100	Disodium capryloyl glutamate	10, 18, 26, 36, 44, 52, 62, 70, 76, 82, 88, 96, 102, 106, 112, 118
ZETESECO HS 200	Disodium cocoyl glutamate / sodium cocoyl glutamate	10, 18, 26, 30, 36, 52, 62, 70, 82, 88, 96, 102, 106, 112, 118
ZETESECO HS 300	Disodium cocoyl glutamate	10, 18, 26, 36, 52, 62, 70, 82, 88, 96, 102, 106, 112, 118
ZETESOL 270/N	Sodium laureth sulfate	12, 26, 38, 44, 52, 70, 76
ZETESOL 370/N *	Sodium laureth sulfate	12, 26, 38, 44, 52, 70, 76
ZETESOL AN 27	Sodium laureth sulfate	12, 26, 38, 44, 52, 70, 76
ZETESOL AN/70	Sodium laureth sulfate	12, 26, 38, 44, 52, 70, 76
ZETESOL LA	Ammonium laureth sulfate	12, 30
ZETESOL LES 11/7	Sodium undeceth-7 sulfate	12, 26, 38, 44, 52, 70, 76, 102
ZETESOL LES 117 HC	Sodium undeceth-7 sulfate	12, 26, 38, 44, 52, 70, 76, 102
ZETESOL LES 2 *	Sodium coceth sulfate	12, 26, 38, 44, 52, 70, 76
ZETESOL LES 3/SL	Sodium coceth sulfate	12, 26, 38, 44, 52, 70, 76
ZETESOL LME	Monoethanol ammonium laureth sulfate	12, 38
ZETESOL TP 300	Triisopropanol ammonium fatty alcohol ether sulfate with 1,2-propylene glycol	12, 18, 26, 30, 38, 44, 52, 62, 70, 76, 82, 88, 92, 96, 102, 106, 112, 118
ZETESOL ZN	Zinc coceth sulfate	12, 38, 52
ZUSOLAT 1004	Fatty alcohol with 4 moles EO	12, 18, 26, 30, 38, 44, 54, 62, 70, 76, 82, 88, 96, 102, 112, 118
ZUSOLAT 1005/85	Fatty alcohol with 5 moles EO	18, 26, 38, 44, 54, 62, 70, 76, 82, 88, 96, 112, 118
ZUSOLAT 1608/85	Fatty alcohol with 8 moles EO	12, 18, 26, 30, 38, 44, 54, 62, 70, 76, 82, 88, 96, 102, 112, 118
ZUTELAN GL 124	Alkyl polyglucoside	12, 18, 26, 30, 38, 44, 54, 62, 70, 76, 92, 96, 102, 106, 112, 118
ZUTELAN GL 810	Alkyl polyglucoside	12, 18, 26, 30, 38, 44, 54, 62, 70, 76, 92, 96, 102, 106, 112, 118



## Chemistry tailor-made

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