



ADHESIVES AND SEALANTS

PRODUCT RANGE Germany



KRAHN CHEMIE - A STRONG PARTNER

WELCOME TO KRAHN CHEMIE. As an independent chemical distributor and sales partner to leading producers, we know that some things are simply better together. That's why we connect markets with innovations, processors with producers and questions with solutions.

At KRAHN Chemie, you can find everything that a processor in the chemical industry values: a broad range of products from top international producers, competent technical support, labora-

tory services and logistic solutions. We share your high standards in terms of speed, flexibility and quality – and have proudly served as your strong and reliable partner for more than 100 years.

We look forward to assisting and advising you.



ADDITIVES

PRODUCT GROUP	PRODUCT NAME	PRODUCER	PRODUCT DESCRIPTION
Adhesion promoters	SiSiB® PC	Nanjing SiSiB Silicones	Different organo-functional silanes that improve the adhesion of adhesives and sealants significantly.
Biocides (dry-film) preservation	Preventol®	Lanxess	Extensive range of film preservatives for protection against algae, fungi and lichens for interior and exterior applications.
Biocides (in-can preservation)	Preventol®	Lanxess	Extensive range of in-can preservatives for improvement of the shelf life of aqueous products, as well as for cleaning of production plants.
Cellulose esters	Eastman™ CA	Eastman Chemical	Cellulose acetate types with different degrees of acetylation and viscosity for solvent-based high solids and UV-curable systems.
	Eastman™ CAB	Eastman Chemical	Cellulose acetate butyrate. Additives for reduced dry time, improved flow and leveling, sag control, redissolve resistance for high solids and UV-curable systems.
Coalescing agents	Eastman Optifilm™ Enhancer 300	Eastman Chemical	Non-VOC, low odor coalescing agent for emulsion paints, plasters as well as for all waterborne systems. Appropriate for many architectural applications, it is particularly suited for low odor flat and low sheen wall paints. Excellent retarder solvent and compatible with a variety of resin systems.
	Eastman Texanol™	Eastman Chemical	Coalescents for dispersions, retarder solvents to extend the open-time, low vapor pressure.
Coupling agents	SiSiB® PC	Nanjing SiSiB Silicones	Different silanes to provide chemical bonding between the inorganic and organic material and curing of silicone sealants.
Defoaming and air-release agents	No-Air-flüssig	Baerlocher	Effective defoamer and air release agent, mineral oil and silicone based.
Dihydrazides	ADH	Otsuka Chemical	Adipic acid dihydrazide. Cross-linking agents for PU, butadiene and acrylate systems.
Diols	EH Diol	Gulf Chemical International	2-Ethyl-1,3-hexanediole, chain extender, modifier for PU systems.
Drying agents	SiSiB® PC	Nanjing SiSiB Silicones	Fast hydrolizing vinyl silanes for the use as drying agent, e. g. in moisture-hardening hybrid-sealants.
Inhibitors	Hydroquinone and derivatives	Eastman Chemical	Hydroquinone and derivatives are inhibitors to improve stability during storage or process (HQ, MTBHQ, DTBHQ).
Rheology modifiers	Krosflex®	Dynaplak Adhesive & Starches	Modified starch ether polymers with a large dissolving range used as universal thickening agent or compounder for many applications.

DISPERSIONS AND EMULSIONS

PRODUCT GROUP	PRODUCT NAME	PRODUCER	PRODUCT DESCRIPTION
Acrylic dispersions Acrylic emulsions	Mowilith® Vinamul®	Celanese	Aqueous copolymer dispersion based on vinyl acetate and ethylene. Formulation of adhesives for paper, packaging, PVC, furniture foil lamination, flooring, walls, ceilings and ceramics. Further for water resistant wood glues and for heat sealing adhesives.
Biobased dispersions	Krosflex®	Dynaplak Adhesive & Starches	Modified starchpolymer dispersion for "biobased" adhesives, possible alternative to casein.
Polymer dispersions	Eastek™	Eastman Chemical	Aqueous dispersions of sulfopolyester polymers with excellent adhesion on aluminium and plastic parts.
Polyurethane dispersions	Adwel®	Wanhua Chemical Group	Waterborne polyurethane dispersions (PUD) for automotive interior, footwear and 3-D lamination.
PVAc	Mowilith®	Celanese	Dispersions based on polyvinyl acetate for low emission and eco-friendly coatings for adhesives for paper packaging, converting and woodworking.
Vinyl acetate - ethylene (VAE) dispersions	Mowilith®	Celanese	Dispersions based on vinyl acetate ethylene for low emission and eco-friendly coatings for adhesives for paper packaging and processing as well as flooring.

FILLER

Aluminium nitride	TOYALNITE™	Toyal	The ALN product range includes different AlN powders. All powders are being produced by a process of direct nitridation and therefore indicate very low impurities. Benefits ALN materials are their high thermal conductivity up to 270 W/m*K.
Barium sulfate	Barytmehl	Deutsche Baryt Industrie (DBI)	Extenders on a natural barium sulfate basis. The product range comprises several grades of differing fineness for standard applications with a moderate lightness requirement.
	Toyal TecFiller®	Toyal	Ag-plated powder/flake materials such as Cu, Al, ${\rm SiO_2}$, Ni and ${\rm Al_2O_3}$ for electro-conductive adhesives and electromagnetic shielding.

ANTI-FRICTION COATINGS AND FLOCK ADHESIVES

	Flocksil® Sipiol® Cuvertin®	Lord Germany	Glide Coatings and Flock Adhesives, for applications in Automotive and further industries, predominantly for weatherstrips.
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RESINS AND HARDENERS

PRODUCT GROUP	PRODUCT NAME	PRODUCER	PRODUCT DESCRIPTION
Epoxy hardeners	ECA 100 NC	Dixie Chemical Company	Blend HHPA/MHHPA/MTHPA, epoxy curing agent to form highly cross-linked polymers with excellent physical (UV and alkaline resistance) and electrical properties.
	ННРА	Dixie Chemical Company	HHPA is used as epoxy hardener when maximum resistance to yellowing is required and where premium optical and electrical performance are required.
Isocyanates	Aquolin®	Wanhua Chemical Group	Modified aliphatic polyisocyanates for aqueous 2 Component PU adhesives.
	Uronal	Galstaff Multiresine	Aliphatic and aromatic isocyanates for PU-systems.
Polyester resins, saturated	Ftalon Italester Italkid	Galstaff Multiresine	Solvent-based polyols that are applied in combination with isocyanate curing for 1- and 2 component PU systems.
	Vitel	Bostik	Linear polyesters for coatings and adhesives.
Polyester resins, unsaturated	Poloral	Galstaff Multiresine	Solvent-free or styrene-solved unsaturated polyester resins for UV- and Redox curing, for cast resins and putties.
	Synteven	Galstaff Multiresine	Solvent-free and styrene-solved unsaturated Polyester resins for cast resins, CFC- and GFC-systems as well as the production of gelcoats.
PU-prepolymers	Polytex	Polytex	Aliphatic and aromatic polyether polyol based PU prepolymers for 1 & 2 pack PU systems. Partly containing a monomeric isocyanate residue < 0.8 %.
PVB	Butvar®	Eastman Chemical	Polyvinyl butyral resin could be used in structural adhesives to give the highest shear strength values at temperatures up to 120° C, also an excellent base for hot melt adhesives even where difficult-to-bond surfaces are involved.
UV curing resins	Syncryl	Galstaff Multiresine	Polyester-, polyether-, urethane- and epoxy-acrylate oligomeres for UV-crosslinking systems.

RUBBER TO METAL BONDING AGENTS

Chemlok [®] Chemosil [®] Parlock [™]	Lord Germany	Bonding agents for the adherence of many elastomers to practically all metals. The products show high adhesion strength and resistance against corrosion, high temperatures as well as oils and solvents.
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ADHESION PROMOTERS

Eastman Advantis™	Eastman Chemical	Waterborne, chlorine-free and APEO-free, product for adhesion to thermoplastic polyolefin-based plastics (TPO, PP), also as blend-in resin/wash primer in waterborne primers and waterborne base coats available.
Eastman™ AP	Eastman Chemical	Non-chlorinated adhesion promoters for adhesion of solvent-borne plastic coatings (TPO, PP).
Eastman™ CP	Eastman Chemical	Chlorinated, solvent- or water-based, adhesion promoters for coatings applied on plastic parts (PP, PE, TPO).

SYNTHETIC RUBBER

PRODUCT GROUP	PRODUCT NAME	PRODUCER	PRODUCT DESCRIPTION
ACSM (chlorosulfonated polyethylene)	extos®	Tosoh	ACSM based on alkylated polyethylene. Special elastomer with high resistance against oils and hot air as well as good weather resistance. Additional to regular CSM better dynamic properties, heat resistance and low temperature flexibilitites. Used in solvent-borne adhesives.
CR (carboxylated polychloroprene rubber)	Skyprene®	Tosoh	Carboxylated polychloroprene rubber for solvent-based adhesives, weather-proof sealings, machine parts, bridge bearings, tank inner linings and bellows.
CR (polychloroprene rubber)	Skyprene®	Tosoh	Polychloroprene rubber for solvent-based adhesives with excellent elasticity and mechanical properties, good flame and chemical resistance, extraordinary crystallinity, moderate resistance against oil and fuel.
CSM (chlorosulfonated polyethylene)	TOSO-CSM®	Tosoh	CSM based on HDPE. Elastomer with high resistance against oils and hot air as well as good weather resistance. Used in solvent-borne adhesives.
Polychloroprene- latices	Skyprene [®]	Tosoh	Waterborne polychloroprene latices for dispersion adhesives.
Polyisobutylene	Oppanol®	BASF	Polyisobutylene of medium and high molecular weight. The special properties are the excellent adhesion to various substrates, the excellent gas and water impermeability, as well as the resistance to various chemicals.

THERMOPLASTIC POLYMERS

EVA (ethylene vinyl acetate)	Ateva®	Celanese	High-performance ethylene vinyl acetate (EVA) copolymers with a vinyl acetate content up to 40% and broad melt index (MI) range from 0.35 to 850, for hot-melt adhesives for packaging, labeling, case and carton closing, lamination and book-binding applications.
PVC	Formolon®	Formosa Plastics	E-PVC for PVC plastisols and laminating adhesives.

PIGMENTS

Liquid pigment pastes HYDRASPERSE™ Chromaflo VOC- und APEO-free colorants for tinting of various adhesives and sealants.
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PLASTICIZERS

PRODUCT GROUP	PRODUCT NAME	PRODUCER	PRODUCT DESCRIPTION
Adipates	DOA	Plastifay	Plasticizer to improve the flexibility at low temperature. Furthermore, it reduces viscosity with good dispersion properties. Food contact applications are possible.
Benzoates	Jayflex™ MB 10	ExxonMobil Chemical	Benzoate based plasticizer which is applied in PUR-sealants, acrylic based adhesives, MS-polymer based, waterborne adhesives, silane-terminated systems and is used as an alternative for critical short-chain esters.
Benzyl phthalates	Santicizer®	Valtris	Phthalate based plasticizers, combining the following properties: Low volatility, excellent extraction resistance and a good compatibility with a wide variety of resins for polyurethane and polysulphide sealants.
Citrate	Sucroplast ATBC	Sucroal	Bio-based plasticizer. Good compatibility with other polymers. It is applied in products with food contact.
Fast fusers – Benzyl-phthalates/ Carboxylates	Santicizer PLATINUM® P-1400	Valtris Specialty Chemicals	Phthalate free and fast fusing plasticizers which shows a high compatibility and efficiency, and performs by high permanence and low water solubility. Recommended for many applications, like plastisol, foam, sealant, calendering, extrusion and films.
Hexanoates	OXSOFT® 3G8	Oxea	Specialty plasticizer with low viscosity, good UV stability, low volatility and migration. Furthermore, OXSOFT® 3G8 shows excellent results as to flexibility at very low temperatures.
Phthalates	Chemflexx 911P	The Chemical Company	Low volatile linear C-9 and C-11 alcohol based phthalate plasticizer. Due to its outstanding weather resistant properties and general good permanence especially suitable for outdoor and durable applications.
	Jayflex™ DIDP Jayflex™ DINP	ExxonMobil Chemical	High molecular standard plasticizers for adhesive and sealant systems. Due to the branching of the alcohol chains Jayflex™ DINP and DIDP have a high migration resistance und a low volatility. Jayflex™ DINP and DIDP are applied in PURsealants, acrylic based adhesives, MS-polymer based and silane-terminated systems.
	Jayflex™ DIUP	ExxonMobil Chemical	High molecular special plasticizer for adhesives and sealants. Due to its low fogging values and high migration resistance Jayflex™ DIUP is used in automotive applications, e. g. car interior. Jayflex™ DIUP is applied in PUR-sealants, acrylic based adhesives, MS-polymer based and silane-terminated systems.
	Jayflex™ DTDP	ExxonMobil Chemical	Very high molecular special plasticizer for adhesives and sealants. Due to its very high molecular weight und the outstanding low volatility, Jayflex™ DTDP is recommended for high temperature and high voltage applications. It is applied in PUR-sealants, acrylic based adhesives, MS-polymer based and silane-terminated systems.
Polyadipates	Santicizer®	Valtris	Polimeric plasticizer which provides outstanding migration and extraction resistance. Application in adhesives and sealants with direct food contact is possible.
Specialty blends	OXSOFT® DUO1	Oxea	Blend of two low volatile esters. Features an excellent migration profile combined with good processability. The low viscosity of the product enables easy handling. Additionally, it offers very good low temperature properties.
	OXSOFT® DUO2	Oxea	Blend of two low volatile esters. OXSOFT® DUO2 features a further improved migration profile compared to OXSOFT® DUO1, but still the product is easy to process. Extraction resistance against various media and fogging values are excellent.
Terephthalates	Plast Soft DOTP	Plastifay	Standard plasticizer, suitable for sensitive applications with direct food contact, as well as in the toy industry and for leisure products.



PLASTICIZERS CONTINUED

PRODUCT GROUP	PRODUCT NAME	PRODUCER	PRODUCT DESCRIPTION
Trimellitates	OXSOFT® TOTM LE OXSOFT® TOTM LE ST	Oxea	Highly permanent plasticizer, compatible with various polymers, extremely low volatility, excellent protection against calcium soaps, low fogging and good processability.

Product Disclaimer

- 1. Any information given on the chemical and physical characteristics of our products, including technical advice on applications whether verbally, in writing or by testing the product, is given to the best of our knowledge. However, this information is given without obligation and does not exempt the buyer from carrying out own investigations and tests in order to ascertain the product's specific suitability for the purpose intended. The buyer is solely responsible for the application, utilisation and processing of the products and must observe the laws and government regulations and the consequential rights of any third party. Any exception of the above-mentioned restrictions requires the manufacturer's express release in writing.
- 2. The products sold and/or supplied by us are not destined for the manufacture (i) of medical devices according to EU directive 93/42/EEC, in particular of implants, (ii) of biocides, (iii) of pesticides, (iv) of human and veterinary pharmaceuticals, (v) of food and feed products, (vi) of cosmetics, (vii) of weapons or other objects, designed to take human life or causing injuries.
- 3. At all times our Conditions of Sale apply.
- 4. Our product lists include dangerous goods. The correct marking of such goods is described in the respective datasheets.





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