

Schill+Seilacher

struktol®

A close-up portrait of a woman's face, looking slightly to the right. Her skin is clear and her eyes are light. The background is a vibrant green, with a large, textured green leaf on the left side. Her hand is resting under her chin.

**COSMETICS +
FINE CHEMICALS**

TAILORMADE SOLUTIONS

PERLASTAN

Sarcosinate Surfactants

PERLASTAN AL-30	Ammonium Lauroyl Sarcosinate
PERLASTAN L-30	Sodium Lauroyl Sarcosinate
PERLASTAN C-30	Sodium Cocoyl Sarcosinate
PERLASTAN M-30	Sodium Myristoyl Sarcosinate
PERLASTAN ON-35	Sodium Oleoyl Sarcosinate
PERLASTAN L	Lauroyl Sarcosine
PERLASTAN C	Cocoyl Sarcosine
PERLASTAN M	Myristoyl Sarcosine
PERLASTAN OCP	Oleoyl Sarcosine

PERLASTAN

Glutamate Surfactants

PERLASTAN SC 25 NKW	Sodium Cocoyl Glutamate / Disodium Cocoyl Glutamate
PERLASTAN SCG 35	Disodium Cocoyl Glutamate
PERLASTAN SCG 35 MS	Disodium Cocoyl Glutamate
PERLASTAN SCG 38 CE	Disodium Cocoyl Glutamate
PERLASTAN SCG 38 DK ^{NEW}	Sodium Cocoyl Glutamate / Disodium Cocoyl Glutamate
PERLASTAN SCG 50	Disodium Cocoyl Glutamate
PERLASTAN SCG 50 HC	Disodium Cocoyl Glutamate
PERLASTAN SCG 50 ZPF	Disodium Cocoyl Glutamate
PERLASTAN SL	Sodium Lauroyl Glutamate
PERLASTAN SLG 38	Sodium Lauroyl Glutamate

PERLASTAN

Glutamate Surfactants

PERLASTAN SC 25 NKPF	Sodium Cocoyl Glutamate / Disodium Cocoyl Glutamate
PERLASTAN SCG 35 PPF	Disodium Cocoyl Glutamate
PERLASTAN SCG 35 IPF	Disodium Cocoyl Glutamate
PERLASTAN SCG 38 PF	Disodium Cocoyl Glutamate
PERLASTAN SCG 38 DKPF ^{NEW}	Sodium Cocoyl Glutamate / Disodium Cocoyl Glutamate
PERLASTAN SCG 50 PPF	Disodium Cocoyl Glutamate
PERLASTAN SCG 50 IPF	Disodium Cocoyl Glutamate

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07

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PERLASTAN

Mass Balance Surfactants

PERLASTAN SLG 38 MB	Sodium Lauroyl Glutamate
PERLASTAN L-30 MB	Sodium Lauroyl Sarcosinate
PERLASTAN L MB	Lauroyl Sarcosine

AMINO ACID BASED SURFACTANTS

Applications and Benefits

Rheo2Green

Self-Thickening Surfactant Concentrates

Rheo2Green1	Lauryl Glucoside / Disodium Cocoyl Glutamate
Rheo2Green2	Lauryl Glucoside / Disodium Cocoyl Glutamate
Rheo2Green1 MB	Lauryl Glucoside / Disodium Cocoyl Glutamate
Rheo2Green2 MB	Lauryl Glucoside / Disodium Cocoyl Glutamate

Pair2Phase

Anionic Emulsifiers

Pair2Phase1	Potassium Cetyl Phosphate / Behenyl Alcohol
Pair2Phase2	Potassium Cetyl Phosphate / Oryza Sativa Bran Cera

POLYFIX

Odour Absorbers

POLYFIX ZRC 25 GP
POLYFIX ZRC 25 MB
POLYFIX ZRC 25 EC ^{NEW}
POLYFIX ZRC 50 TB
POLYFIX ZRC 30 MT

ZINC DIRICINOLEATE CONCENTRATES

Applications and Benefits

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09-11

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WORLD WIDE

**FROM HUMBLE ROOTS IN LEATHER PROCESSING
CHEMICALS TO A GLOBAL PLAYER IN THE PRODUCTION
OF INDUSTRIAL PROCESS ADDITIVES.**

**SCHILL+SEILACHER'S STORY BEGAN IN 1877, WHEN KARL SCHILL AND CHRISTOPH SEILACHER
STARTED MANUFACTURING CHEMICALS FOR LEATHER PROCESSING IN HEILBRONN, GERMANY.
IN 1925 SCHILL+SEILACHER OPENED A SECOND PRODUCTION SITE.**

**IN HAMBURG TO CATER TO THE EXPANDING NEEDS OF ITS GROWING CUSTOMER BASE AND SECURE
BETTER ACCESS TO INTERNATIONAL MARKETS THROUGH THE CITY'S BUSTLING PORT.**

Following the Second World War, Schill+Seilacher moved its Heilbronn operation to Böblingen, a suburb of Stuttgart. Although both locations Hamburg and Böblingen are sharing the same name, they are serving different industries and working independently of each other. Schill+Seilacher ventured into the North American market in 1979 with the establishment of Struktol® Company of America. SCA is located at the heart of the American tire industry, just outside Akron, Ohio, and majorly supplies the plastic, rubber and tire industries.

Schill+Seilacher Chemie GmbH, situated on the banks of the Elbe just south of Dresden was acquired in the early 1990s and serves as both a production and research facility for silicone based chemistry.

DIN EN ISO 9001: OUR QUALITY GUARANTEE

The high quality standard of our products is guaranteed by our certified quality management system (ISO 9001), which integrates our highly qualified application experts, state of the art laboratories and testing equipment, and modern production methods into an effective and continually improving team.

**DIN EN ISO 14001, DIN EN ISO 50001:
OUR COMMITMENT TO THE ENVIRONMENT**

Our commitment to reducing waste and managing energy consumption efficiently has been at the core of our business for many years. By helping us work more efficiently and cost effective, our ISO 14001 and ISO 50001 certification promise better products through environmental responsibility.

Specific information of site certifications can be found on page 18.

1877

PERLASTAN Sarcosinate Surfactants

Surfactants based on amino acid N-methyl glycine (sarcosine).

Product Name	INCI Name	Active Ingredient	PO/PKO*
PERLASTAN AL-30	Aqua, Ammonium Lauroyl Sarcosinate	30%	0/21.5
PERLASTAN L-30	Aqua, Sodium Lauroyl Sarcosinate	30%	0/21
PERLASTAN C-30	Aqua, Sodium Cocoyl Sarcosinate	30%	0/20
PERLASTAN M-30	Aqua, Sodium Myristoyl Sarcosinate	30%	0/23
PERLASTAN ON-35	Aqueous concentrate of Sodium Oleoyl Sarcosinate	35%	26/0

ACIDIC FORM

Product Name	INCI Name	Active Ingredient	PO/PKO*
PERLASTAN L	Lauroyl Sarcosine	94%	0/74.5
PERLASTAN C	Cocoyl Sarcosine	94%	0/71
PERLASTAN M	Myristoyl Sarcosine	94%	0/82
PERLASTAN OCP	Oleoyl Sarcosine	90%	78.5/0

*PO Palm oil / PKO Palm kernel oil [%]

PERLASTAN Glutamate Surfactants

Mild and good foaming surfactants based on L-glutamic amino acid.

Product Name	INCI Name	Dry Substance	PO/PKO*	Remarks
PERLASTAN SC 25 NKW	Aqua, Disodium Cocoyl Glutamate, Sodium Cocoyl Glutamate	25%, pH 6.5	0/17.5	COSMOS, ECOCERT, NATRUE, ECO-Label, Nordic Swan, ECOGARANTIE
PERLASTAN SCG 35	Aqua, Disodium Cocoyl Glutamate, Propylene Glycol, Sodium Chloride	35%, pH 10	0/15	ECO-Label, Nordic Swan
PERLASTAN SCG 35 MS	Aqua, Disodium Cocoyl Glutamate, Isopropyl Alcohol, Sodium Chloride	35%, pH 10	0/17	ECO-Label, Nordic Swan
PERLASTAN SCG 38 CE	Aqua, Disodium Cocoyl Glutamate, Sodium Chloride	38%, pH 10.5	0/15.5	COSMOS, ECOCERT, NATRUE, ECO-Label, Nordic Swan
PERLASTAN SCG 38 DK^{NEW}	Aqua, Disodium Cocoyl Glutamate, Sodium Cocoyl Glutamate	38%, pH 10.5	0/15.5	COSMOS, ECO-Label, Nordic Swan
PERLASTAN SCG 50	Aqua, Disodium Cocoyl Glutamate, Propylene Glycol, Sodium Chloride	50%, pH 10	0/20	ECO-Label, Nordic Swan
PERLASTAN SCG 50 HC	Aqua, Disodium Cocoyl Glutamate, Isopropyl Alcohol, Sodium Chloride	50%, pH 10	0/21	ECO-Label, Nordic Swan
PERLASTAN SCG 50 ZPF	Aqua, Disodium Cocoyl Glutamate, Propanediol, Sodium Chloride	50%, pH 10	8/0	COSMOS, ECOCERT, NATRUE, ECO-Label, Nordic Swan, ECOGARANTIE
PERLASTAN SL	Aqua, Sodium Lauroyl Glutamate	25%, pH 8.5	0/16.5	COSMOS, ECOCERT, NATRUE, ECO-Label, Nordic Swan
PERLASTAN SLG 38	Aqua, Sodium Lauroyl Glutamate, Propylene Glycol, Sodium Chloride	38%, pH 9.5	0/16	ECO-Label, Nordic Swan

ATTRIBUTES

- very mild to skin and eyes
- lowers irritation potential of severe surfactants
- offers buffer capacity at skin pH
- provides rich foam and smooth skin feel
- resistant to sebum delathering
- rapid biodegradability
- compatible with cationic surfactants
- metal corrosion inhibition

APPLICATIONS

- rinse-off applications: body wash, aerosol shampoos, liquid hand soaps, cleansing wipes, shaving gels, surgical scrubs, hair shampoos, hair conditioners
- dental/oral hygiene: toothpastes and mouth washes
- eye care: eye drops, contact lense cleansers
- pet care: dog shampoos, mild cleaning products for pets, cleaners for blankets, beds
- home care products: laundry detergents, mild surface cleaners, manual dish wash, carpet cleaners, glass cleaners
- industrial applications: lubricants, rust preventive fluids, metal working fluids, anti corrosion application

ATTRIBUTES

- remarkably mild to skin and eyes
- lowers irritation potential of severe surfactants
- comfortable and soft feeling of the skin during and after use
- gentle cleansing
- excellent foaming power
- offers buffer capacity at skin pH
- environmentally friendly
- useful for certified natural cosmetics

APPLICATIONS

- rinse off products: facial and body cleansers, hair shampoos, baby bath soaps
- dermatological products and allergen-controlled medical cleansers
- dental/oral hygiene: toothpastes and mouth washes
- pet care: dog shampoos, mild cleaning products for pets, cleaners for blankets, beds
- home care products: laundry, mild surface cleaners, manual dish wash, carpet cleaners, glass cleaners

PERLASTAN Glutamate Surfactants

Mild and good foaming surfactants based on L-glutamic amino acid.

Product Name	INCI Name	Dry Substance	PO/PKO*	Remarks
PERLASTAN SC 25 NKPF	Aqua, Disodium Cocoyl Glutamate, Sodium Cocoyl Glutamate	25%, pH 6.5	0/0	COSMOS, ECOCERT, NATRUE, ECO-Label, Nordic Swan, ECOGARANTIE
PERLASTAN SCG 35 PPF	Aqua, Disodium Cocoyl Glutamate, Propylene Glycol, Sodium Chloride	35%, pH 10	0/0	ECO-Label, Nordic Swan
PERLASTAN SCG 35 IPF	Aqua, Disodium Cocoyl Glutamate, Isopropyl Alcohol, Sodium Chloride	35%, pH 10	0/0	ECO-Label, Nordic Swan
PERLASTAN SCG 38 PF	Aqua, Disodium Cocoyl Glutamate, Sodium Chloride	38%, pH 10.5	0/0	COSMOS, NATRUE, ECO-Label, Nordic Swan
PERLASTAN SCG 38 DKPF^{NEW}	Aqua, Disodium Cocoyl Glutamate, Sodium Cocoyl Glutamate	38%, pH 10.5	0/0	COSMOS, ECO-Label, Nordic Swan
PERLASTAN SCG 50 PPF	Aqua, Disodium Cocoyl Glutamate, Propylene Glycol, Sodium Chloride	50%, pH 10	0/0	ECO-Label, Nordic Swan
PERLASTAN SCG 50 IPF	Aqua, Disodium Cocoyl Glutamate, Isopropyl Alcohol, Sodium Chloride	50%, pH 10	0/0	ECO-Label, Nordic Swan

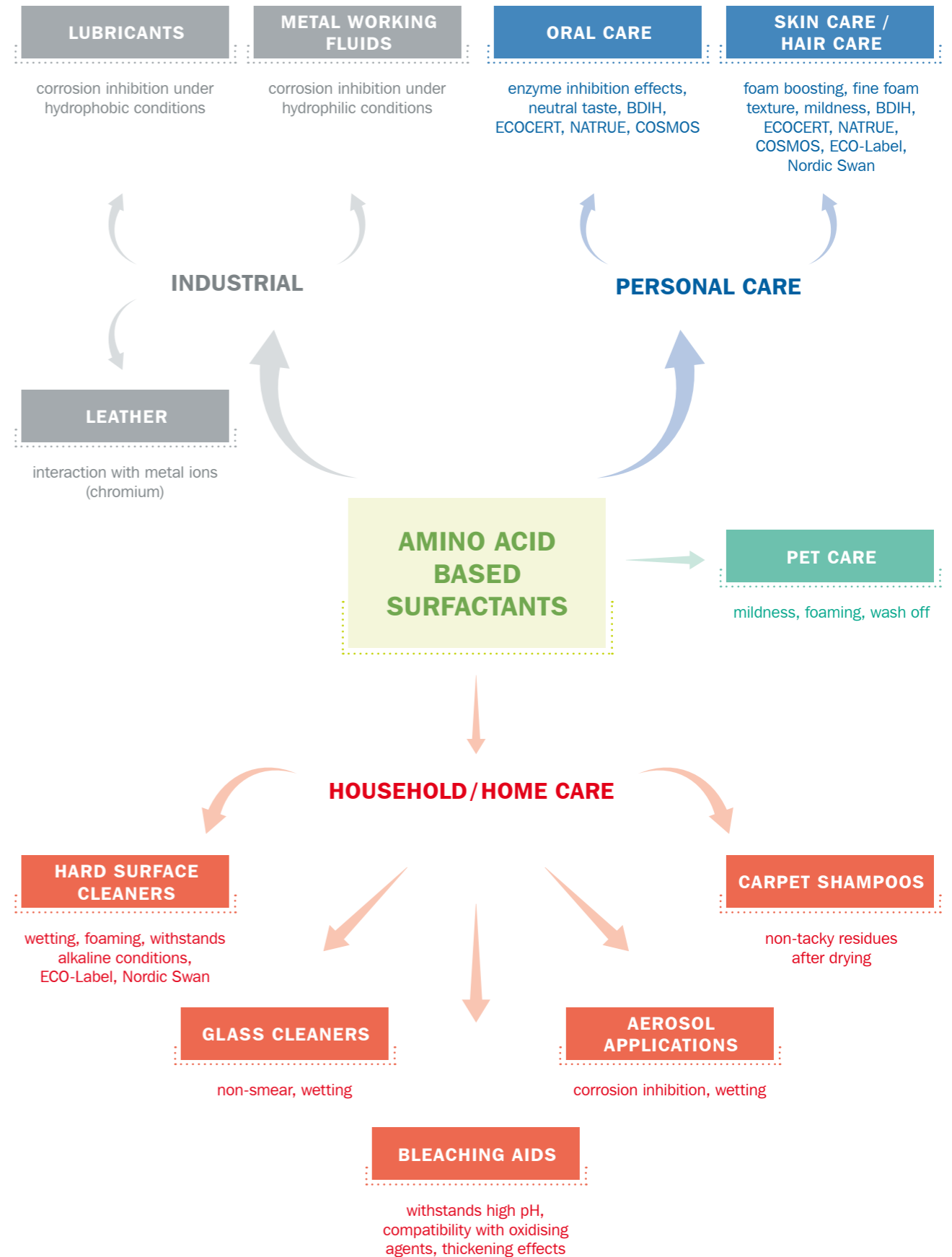
PERLASTAN Mass Balance Surfactants

RSPO Certificate Number CU-RSPO SCC-846664

Product Name	INCI Name	Dry Substance	PO/PKO*	Remarks
PERLASTAN SLG 38 MB	Aqua, Sodium Lauroyl Glutamate, Propylene Glycol, Sodium Chloride	38%, pH 9.5	0/16	ECO-Label, Nordic Swan
PERLASTAN L-30 MB	Aqua, Sodium Lauroyl Sarcosinate	30%, pH 8.5	0/21	
PERLASTAN L MB	Lauroyl Sarcosine	94%, pH 4 (1%)	0/74.5	

*PO Palm oil / PKO Palm kernel oil [%]

APPLICATIONS AND BENEFITS

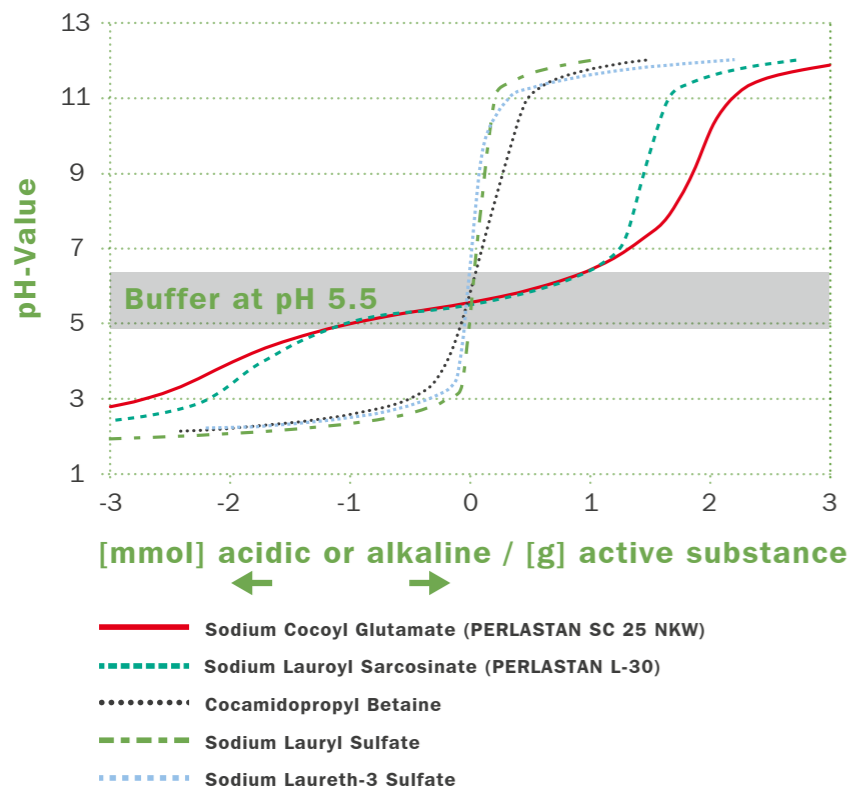
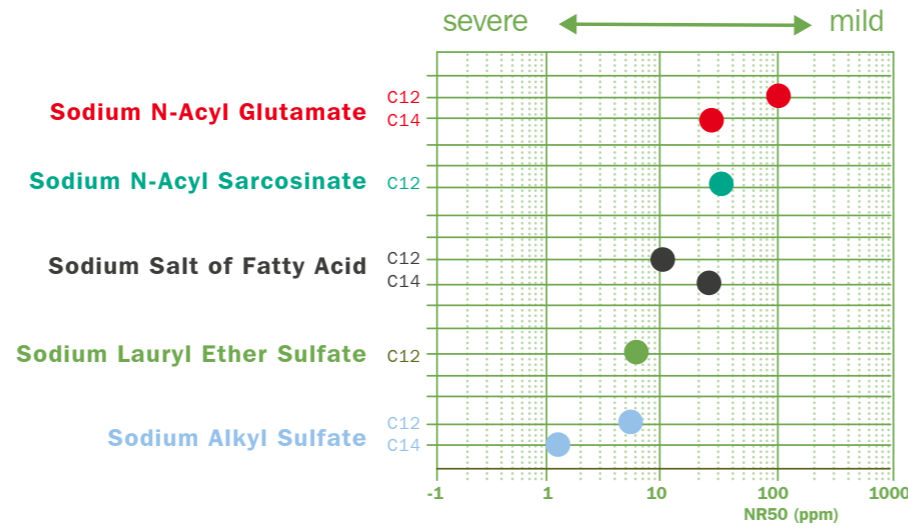


ATTRIBUTES

MILDNESS TO SKIN AND EYES

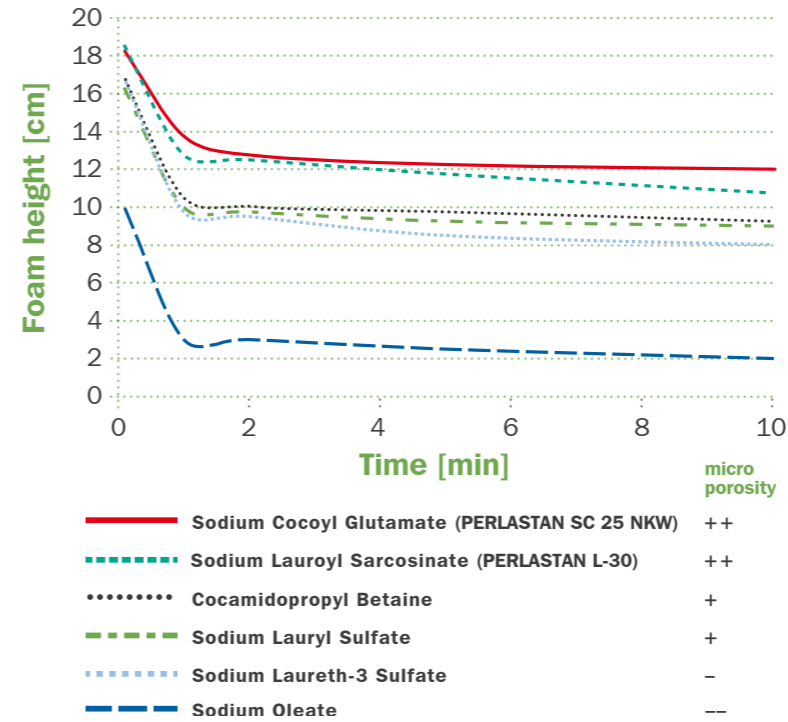
It was found by cytotoxicity tests that N-acyl amino acids achieve low toxicity for cultured human skin cells. The shorter the fatty acid chain part of amino acid surfactant the milder it behaves to human skin cells.

M. Kanari, Y. Kawasaki and K. Sakamoto
J. Soc. Cosmet. Chem., 27, 498 (1993)



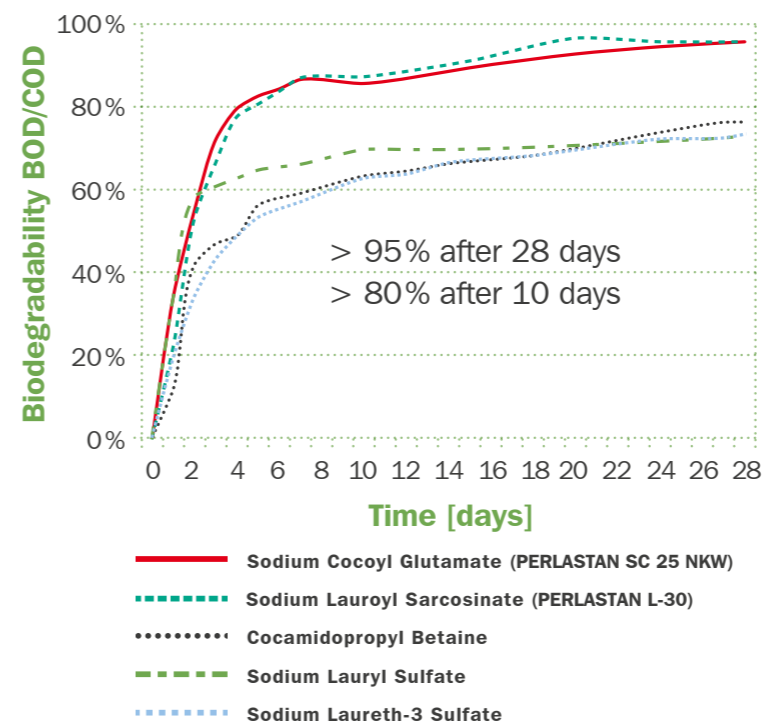
BUFFER CAPACITY AT PH OF SKIN

PERLASTAN surfactants generally show at pH of 5 to 6.5 the buffer capacity of an unneutralized carboxylic acid. Especially the pH = 5.5 of the skin is supported during cleansing processes.



PROMOTES FINE LATHER

Foam height and stability is comparable to extremely good foaming surfactants like sulfate and betaine surfactants. Most important factor is that the amino acid based surfactants provides very fine porous, mousse-like foam.



ENVIRONMENTALLY FRIENDLY, HIGHLY AND RAPIDLY BIODEGRADABLE

Bacterial decomposition under aerobic (manometric respirometry test; OECD 301F) as well as anaerobic (ISO 11734) conditions takes place faster than with most other types of commercially available anionic surfactants. Sarcosinate and glutamate surfactants reach extremely high degradation values close to 100%.

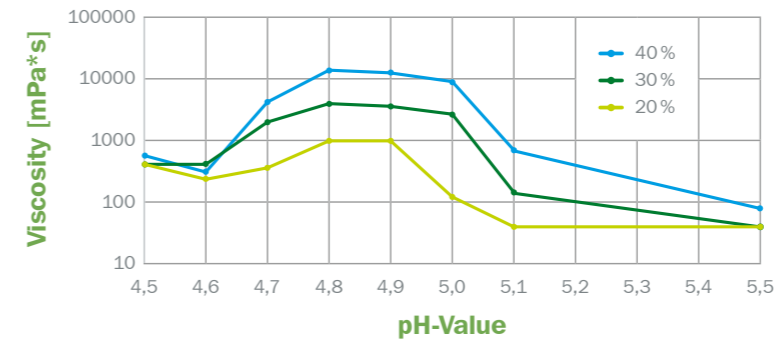
Rheo2Green Self-Thickening Surfactant Concentrates

Ready-to-use surfactant concentrates based on Disodium Cocoyl Glutamate and Lauryl Glucoside, building up a remarkable viscosity without thickening agent.

Product Name	INCI Name	Dry Substance	PO/PKO	Remarks
Rheo2Green1	Aqua, Lauryl Glucoside, Disodium Cocoyl Glutamate	42%, pH 9.5	0/18.5	COSMOS, NATRUE, ECO-Label, Nordic Swan
Rheo2Green2	Aqua, Lauryl Glucoside, Disodium Cocoyl Glutamate, Sodium Benzoate, Potassium Sorbate	42%, pH 9.5	0/18.5	COSMOS, NATRUE, ECO-Label, Nordic Swan

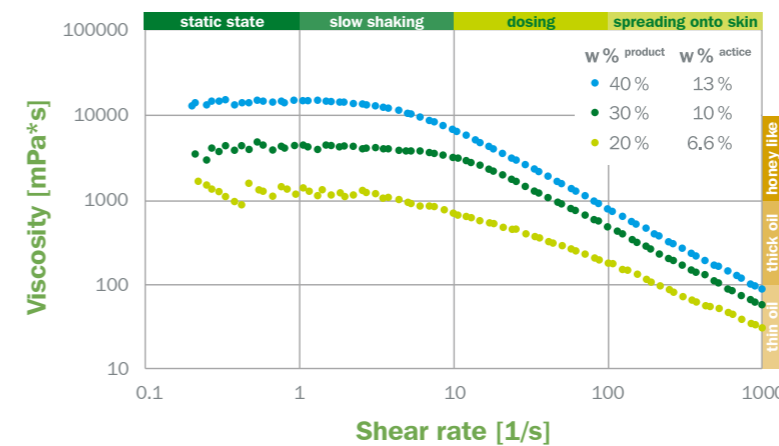
Rheo2Green Mass Balance

Product Name	INCI Name	Dry Substance	PO/PKO	Remarks
Rheo2Green1 MB	Aqua, Lauryl Glucoside, Disodium Cocoyl Glutamate	42%, pH 9.5	0/8.5	COSMOS, NATRUE, ECO-Label, Nordic Swan
Rheo2Green2 MB	Aqua, Lauryl Glucoside, Disodium Cocoyl Glutamate, Sodium Benzoate, Potassium Sorbate	42%, pH 9.5	0/8.5	COSMOS, NATRUE, ECO-Label, Nordic Swan



THICKENING AT THE RIGHT PH

After dilution of Rheo2Green products with water (approx. 1:3 to 1:5) and reducing the pH in a cold process, the viscosity will increase immediately, leading to desirable flow and foam behavior of cleansing formulations. This is an inventive way to thicken in absence of gums.



NATURAL PERCEPTION OF VISCOSITY

Rheological properties are based on pure micellar thickening, which is responsible for the desired viscoelasticity. Such flow behavior provides perfect natural sensation that is important for consumer acceptance: honey-like at slow shaking, thick oil by dosing, thin oil during spreading onto skin.



ATTRIBUTES

- rich fine-pored foam
- outstanding micellar self-thickening at pH < 5.5
- cold processable
- buffer capacity at pH of skin
- mildness to skin and eyes
- good cleansing ability
- applying for certified cosmetic formulation
- high biological degradability
- environmentally friendly
- free from fragrances and solvents
- sulfate-free

APPLICATIONS

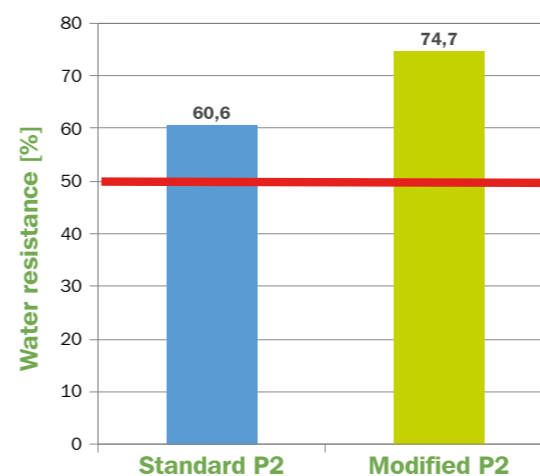
- mild rinse-off products with smooth skin feeling and excellent foaming properties: shower gels, facial cleansing gels, micellar water, liquid hand soaps, medical soaps, hair care, baby bubble bath, wet wipes, shaving gels, natural/green/certified cosmetics, sulfate-free rinse-off products
- home care: laundry detergents, mild surface cleaning, manual dish wash, carpet and glass cleaners
- pet care: dog shampoos, mild cleaning products for pets, cleaners for blankets, beds

Pair2Phase Anionic Emulsifiers

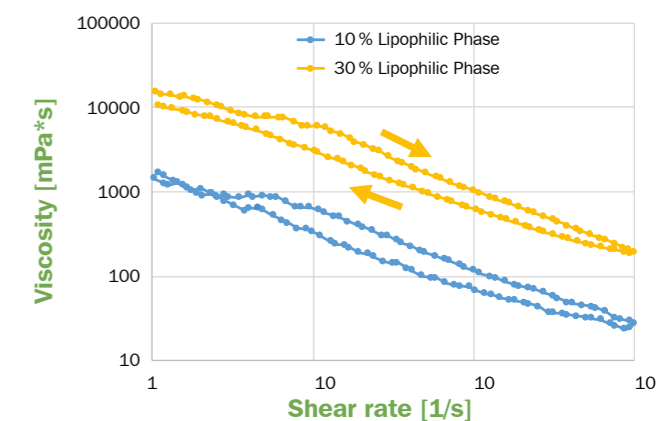
Anionic emulsifiers based on Potassium Cetyl Phosphate

Product Name	INCI Name	Saponification value	PO/PKO	Remarks
Pair2Phase1	Potassium Cetyl Phosphate, Behenyl Alcohol	40 – 65 mg KOH/g	39/0	COSMOS, NATRUE
Pair2Phase2	Potassium Cetyl Phosphate, Oryza Sativa Bran Cera	70 – 95 mg KOH/g	39/0	COSMOS, NATRUE

Pair2Phase mixtures are emulsifiers for cosmetic preparations such as creams and lotions for skin and body care in a variety of beauty and cosmetic products like shampoos, facial cleansers, exfoliants, sunscreens, moisturizers and make up removers. It allows the formulation of water resistant sun care products with similar soothing skin feel without stickiness. Due to its driving force to form lamellar surfactant phases like phosphate lipides, potassium cetyl phosphate takes care to regulate humidity on the skin. The surfactant property lowers the surface tension of cosmetic formulations as well as aids the even distribution of the product when used.



Colipa 2005 test with a modified P2 cream comprising Pair2Phase1 shows significant increase in water resistance compared to the standard P2 cream.



Examination regarding flow behavior of Pair2Phase based emulsions indicates the presence of thixotropic gels with shear thinning. These rheological properties can be explained by the formation of liquid crystal like structure.

ATTRIBUTES

- good emulsifying ability of non-miscible liquids
- application in certified cosmetic formulations
- no yellowing in sun care formulations
- environmentally friendly
- free from preservatives, fragrances and solvents
- sulfate-free
- PEG-free
- humectant abilities
- outstanding skin feeling without stickiness

APPLICATIONS

- creams and lotions for face and body
- hair care: shampoos, hair masks and conditioner
- facial cleansers, make up removers
- sunscreens

SCHILL+SEILACHER
INSIDE

POLYFIX Odour Absorbers

Concentrates of zinc diricinoleate complexes activated by chelating agents.

Product Name	INCI Name /Ingredient	PO/PKO	Application	Remarks
POLYFIX ZRC 25 GP	Aqua, Zinc Ricinoleate, Tetrasodium Glutamate Diacetate, Propanediol	4/0	Personal Care, HI&I, Pet Care	COSMOS
POLYFIX ZRC 25 MB	Aqua, Zinc Ricinoleate, Tetrasodium Glutamate Diacetate, Propanediol	4/0	Personal Care, HI&I, Pet Care	COSMOS
POLYFIX ZRC 25 EC^{NEW}	Aqua, Zinc Ricinoleate, Tetrasodium Glutamate Diacetate, Propylene Glycol	0/0	Personal Care, HI&I, Pet Care	COSMOS
POLYFIX ZRC 50 TB	Zinc Ricinoleate, Laureth-3, Tetrahydroxypropyl Ethylenediamine, Propylene Glycol	0/20	Personal Care, HI&I, Pet Care	
POLYFIX ZRC 30 MT	Aqua, Zinc Diricinoleate, Chelating Agent, Alcohol Ethoxylated	0/0	HI&I, Pet Care	

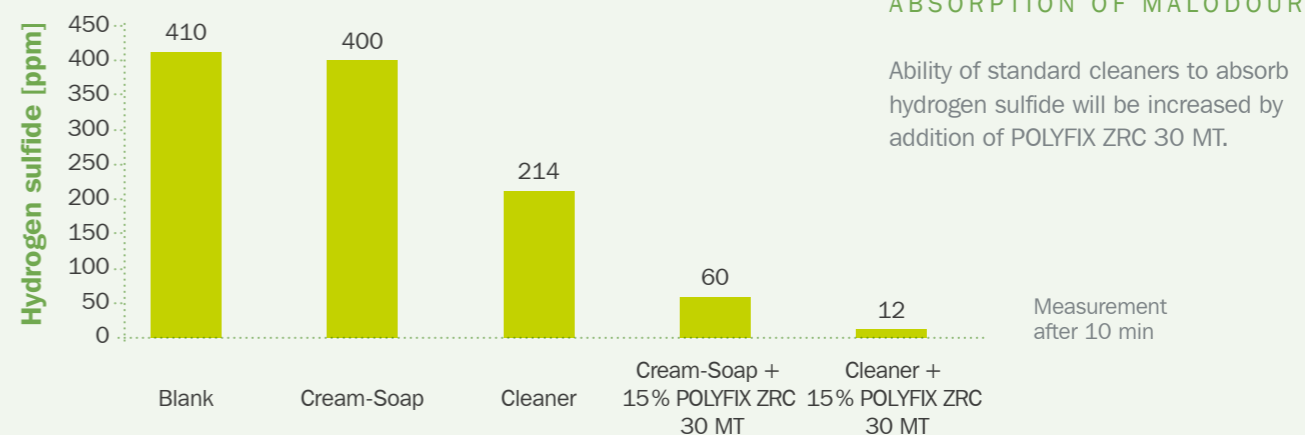
ATTRIBUTES

- eliminates bad odour caused e.g. by amines, mercaptanes, hydrogen sulfides, organic acids, ammonia, thio esters etc.
- tolerant to natural transpiration
- readily biodegradable
- water soluble and cold processable
- compatible with non-ionic and anionic surfactants
- recommended use level of 1 - 10 %
- will not affect most fragrances
- active as limescale remover

APPLICATIONS

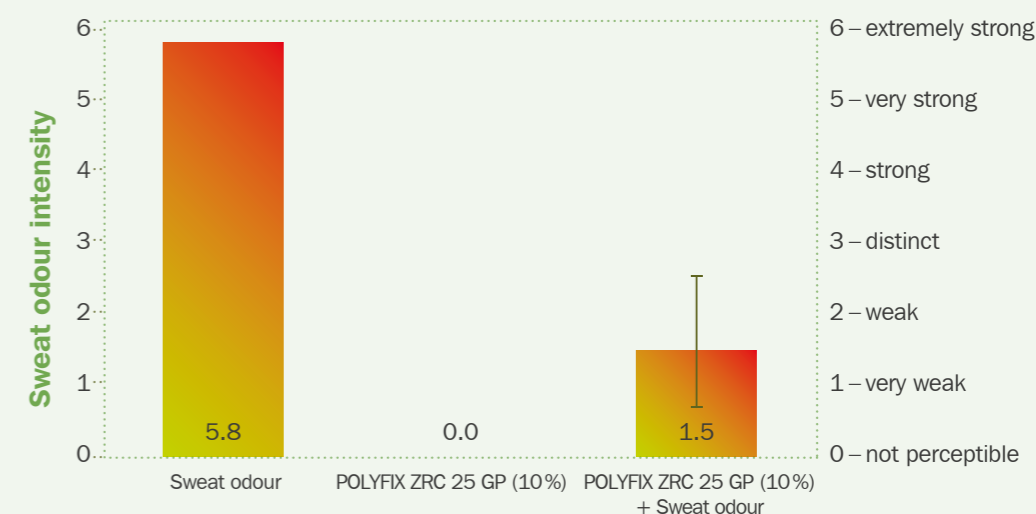
- personal care formulations: deodorants, hand sanitizers, foot creams, intimate hygiene products etc. against body odour
- blends: hair depilatory creams, permanent hair straightening or permanent hair wave with unpleasant smell caused by raw materials
- broad application range in HI&I cleaners for eliminating smells caused by urine, excrements, spoiled foods, tobacco etc.
- pet care products: dog shampoos, cat litter, cleaners against "scent marking" etc.

PERFORMANCE



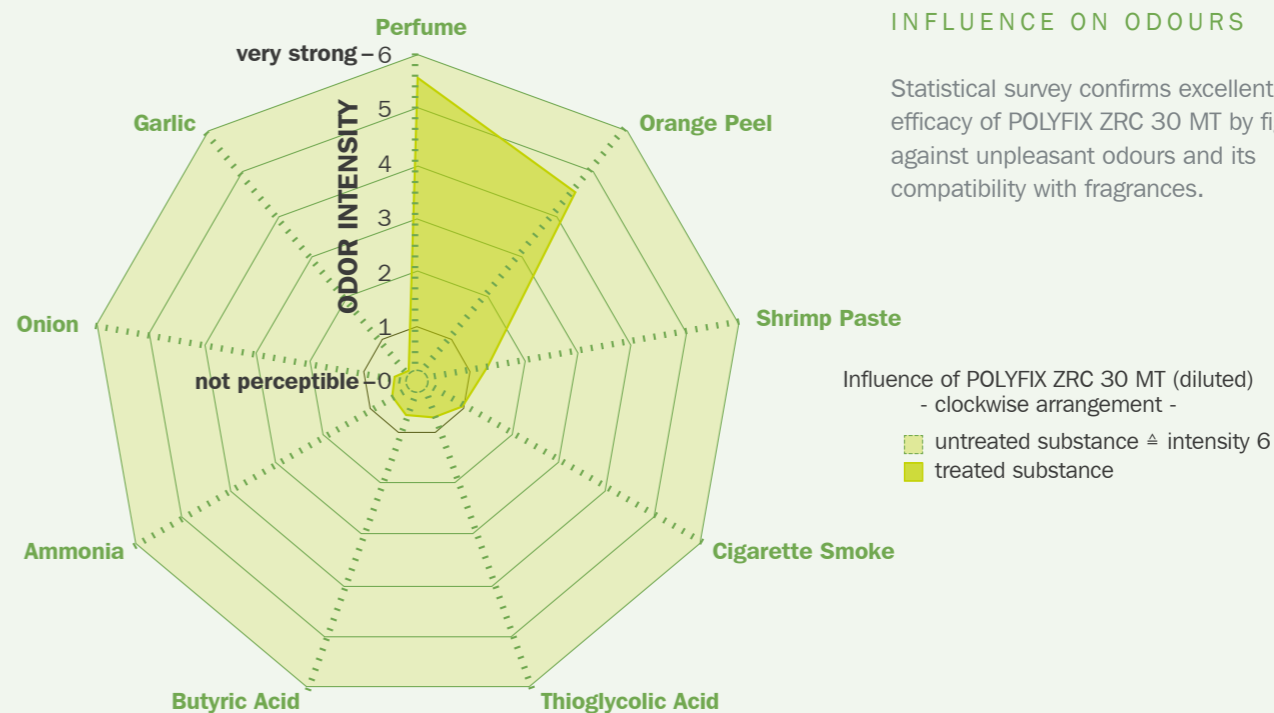
REDUCTION OF SWEAT ODOUR

Artificial sweat odour absorption test performed by trained panellists using an olfactometric sampling unit shows drastically decrease by application of 10% solution of POLYFIX ZRC 25 GP in comparison to a reference.



INFLUENCE ON ODOURS

Statistical survey confirms excellent efficacy of POLYFIX ZRC 30 MT by fighting against unpleasant odours and its compatibility with fragrances.



SCHILL+SEILACHER. AT A GLANCE.

SPECIALITY CHEMICALS FOR:

BOEBLINGEN

DIN EN ISO 9001:2015
DIN EN ISO 14001:2015
DIN EN ISO 50001:2011
RSPO Certification Mass Balance

FIBRES
TEXTILES
LEATHER
PAPER
COSMETICS
FINE CHEMICALS

HAMBURG

DIN EN ISO 9001:2015
DIN EN ISO 14001:2015
DIN EN ISO 50001:2011

RUBBER ADDITIVES
ANTIFOAMS
EPOXY PREPOLYMERS
AND FLAME RETARDANTS
LATEX ADDITIVES
SILICONES
RELEASE AGENTS

PIRNA

DIN EN ISO 9001:2015
(Only for Boeblingen products)

SILICONES
PU INDUSTRY
PAPER
TEXTILES
COSMETICS
FIBRES
LEATHER

STOW / OHIO VILLA RICA / GEORGIA

DIN EN ISO 9001:2008

RUBBER ADDITIVES
PLASTIC ADDITIVES
PVC ADDITIVES
ENGINEERED
THERMOPLASTIC ADDITIVES
WOOD PLASTIC
COMPOSITE ADDITIVES
LEATHER CHEMICALS

DISCLAIMER:

The mentioned attributes and application proposals are only non-binding application possibilities and application proposals for our products. Our advice and recommendations whether verbal, in writing or by way of tests do not excuse the customer from his or her own examination regarding the applicability for the intended procedures and purposes. The mentioned attributes and application proposals are no assurance for a certain further processing. Any assurances must be agreed upon explicitly and in writing between the customer and us.

We also advise you, that any further processing and the distribution of the further processed products is part of the customers sole scope of responsibilities as the producer of the new product.

WHERE WE ARE.



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