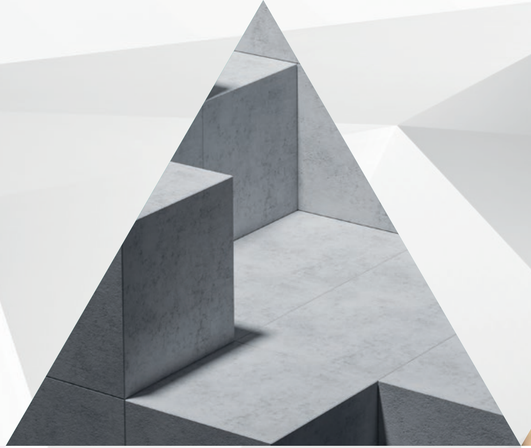
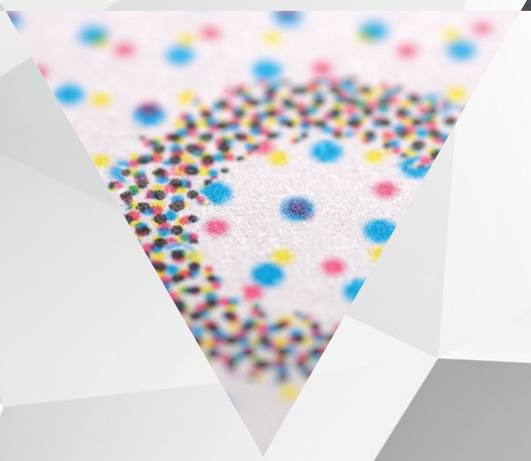
INDUSTRIAL SPECIALITIES

PAINTS & COATINGS

Water-based polymers for industrial coatings and graphic arts

ZSCHIMMER & SCHWARZ





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CHEMISTRY TAILOR-MADE

Zschimmer & Schwarz is a global supplier of chemical auxiliaries and specialities 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, lubricants and industrial applications all over the world trust in the company's chemical specialities as well.

A FAMILY BUSINESS WITH A GLOBAL FORMULA FOR SUCCESS

The corporate group Zschimmer & Schwarz comprises 27 companies in 16 countries on five continents. Our customers can always rely on a uniform quality standard worldwide and equally on the high service orientation of our local experts.

BRINGING YOUR IDEAS TO THE SURFACE

The paints & coatings portfolio of the Industrial Specialities Division serves a wide range of end-use applications from the industrial coatings and graphic arts sectors. We offer technologies and materials for the treatment and coating of surfaces such as wood, paper, metal, textile and concrete for best results. Innovative polymer technologies, tailored to the application and requirements of our customers, provide the necessary "plus" in the formulation. As specialists in environmentally conscious, water-based polymers, we offer optimised customer solutions with the highest standards of quality and cost-effectiveness, which we are producing at our sites in Europe, North America and Asia.

Whether it's raw materials or tailored and ready-to-use customer solutions – we will help you find the right products. We will happily accompany you on the way to your formulation in order to jointly create added value for your customer.

TECHNOLOGIES

Appearance, durability and haptics: industrial substrates like wood, metal or concrete are subject to the highest demands, which can usually only be met by a high-performance coating.

High-quality print products with the highest demands on appearance and durability also require optimally matched binder systems. As experts in environmentally friendly aqueous dispersions, Zschimmer & Schwarz offers tailor-made products for a wide variety of formulations in the graphic arts sector through precise control of the polymerisation process.

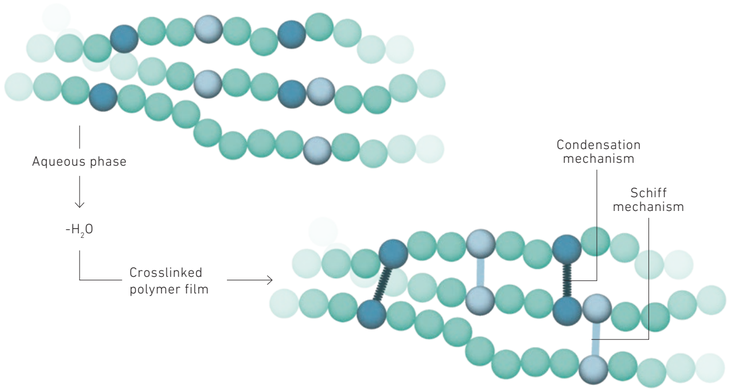
Since visually appealing and durable results can often only be achieved in a multi-layer build-up with primer or overprint varnish, Zschimmer & Schwarz has also developed water-based polymers for this purpose, which we adapt to your applications on request.

SELF-CROSSLINKING TECHNOLOGY

Our portfolio includes polymer dispersions with up to two crosslinking mechanisms on the same polymer backbone. The self-crosslinking of the polymers takes place only during film formation by drying at room temperature. In this way, the typical properties of a crosslinked polymer can be achieved without limiting storage stability. High-performance coatings as well as overprint varnishes benefit from this in particular.

FEATURES & BENEFITS

- Increased chemical resistance
- Stain resistance
- Water resistance
- Good adhesion properties
- Room-temperature curing with long-term shelf stability



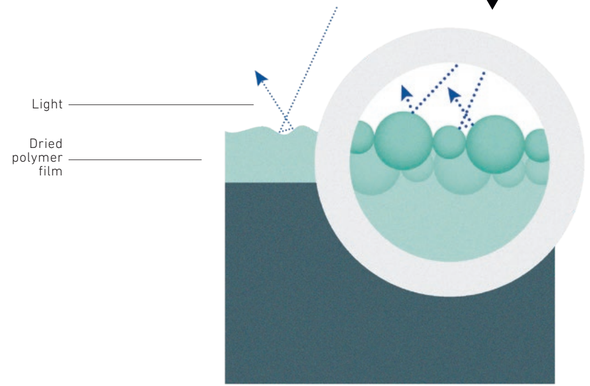
INHERENTLY MATTE TECHNOLOGY

Using a proprietary process, Zschimmer & Schwarz offers an inherently matte acrylate polymer. After drying, a film with low gloss, high flexibility and excellent stability is formed. This technology also provides excellent adhesion to various substrate types.

The polymer is a matte binder and not a "liquid matting agent", meaning it can be formulated as a conventional (water-based) acrylic polymer, replacing the binder. It can be used as a single binder or in a blend with polyurethanes, has low foaming, and no or low addition of VOCs is required to formulate coatings. The time- and labour-consuming incorporation of solid matting agents is completely eliminated, making the formulation much simpler, more stable and more economical. Unlike conventional matting agents, the matte polymer also has excellent transparency.

FEATURES & BENEFITS

- No incorporation of matting agents necessary
- Easy to formulate
- Stable – no settling of the polymer
- Lower process costs
- Excellent transparency

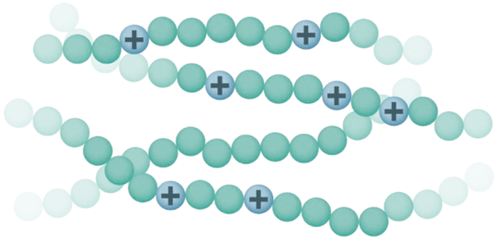


CATIONIC TECHNOLOGY

Zschimmer & Schwarz offers polycationic systems with an optimal acidic pH range and high charge density. By complexing anionic structures such as wood extractives or water-soluble soils, these products show outstanding stain blocking. Excellent adhesion to various critical anionic surfaces and metals can also be achieved by cationic resins. On porous substrates, the small particle size leads to good penetration into the substrate, which further improves adhesion and protection. These properties make these polymers especially well suited for use in isolation primers on wood.

FEATURES & BENEFITS

- Excellent adhesion to various problematic surfaces
- Superior stain blocking
- Forms soft to medium-hard films
- Colourless and glossy films
- Suitable in highly pigmented and low-VOC systems
- Stable in acidic formulas (pH 3–6)
- Less discolouration of wood due to low pH

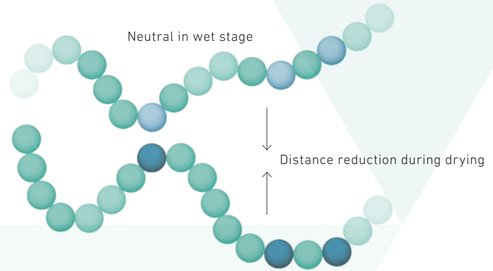


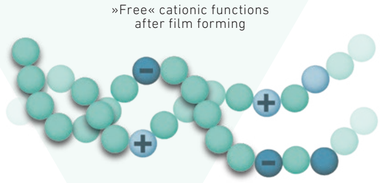
INTERPENETRATING POLYMER NETWORK (IPN)

The IPN involves two different ionic structures in the same polymer network at a neutral pH value. Overall, the polymer exhibits an anionic behaviour and can thus be formulated like an anionic polymer. Cationic functionalities then form during drying, providing excellent tannin, stain and dye blocking without the compatibility problems common to cationic polymers. Adhesion to various substrates such as aluminium, PVC or wood is also improved. At the same time, no or low addition of VOCs is required to formulate coatings.

FEATURES & BENEFITS

- Enables cationic functionalities in anionic formulations
- Excellent tannin, stain and dye blocking
- Excellent adhesion to multiple substrates
- High compatibility with other resins and additives
- No or low addition of VOCs required to formulate coatings



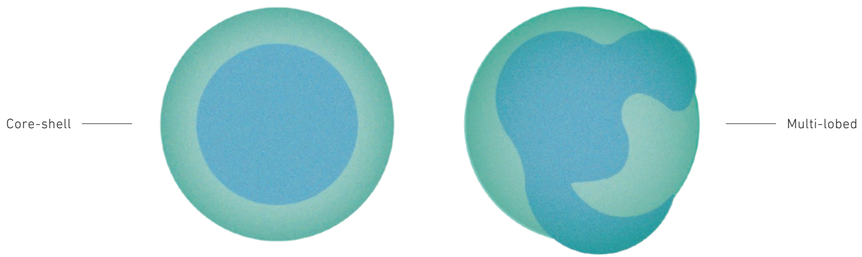


MULTIPHASE TECHNOLOGY

Using a two-step synthesis process, multiphase technology combines two different types of polymers in the same polymer network. This allows a balanced combination and thereby an overall improvement of the physical properties of the two polymers. A very good hardness and chemical resistance balanced with a moderate film-forming temperature benefits applications in the wood sector in particular. This process also means that no or only a small amount of emulsifiers is required. Thus, some of these products are approved for indirect food contact. It also helps with water resistance and the protective performance of the polymers. Metal applications additionally benefit from the possibility to keep the polarity of the overall film low by balancing the polymer phases.

FEATURES & BENEFITS

- Very low to zero emulsifier content
- Good balance between hardness, chemical resistance and film forming
- Excellent adhesion to multiple substrates
- Compliant with Swiss Ordinance for indirect food contact

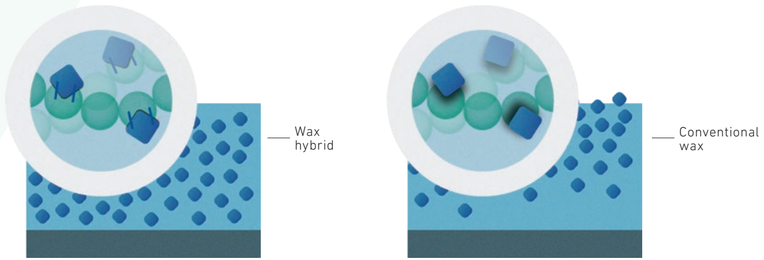


WAX-HYBRID TECHNOLOGY

Our wax-hybrid technology is a patented process for combining wax and acrylate in a single polymer network. This prevents the wax from migrating to the surface as it dries, resulting in a more uniform film composition that improves the appearance and performance of the coating. The hybrid polymer exhibits anionic behaviour and broad compatibility with other water-based polymers. The positive properties of waxes, such as increased slip or abrasion resistance and improved water resistance, can thus be optimally utilised.

FEATURES & BENEFITS

- Wax grafted to the polymer network
- Even distribution in liquid and dried form
- Enhanced wear resistance
- Improved water resistance
- Soft and flexible, good response to buffing for scratch repair and gloss
- Slip resistance



ALKALI-SOLUBLE TECHNOLOGY – RESIN SOLUTIONS

Our alkali-soluble polymers are based on polyacrylic and polymethacrylic acids with high electrostatic repulsion. They are available with different acid numbers, molar weights and glass transition temperatures as a clear solution in water.

The resin solutions offer excellent dispersibility of pigments and high compatibility and stability in various formulation types. This provides improved wetting and increased gloss of formulations. Unlike dispersing additives, these resins form a hard, water-soluble film at room temperature and are thus part of the binder. In addition, adhesion can be positively influenced on some substrates.

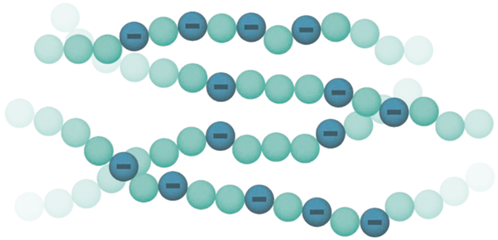
FEATURES & BENEFITS

Dispersing

- Excellent wetting and dispersibility of pigments
- High compatibility and stability in multiple formulation types
- Improves the wetting of formulations
- Improves gloss

Binding

- Formation of a hard, water-soluble film at room temperature



PRODUCT PORTFOLIO

PRODUCT	EU	US	ASIA	PRODUCT DESCRIPTION	FEATURES & BENEFITS	IONICITY	SOLID APPROX. [%]	pH	MFFT [°C]	Tg [°C]	WOOD				METAL		CONCRETE		PLASTIC	ARCHITECTURAL	GRAPHIC ARTS		ADDITIVES		
											Topcoat	Primer	Isolation Primer	Outdoor	Topcoat	DTM	Topcoat	Primer			OPV	Primer	Waxes	Grinding Resins	Hardness Modifier
SYNTRAN® AC 1012		▲	▲	Acrylic copolymer	Hardness modifier, styrene-free acrylic polymer for use as an additive (5–20 %) in formulations to improve hardness, sandability, block resistance and stackability; can be used as a standalone film former	Anionic	28	7.6	N/A	109															▲
SYNTRAN® AC 1030		▲		Acrylic polymer	Acrylic polymer for waterproofing leather materials, excellent compatibility with polyurethane dispersions for leather impregnation applications	Anionic	35	7	N/A	-13															
SYNTRAN® AC 1090		▲		Acrylic polymer	High solids, large particle size; film has very high flexibility with excellent water resistance; high compatibility with pigments, waxes and other additives, excellent adhesion to mortar, flexible films and foils, no VOCs required to formulate coating; for masonry, mortar modification and roofing	Anionic	50	8	5	0										▲					
SYNTRAN® AC 1091		▲		Acrylic polymer	High solids, large particle size; film has very high flexibility with excellent water resistance; high compatibility with pigments, waxes and other additives, excellent adhesion to multiple substrates, no VOCs required to formulate coating, good alkali and acid resistance; for masonry, mortar modification and roofing	Anionic	57	7.2	15	15										▲					
SYNTRAN® APU 1602	▲		▲	Acrylic modified aliphatic polyurethane dispersion	Excellent compromise of acrylate and PU properties, highly compatible with other acrylic polymers and can be used as sole binder or in combination with other acrylic binders to improve abrasion resistance, very good combination partner to acrylic matte polymers with low increase in gloss level and wood warming	Anionic	39	8	12	N/A	▲	▲													
SYNTRAN® AC 2901		▲		Inherently matte self-crosslinking acrylic polymer	Very low- to satin-gloss lacquers with excellent water resistance and blocking properties, high transparency and excellent flexibility; in combination with PUDs and acrylic polymers to improve film properties; OH-functional, can be further crosslinked with isocyanates to enhance scratch and chemical resistance; in applications such as OPVs, paper, board and metallised substrates compatible with organic and inorganic pigment pastes without altering the ink colours	Anionic	45	7.5	0	0	▲											▲	▲			
SYNTRAN® AC 2902	▲	▲	▲	Inherently matte self-crosslinking acrylic polymer	Low- to satin-gloss lacquers with excellent water resistance and blocking properties, high transparency, excellent grain wetting and almost no wood warming; in combination with low-MFFT PUDs and acrylic polymers to improve film properties; OH-functional, can be further crosslinked with isocyanate to enhance scratch and chemical resistance; in applications such as OPVs, paper, board and metallised substrates compatible with organic and inorganic pigment pastes without altering the ink colours	Anionic	45	7.5	30	30	▲	△		△					▲		▲				
SYNTRAN® AC 4101	▲		▲	Cationic acrylic copolymer	Excellent universal stain-blocking properties: tannins, dyes and nicotine; with excellent adhesion in both wood and architectural applications; in paper, board and metallised substrates it ensures excellent bonding with anionic inks and stain-blocking properties, all while being free of APEO and cosolvents, enabling low-VOC formulations	Cationic	35	5.7	< 10	16			▲							▲			△		
SYNTRAN® AC 4102	▲			Cationic acrylic copolymer	Excellent universal stain-blocking properties: tannins, dyes and nicotine; with excellent adhesion in floor, furniture and joinery applications; in paper, cardboard and labels applications it has excellent adhesion and allows the film to act as a receptive layer for water-based anionic inks	Cationic	35	5.6	22	35			▲							▲			▲		

▲ = Highly recommended △ = Recommended

PRODUCT PORTFOLIO

PRODUCT	EU	US	ASIA	PRODUCT DESCRIPTION	FEATURES & BENEFITS	IONICITY	SOLID APPROX. [%]	pH	MFFT [°C]	Tg [°C]	WOOD				METAL		CONCRETE		PLASTIC	ARCHITECTURAL	GRAPHIC ARTS		ADDITIVES		
											Topcoat	Primer	Isolation Primer	Outdoor	Topcoat	DTM	Topcoat	Primer			OPV	Primer	Waxes	Grinding Resins	Hardness Modifier
SYNTRAN® AC 5111	▲	▲	▲	Multiphase acrylic copolymer	Hard modifier emulsion, fast drying, APEO-free, low odour, compliant with Swiss Ordinance; OPV, primer, ink and paper coating applications; printing improvement on aluminium foil	Anionic	44	7.0	> 90	N/A											▲				▲
SYNTRAN® AC 5112	▲		▲	Multiphase acrylic copolymer	Good levelling, good adhesion on paper and board, very flexible, low odour, compliant with Swiss Ordinance; paper and paperboard (OPV) label, board and packaging coatings applications	Anionic	44	7.1	20	N/A											▲				▲
SYNTRAN® AC 5115	▲	▲	▲	Multiphase acrylic copolymer	Excellent adhesion to various substrates, quick drying in wood applications, compatible with water-based alkyds; in graphic arts applications high gloss, flexibility and excellent printability, high compatibility with waxes and other additives, excellent adhesion to flexible films and foils, no VOCs required to formulate coating	Anionic	43	7.5	20	N/A		▲									▲	▲			
SYNTRAN® AC 5199		▲		Styrene acrylic	Hydroxy functional styrene acrylic emulsion for low-temperature cure with melamine and isocyanate cross-linkers without the need for additional catalysts; finished coatings exhibit high gloss, excellent stability and high hardness	Anionic	40	7.0	63	70						▲	▲								
SYNTRAN® AC 5917	▲	▲	▲	Self-crosslinking multi-phase acrylic polymer	Coatings for joinery, sealer concrete and plastic applications; outdoor and indoor; blocking resistance, low water absorption; high-gloss, flexible films, fast drying, alkali and water resistance for concrete, suitable as a combination partner for hard acrylics to reduce the MFFT and PUDs in exterior applications, VOC-free formulations; arts and crafts paints application	Anionic	46	7.0	7	N/A	▲	▲		▲			▲	▲	▲	▲					
SYNTRAN® AC 5917B		▲		Self-crosslinking multi-phase acrylic polymer	Version of SYNTRAN® AC 5917 with increased early water and water soak blush resistance; excellent adhesion to various substrates	Anionic	46	7.0	7	N/A	▲	▲		▲			▲	▲	▲	▲					
SYNTRAN® AC 5918	▲	▲		Self-crosslinking multi-phase acrylic polymer	Polymer for arts and crafts paints and markers with EU-compliant biocide packages to minimise consumer hazard labelling requirements	Anionic	46	10.0	7	N/A										▲					
SYNTRAN® AC 5922	▲	▲	▲	Self-crosslinking multi-phase acrylic polymer	For decorative interior and exterior coatings with very low VOC content, high and low build stains and impregnations, low water absorption, good block resistance and exterior durability, excellent penetration into the wood substrate, good adhesion, excellent pigment wetting, combination partner for harder acrylics to improve adhesion and flexibility and to reduce the MFFT, combination partner for PUDs	Anionic	44	7.0	0	N/A	▲	▲		▲						▲					
SYNTRAN® AC 5922B		▲		Self-crosslinking multi-phase acrylic polymer	Version of SYNTRAN® AC 5922 with increased early water and water soak blush resistance; excellent adhesion to various substrates	Anionic	44	7.0	0	N/A	▲	▲		▲						▲					
SYNTRAN® AC 5923	▲	▲	▲	Self-crosslinking multi-phase acrylic polymer	Coatings with excellent resistance to stains and alcohol, high hardness, flexibility, medium to high gloss; good adhesion to non-ferrous metals, joinery, furniture, floor and pool decks with resistance to alkalis, water and scratches; compatible with pigment pastes and PUDs, it allows the creation of durable, VOC-free, high-performance coatings for both interior and exterior applications	Anionic	40	7.5	30	N/A	▲	▲		▲	▲	▲	▲	▲	▲						

▲ = Highly recommended ▲ = Recommended

PRODUCT PORTFOLIO

PRODUCT	EU	US	ASIA	PRODUCT DESCRIPTION	FEATURES & BENEFITS	IONICITY	SOLID APPROX. [%]	pH	MFFT [°C]	Tg [°C]	WOOD				METAL		CONCRETE		PLASTIC	ARCHITECTURAL	GRAPHIC ARTS		ADDITIVES		
											Topcoat	Primer	Isolation Primer	Outdoor	Topcoat	DTM	Topcoat	Primer			OPV	Primer	Waxes	Grinding Resins	Hardness Modifier
SYNTRAN® AC 5923B		▲		Self-crosslinking multi-phase acrylic polymer	Version of SYNTRAN® AC 5923 with increased early water and water soak blush resistance; excellent adhesion to various substrates	Anionic	40	7.0	30	N/A	▲	▲		▲	▲	▲	▲	▲	▲						
SYNTRAN® AC 5924		▲		Self-crosslinking multi-phase acrylic polymer	SYNTRAN® AC 5923 with cosolvents added for customers without mixing capabilities	Anionic	39	7.5	5	N/A	▲	▲		▲	▲	▲	▲	▲	▲						
SYNTRAN® AC 6045	▲	▲	▲	IPN acrylic polymer	Excellent adhesion properties for wood, architectural applications, paper and metallised substrates; unpigmented formulations effectively blocking tannins, stains and dyes; good water resistance, fast drying, low-VOC formulations; compatible with flexible and outdoor substrates, such as white roofs, shows high compatibility with other resins and additives, good ink receptivity and anchorage; use at Speedball art for high-end artist inks	Anionic	41	7.5	8	8			▲	▲						▲		▲			
SYNTRAN® AC 6050	▲	▲	▲	IPN acrylic polymer	Excellent adhesion properties for wood, architectural applications, paper and metallised substrates; unpigmented formulations effectively blocking tannins, stains and dyes; good water resistance, fast drying, low-VOC formulations; compatible with flexible and outdoor substrates, such a white roofs; shows high compatibility with other resins and additives, good ink receptivity and anchorage	Anionic	41	7.5	8	8			▲	▲						▲		▲			
SYNTRAN® AC 6130	▲	▲	▲	IPN acrylic copolymer	Excellent adhesion, hardness and scratch resistance, very good resistance to water, grease, solvents and abrasion; good resistance to coffee and red wine in white coatings, clear when wet, reddish colour on wood with clear coatings, blending partner for SYNTRAN® AC 5922, fast drying	Anionic	40	8.8	52	68	▲						△								
SYNTRAN® AC 7016	▲	▲	▲	Alkali-swellable acrylic copolymer	Clear and pigmented primers for roller coater and spray applications, wood stains, insulating coatings, adhesion primers under UV systems; very good insulation of water-soluble substances like tannin, excellent water resistance and good oil resistance; good adhesion on metallised foil, excellent blocking resistance; not soluble in alkali but will thicken/increase in viscosity	Anionic	39	5.5	20	36		▲	▲	△								▲			
SYNTRAN® AC 7018	▲	▲	▲	Alkali-soluble acrylic copolymer	Highly transparent wood stains and primers for industrial applications for room temperature and forced drying, excellent film clarity and compatibility with dyes and pigment preparations, well dilutable with alcohols	Anionic	25	8.0	0	15		▲		▲											
SYNTRAN® AC 7080	▲		▲	Acrylic polymer solution	Surfactant-free with outstanding binding effect on metal, very good chemical resistance including diesel and E10 fuel, can also be used to formulate a rust converter	Anionic	40	2.2	N/A	107						△								
SYNTRAN® AC 9001		▲		Self-crosslinking acrylic polymer	Excellent chemical and alkali resistance for paper, board and metallised substrates, excellent water submersion resistance; film has very high gloss, hardness with good printability; low addition of VOCs required to formulate coating	Anionic	42	7.5	45	53											▲			

▲ = Highly recommended △ = Recommended

PRODUCT PORTFOLIO

PRODUCT	EU	US	ASIA	PRODUCT DESCRIPTION	FEATURES & BENEFITS	IONICITY	SOLID APPROX. [%]	pH	MFFT [°C]	Tg [°C]	WOOD				METAL		CONCRETE		PLASTIC	ARCHITECTURAL	GRAPHIC ARTS		ADDITIVES		
											Topcoat	Primer	Isolation Primer	Outdoor	Topcoat	DTM	Topcoat	Primer			OPV	Primer	Waxes	Grinding Resins	Hardness Modifier
SYNTRAN® AC 9034	▲	▲	▲	Self-crosslinking acrylic polymer	General-purpose acrylic polymer, excellent early and final water resistance, good chemical resistance, dry heat resistance and hardness, light colour on "dark oak", good for floor and furniture applications	Anionic	40	7.8	50	55	▲	▲													
SYNTRAN® AC 9057		▲		Self-crosslinking acrylic polymer	Self-crosslinking, excellent household stain resistance, outstanding hot tire and Betadine resistance, excellent water submersion resistance, very hard and high-gloss film with good printability, low addition of VOCs required to formulate coating; sealer, decorative and pool decks	Anionic	42	7.5	55	56							▲								
SYNTRAN® AC 9061			▲	Self-crosslinking acrylic polymer	Very good adhesion on laminated PVC substrate, OPV, paper and board substrates for low-gloss formulations	Anionic	41	8.0	61	79											▲				
SYNTRAN® AC 9073		▲		Self-crosslinking acrylic polymer	Excellent adhesion in sealer and decorative concrete and resistance to household stains and water submersion, outstanding hot tire resistance; in OPV and paper high-gloss films with flexibility and good printability; no VOCs required to formulate coatings	Anionic	42	7.5	25	N/A							△				△				
SYNTRAN® AC 9093		▲		Self-crosslinking acrylic polymer	Excellent resistance to alkalis, household stains and water submersion, high adhesion to multiple substrates including PET and metallised substrates; film has high gloss, flexibility with good early water resistance, making it ideal for coatings, primers and inks; small particle size for deep penetration into concrete; no VOCs required; arts and crafts paints application	Anionic	42	7.5	15	29		▲		▲	▲	△	△	▲			▲	▲			
SYNTRAN® AC 9120	▲	▲	▲	Self-crosslinking acrylic polymer	Excellent household stain resistance, outstanding hot tire and Betadine resistance, excellent water submersion resistance, very hard and high-gloss film with good printability, low addition of VOCs required to formulate coating; sealer, decorative and pool decks	Anionic	43	7.0	45	57							▲								
SYNTRAN® AC 9131	▲	▲	▲	Self-crosslinking acrylic polymer	Excellent resistance to alkalis, household stains and water submersion, high adhesion to multiple substrates, including PET; film has high gloss, flexibility with good early water resistance, making it ideal for coatings, primers and inks; small particle size for deep penetration into concrete; no VOCs required; arts and crafts paints application	Anionic	42	7.0	15	29		▲		▲	▲	△	△	▲			▲	▲			
SYNTRAN® WA 1001	▲	▲	▲	Hard polyethylene wax emulsion	Hard and high melting polyethylene wax emulsion, melting range 122–139 °C; abrasion and scratch resistance, anti-blocking; can improve the friction resistance and anti-blocking properties of the surface	Nonionic/ anionic	35	9.5	N/A	N/A													▲		
SYNTRAN® WA 1005	▲	▲		Hard polyethylene wax emulsion	Hard and high melting polyethylene wax emulsion, melting range 130–140 °C; abrasion and scratch resistance, anti-blocking; excellent compatibility with all known water-based polymer dispersions	Nonionic/ anionic	35	8.6	N/A	N/A													▲		

▲ = Highly recommended △ = Recommended

PRODUCT PORTFOLIO

											WOOD				METAL		CONCRETE				GRAPHIC ARTS		ADDITIVES		
PRODUCT	EU	US	ASIA	PRODUCT DESCRIPTION	FEATURES & BENEFITS	IONICITY	SOLID APPROX. [%]	pH	MFFT [°C]	Tg [°C]	Topcoat	Primer	Isolation Primer	Outdoor	Topcoat	DTM	Topcoat	Primer	PLASTIC	ARCHITECTURAL	OPV	Primer	Waxes	Grinding Resins	Hardness Modifier
SYNTRAN® WA 1065	▲	▲	▲	Wax-hybrid acrylic	Patented acrylic olefin graft technology; this unique incorporation of olefin onto the backbone of the acrylic avoids the natural migration of the generally lower-density wax to the surface during drying, resulting in better compatibility of the wax with acrylic systems and more uniform film application; recommended to support traditional wax components in highly abrasive applications; high clarity and water resistance, no phase separation; low impact on surface properties	Nonionic/ anionic	38	9.1	35	N/A													▲		
SYNTRAN® WA 1075		▲		Wax-hybrid acrylic	Patented acrylic olefin graft technology; this unique incorporation of olefin onto the backbone of the acrylic avoids the natural migration of the generally lower-density wax to the surface during drying, resulting in better compatibility of the wax with acrylic systems and more uniform film application; recommended to support traditional wax components in highly abrasive applications; high clarity and water resistance, no phase separation; low impact on surface properties	Anionic	38	9.2	20	N/A													▲		
SYNTRAN® DR 7011		▲		Alkali-soluble acrylic polymer	Polymeric surfactant technology designed to improve wetting and incorporation of pigments or additives into water-based pigment concentrates and coatings; used as a grinding resin in pigment dispersions, it improves colour development of organic pigments and carbon black	Anionic	25	7.6	20	76														▲	
SYNTRAN® DR 7015		▲		Alkali-soluble acrylic polymer	Polymeric surfactant technology designed to provide excellent wetting and incorporation of pigments or additives into water-based coatings	Anionic	30	7.5	100	152														▲	
SYNTRAN® DR 7055		▲		Alkali-soluble acrylic polymer	Polymeric surfactant technology designed to provide excellent wetting and incorporation of pigments or additives into water-based coatings; free of ammonia	Anionic	25	8.0	66	74														▲	
SYNTRAN® DR 7060		▲	▲	Alkali-soluble acrylic polymer	Polymeric surfactant technology designed to provide excellent wetting and incorporation of pigments or additives into water-based coatings; used as a grinding resin in pigment dispersions, it improves the colour development of organic pigments, carbon black and titanium dioxide	Anionic	25	7.0	7	107														▲	
SYNTRAN® DR 7061	▲			Alkali-soluble acrylic polymer	Polymeric surfactant technology designed to provide excellent wetting and incorporation of pigments or additives into water-based coatings; used as a grinding resin in pigment dispersions, it improves colour development of organic pigments and carbon black	Anionic	25	7.1	77	78														▲	

▲ = Highly recommended ▲ = Recommended

PRODUCT PORTFOLIO

PRODUCT	EU	US	ASIA	PRODUCT DESCRIPTION	FEATURES & BENEFITS	IONICITY	SOLID APPROX. [%]	pH	MFFT [°C]	Tg [°C]	WOOD				METAL		CONCRETE		PLASTIC	ARCHITECTURAL	GRAPHIC ARTS		ADDITIVES		
											Topcoat	Primer	Isolation Primer	Outdoor	Topcoat	DTM	Topcoat	Primer			OPV	Primer	Waxes	Grinding Resins	Hardness Modifier
SYNTRAN® DR 7101	▲		▲	Alkali-soluble acrylic polymer	Excellent properties for OPV, paper and board such as pigment dispersion, high gloss, ink transfer, low odour and compatibility with acrylic emulsions; as an additive, its polymeric surfactant technology improves dispersibility and colour development of water-based organic and inorganic pigment concentrates and coatings, showing exceptional rheology control and storage stability; compliant with Swiss Ordinance and FDA regulations	Anionic	30	7.0	70	88											▲			▲		
SYNTRAN® DR 7102		▲		Carboxylated acrylic copolymer	Polymeric surfactant technology designed to provide excellent wetting and incorporation of pigments or additives into water-based coatings	Anionic	35	6.6	100	105														▲		
SYNTRAN® DR 7105		▲		Alkali-soluble acrylic polymer	Polymeric surfactant technology designed to improve dispersibility and colour development of water-based pigment concentrates and coatings and can be used for both inorganic and organic pigment dispersions, providing excellent rheology control and storage stability; easy to use in inks and OPV, high gloss and hold-out, excellent ink transfer and printability, APEO-free, good compatibility with acrylic emulsions, low odour, compliant with Swiss Ordinance and FDA regulations for indirect food contact	Anionic	30	7.0	99	88											▲	▲		▲		

Chemistry tailor-made

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