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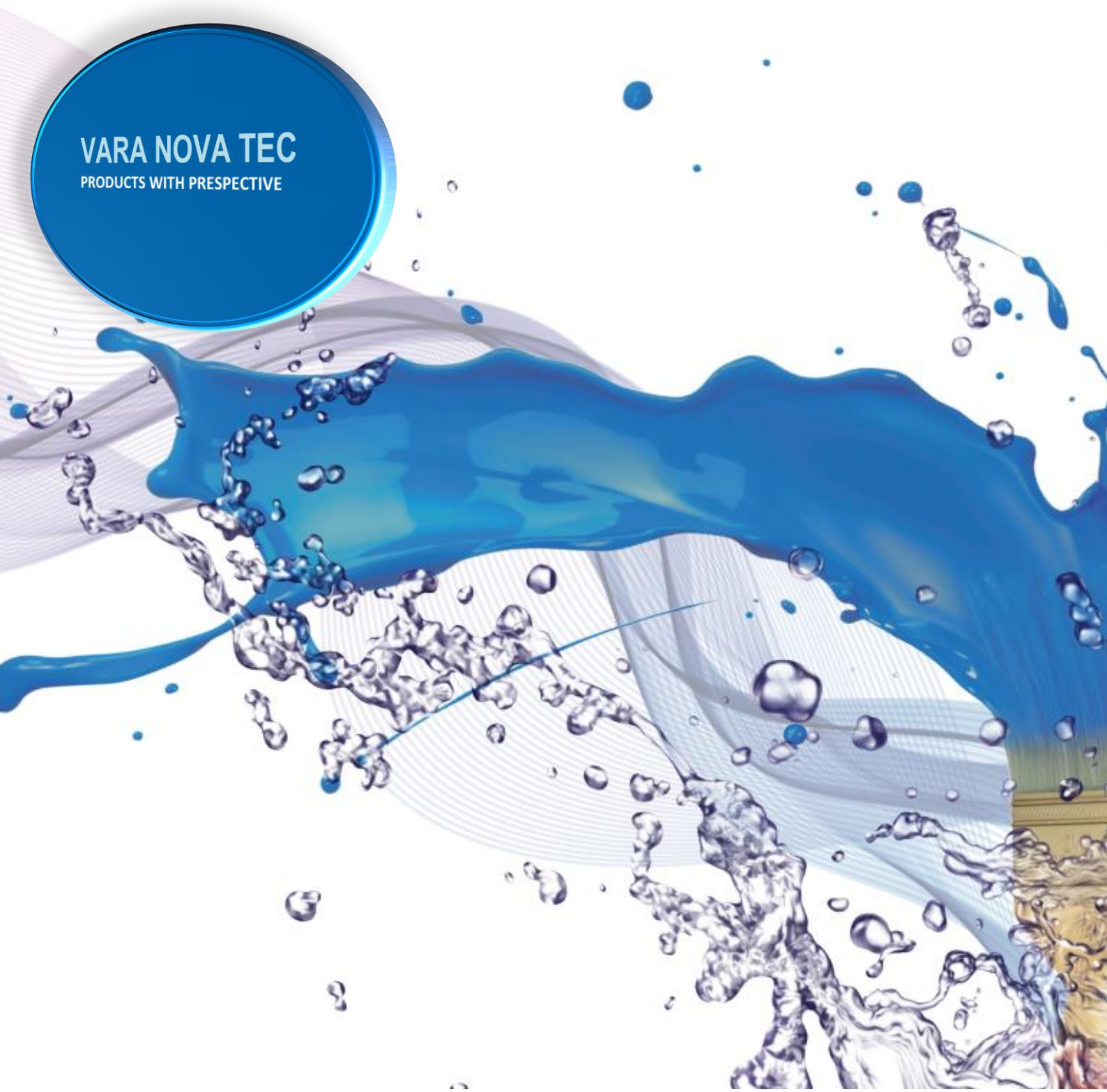
your competent partner for procurement of raw materials

WATER-BASED & SOLVENT-BASED COATING ADDITIVES



TECHNOLOGIES FOR A SECURE FUTURE

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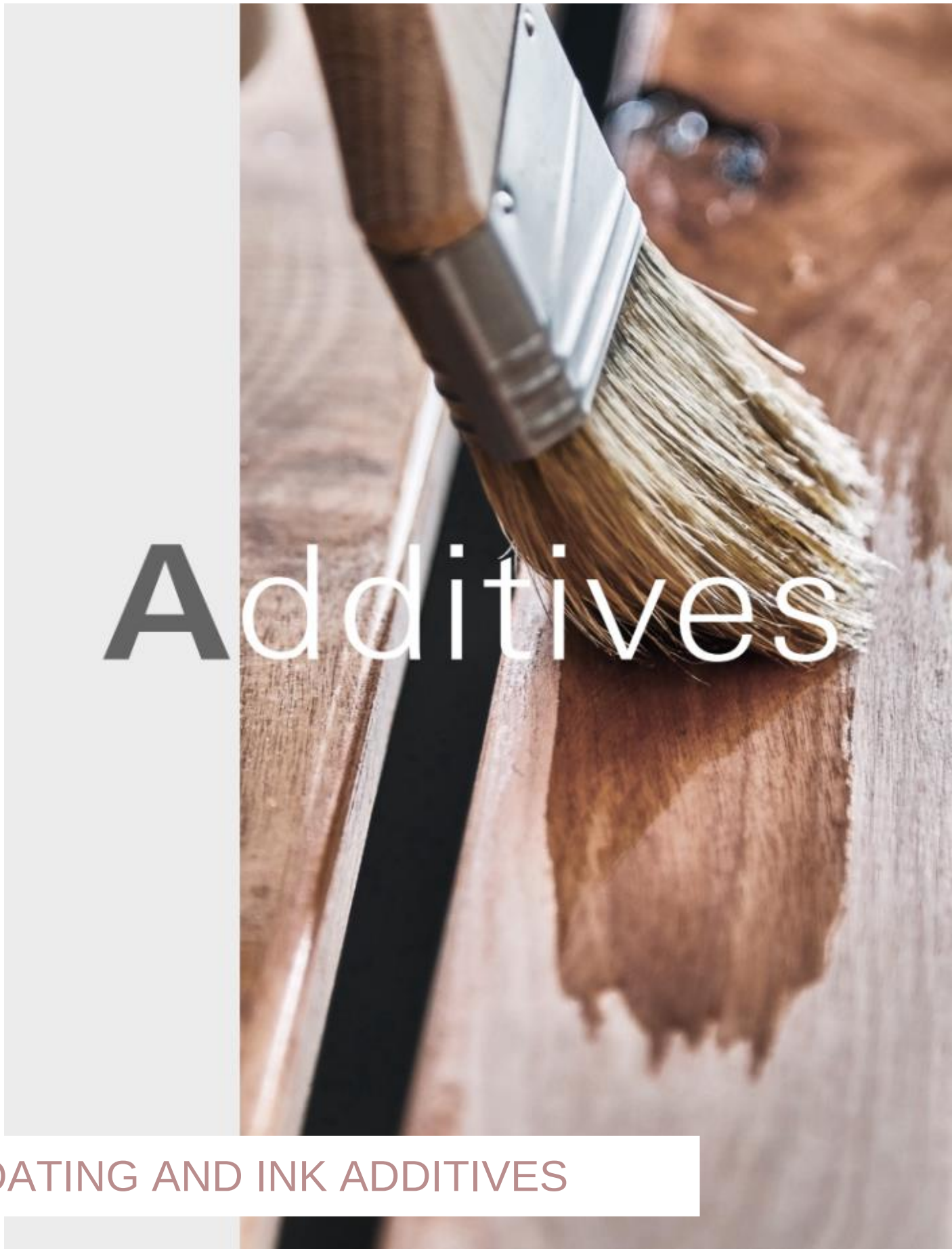
ADDITIVE TECHNOLOGY



COATING AND INK ADDITIVES

A little makes a big splash!

Coatings additives improve product properties and eliminate or reduce problems occurring during formulating paint systems, thus optimizing production processes. Coatings additives – high performance additives for your paint formulations. Coatings additives help you meet the challenges typically appearing in paint formulations and offer customized solutions with regard to improved pigment wetting, defoaming, air release, substrate wetting or surface slip. Using additives you will also meet the requirements for water and scratch resistance, increased adhesion to aged coating surfaces or UV protection, to name but a few.

- Architectural Coating
- Automotive OEM and Refinish Coating
- Industrial Coating
- Can and Coil Coating
- Wood and Furniture Coating
- Powder Coating
- Floor Coating
- Printing Inks

- Protective and Marine Coatings
- Printing Inks

Additives enhance the performance of paint formulations by modifying rheological properties, improving flow and leveling, reducing foam, improving pigment dispersability, accelerating cure and crosslinking, improving adhesion and reducing defects.

Our portfolio includes low VOC, and hazardous air pollutant substance-free (HAPS free) technologies for solvent-borne, water-borne, high solids, powder coatings, and energy curable systems in both existing and emerging markets.

About Additives

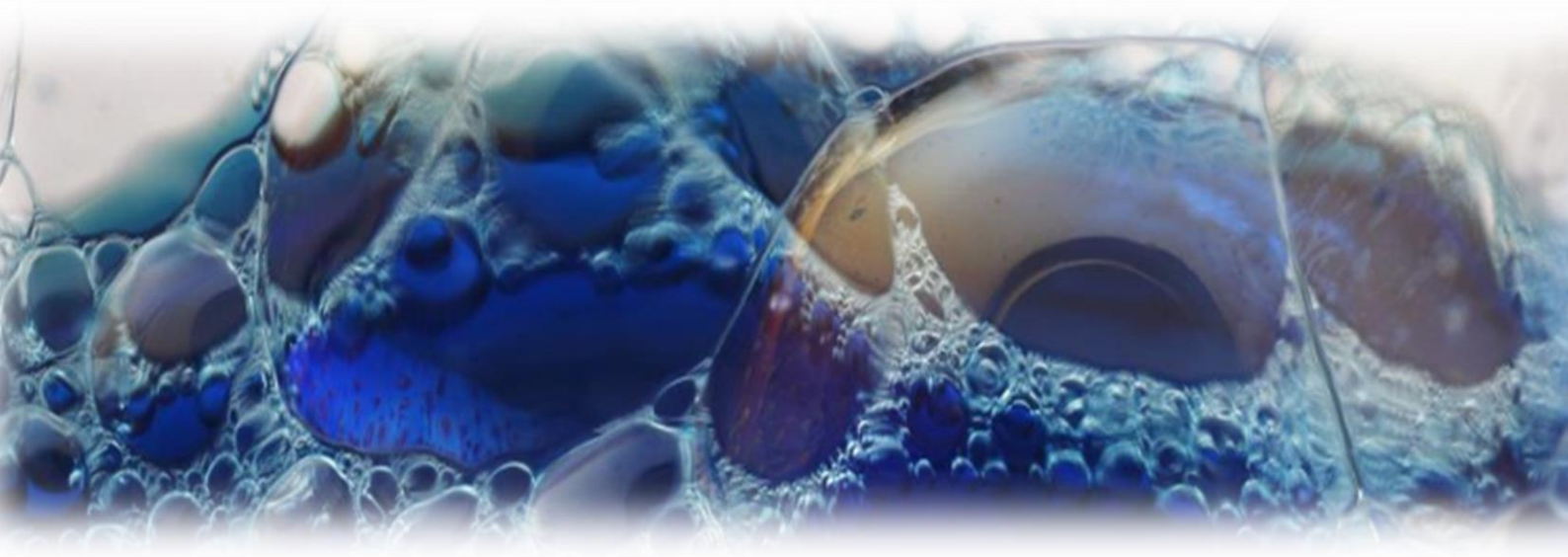
The coating resins and additives portfolio is on the leading edge of performance. This broad package of products enables our customers to bring coatings faster to the market, solve problems and enhance properties. We offer a broad range of additives for the formulation of coatings. Our portfolio includes low VOC, and hazardous air pollutant substance-free (HAPS free) technologies for solvent-borne, water-borne, high solids, powder coatings, and energy curable systems in both existing and emerging markets:

- Architectural-decorative Wall and Trim Coatings, Stains, Concrete
- Automotive and Transportation – OEM, Aerospace, Refinish, Parts and Accessories
- General Industry, Wood, Packaging, Coil, Metal Protection
- Marine and Protective

Additives enhance performance by modifying rheological properties, improving flow and leveling, reducing foam, improving pigment dispersability, accelerating cure and crosslinking, improving adhesion and reducing defects.

Our high performance dispersants and grinding resins are at the forefront of technology for the preparation of binder free pigment concentrates and pastes. The highest level of pigment, at the lowest VOC, without effects on corrosion resistance and other properties are achieved in systems using wetting and dispersing additives.

- Wetting and Dispersing Additives
- Flow and Leveling Additives
- Defoamer and Deaerater
- Rheology Modifier
- Catalysts and Drier



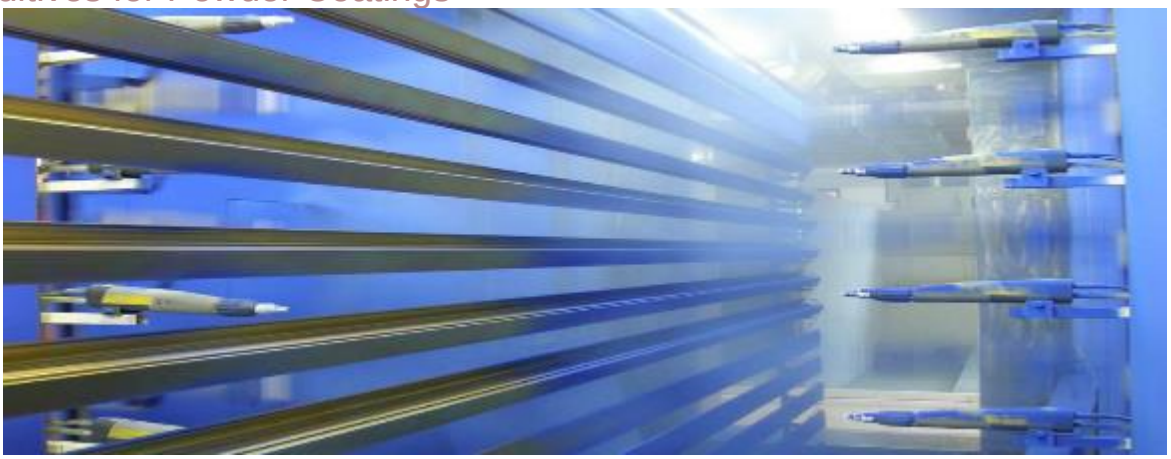
Additives for Can Coatings

Additives for Automotive Coatings

Additives for Printing Inks

Additives for Coil Coatings

Additives for Powder Coatings



Additives for Wood Coatings

Additives for Architectural Coatings

Additives for Protective & Marine Coatings

Driers

THORBITOR; Rust inhibitor

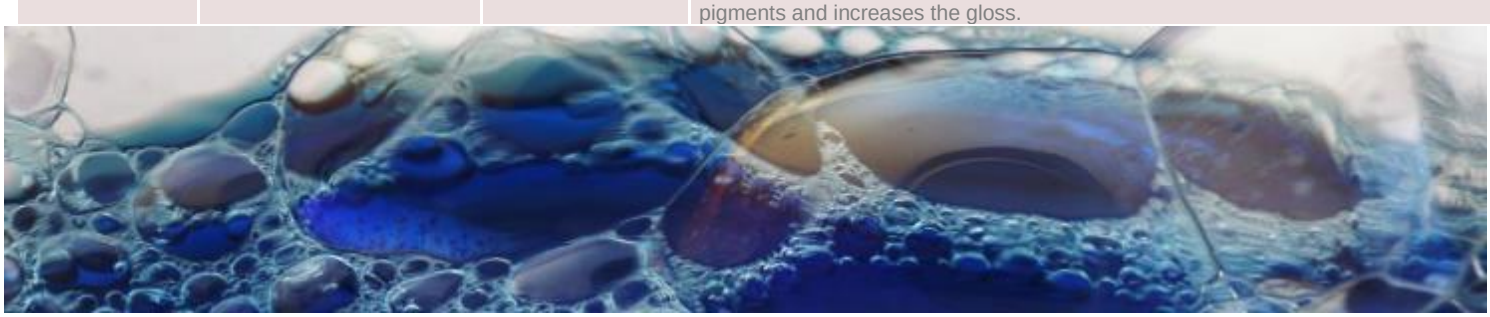
Product	Chemical characteristic	Highlighted application/Effect	Active substance [%]	Use level [%] (On total formulation)
TR 456	Organic salts and morpholine derivate	VOC- and nitrite-free, for all waterborne DTM systems incl. 1K/2K PUR	30	0.5 – 2.0
TR 458	Organic salts	VOC- and nitrite-free, preferably for polymer-emulsion-based DTM systems	38	0.5 – 2.0
TR 790	Epoxy phosphate ester	Used as additive for waterborne stoving enamels.	72	5-15
TR 800	Epoxy phosphate ester	Used as additive for waterborne stoving enamels.	73	5-15

THORADD; Miscellaneous additives

Product	Appearance	Non-volatiles [%]	Use level [%] (on total formulation)	Use level [%] (On total formulation)
ADD 410	Clear to slightly turbid, yellowing, low-viscosity liquid	13	0.5 – 2.0	Viscosity stabilizer, anti-skinning and anti-gelling agent for solvent-based air-drying and stoving alkyd paints.
ADD 412	Clear to slightly turbid, yellowing, low-viscosity liquid	65	0.5 – 1.0	Solvent-free compatibility agent for easier incorporation of driers into water-based alkyd emulsion paints.
ADD 425	Clear, yellowing liquid	51	0.2 – 1.5	Silicon-free additive, imparts an equal structure to wax-containing coil coatings; improves degassing, reduces popping; also for clear coats.
ADD 428	Clear, low-viscosity liquid	10	3.0 – 6.0	Silicon-free additive for structured, wax-free coil coatings; causes orange-peel effect; improves degassing.
ADD 481	Clear, medium-viscosity liquid	100	0.1 – 2.0	Silicon-free flow and leveling additive for solvent-borne, solvent-free and aqueous systems; improves leveling, flexibility and adhesion; reduces blistering in thick layers of two-pack PUR coatings.
ADD 470	Clear, brownish liquid	12	0.1 – 1.0	Cobalt-free primary drier for aqueous alkyd systems; provides fast surface drying, good through drying and hardness development.
ADD 422	Slightly yellowish liquid	50	0.2 – 0.8	Cationic surface active additive; increase the conductivity of electrostatic sprayable paint systems; effective at low use levels.
ADD 560	Brownish liquid	12	1.5 – 3.0	Cobalt-free drier for alkyd systems; free from 2-ethyl hexanoic acid.
ADD 415	Clear to slightly turbid, yellow-brownish, low-viscosity liquid	65	01 – 0.5	Oxime-free anti-skinning agent with pigment-wetting properties.
ADD FR 500	White powder	min. 98	approx. 10	Halogen-free flame retardant, based on entcapsulated phosphoric compounds for water-based polymer dispersion and solvent-based polymer binders.

THORMUL; Wetting and dispersing agents

Product	Chemical characteristic	Active substance [%]	Main uses and characteristics
DIS 810S	Modified block copolymer	100	Easy-to-use, universal dispersion for decorative and industrial coatings, recommended for solvent-borne and solvent-free systems.
DIS 811S	Modified polymer	100	Easy-to-use, universal dispersion for decorative and industrial aqueous coatings; first choice for medium oil alkyds when gloss matters.
DIS 840W	Modified block copolymer	50	Universal, outstanding cost-performance ratio for aqueous systems.
DIS 844W	Modified block copolymer	40	40% version of DIS 840W for aqueous systems.
DIS 845W	Modified block copolymer	50	Similar to DIS 840W, optimized for micronized iron oxides.
DIS 846W	Modified polyacrylate	50	For highly loaded concentrates of various pigments, especially effective with carbon blacks for aqueous systems.
DIS 850W	Modified polyacrylate	50	Universal, no effect on film hardness; for maximum pigment paste concentration take DISP 840W or DIS 8470W.
DIS 860W	Modified polyacrylate amine-free	44	Universal. No effect on film hardness; lowest water uptake; for maximum pigment paste concentration take DIS 840W or DIS 870W.
DIS 870W	Modified alcohol ethoxylate	80	Very effective, low use level, outstanding for printing inks.
DIS 438	Special polymer	100	Special additive for solvent based alkyd systems, it enhances the dispersing of pigments and increases the gloss.



THORFOAM AQUA; Anti-foaming agents for aqueous formulations

Product	Chemical characteristic	Active substance [%]	Use level (on total formulation)
AQUA 210	Silica containing PDMS solution	80	0.1 – 1.7
AQUA 223	Silica containing PDMS	100	0.1 – 1.0
AQUA 224	Silica containing PDMS	100	0.1 – 1.0
AQUA 226	Silica containing PDMS	100	0.1 – 1.0
AQUA 204	Silicone containing solution	25	1.0 – 4.0
AQUA 228	Silica containing PDMS solution	66	0.1 – 1.0
AQUA 241	Silica containing PDMS solution	30	0.3 – 1.0
AQUA 242	Silica containing PDMS solution	26	0.1 – 1.0
AQUA 250	Silicone- and mineral-oil free	100	0.3 – 1.0
AQUA 251	Silicone- and mineral-oil free	100	0.3 – 1.0

THORFOAM; Anti-foaming agents for non-aqueous formulations

Product	Chemical characteristic	Active substance [%]	Use level (on total formulation)
PD 170	PDMS solution	10	0.03 – 0.5
PD 172	PDMS solution	5	0.05 – 0.8
PD 125	Silicone-free formulation of defoaming actives	80	0.2 – 1.5
PD 102	PDMS solution	1.3	0.4 – 2.0
AC 103	Solution of acrylate-mod. PDMS	13.5	0.2 – 1.5
AC 135	Solution of polyacrylate-mod. PDMS	8.5	0.5 – 1.0
PD 123	PDMS solution	12	0.5 – 1.0

THORNOL; Substrate wetting agents

Product	Chemical characteristic	Active substance [%]	Use level [%] (on total formulation)	Highlighted application / Effect
WET 345	Formulation of silicone copolyether and dioctylsulphosuccinate	71	0.3 – 1.5	Improves the substrate wetting and penetration of aqueous formulation.
WET 341	Polyethermod. PDMS trisiloxane	50	0.2 – 1.5	For all kinds of aqueous air-drying industrial, automotive, wood and architectural coatings and 2-pack PUR; no influence on surface slip, no foam stabilization.
WET 344	PDMS copolymer	100	0.1 – 1.0	For all kinds of aqueous air-drying industrial, automotive, wood and architectural coatings and 2-pack PUR systems; no influence on surface slip, no foam stabilization; better against craters than Add 3410.
WET 328	Maleic resin	100	0.2 – 1.5	A wetting agent for wood impregnation and solvent as well water-dilutable premix applications.
WET 354	Maleic resin	100	0.2 – 2.0	A wetting agent for wood impregnation and solvent as well water-dilutable premix applications.
WET 346	Dioctylsulfosuccinate / PDMS	70	0.3 – 1.5	For water borne coatings, by reducing the surface tension causes Add 3460 better substrate wetting on substrates with low surface energy. The penetration in porous substrates such as wood or paper is improved. Surface defects as craters, orange peel and edge pulling are significantly reduced.
WET 301	Dioctylsulfosuccinate	70	0.1 – 1.0	Additive for improving the wetting and leveling of water borne coatings on different substrates. Typical applications are coatings on wood, printing inks, care products, adhesives, etc.

THORFLEX; Acrylic flow and leveling agents

Product	Chemical characteristic	Active substance [%]	Use level [%] (on total formulation)	Highlighted application / Effect
FL 20	Polyacrylate	100	0.2 – 2.0	Especially for coil and can coatings; 2K-PUR and high solids; weatherproof, UV-resistant. **FL 20 corresponds to FDA § 21 CFR § 175.300 and the AP (2004).**
FL 20-50	Diluted polyacrylate	50	0.4 – 4.0	Easy to dose; especially for coil and can coatings; 2K-PUR and high solids: weatherproof, UV-resistant.
FL 90	Polyacrylate	100	0.5 – 1.5	Especially for coil coatings; 2K-PUR and high solids; weatherproof, UV- and hydrolysis-resistant.
FL 100	Polyacrylate	100	0.2 – 2.0	Especially for 1K/2K high solids; excellent weather, UV and hydrolysis stability. LW prevents surface defects and improves the flexibility of coating films.
FL 200	Modified polyacrylate, carboxyl functional	96	0.2 – 1.5	Excellent compatibility with various resins; specially for aqueous coatings, but also for solvent-based systems, no transparency of clear coats. **FL 200 corresponds to FDA § 21 CFR § 175.300 and the council of Europe resolution AP (96) 5.**
FL 167	Silicon-free polymer	min. 98	0.2 – 2.0	Hydrolysis and UV-resistant polymeric leveling agent to prevent surface defects like crating, pinhols, orange peels, etc.. industrial adhesion and recoatbilioty are not affected by addition of FL 167.
FL 190	Acrylic polymer	100	0.2 – 1.5	Used in high solids, UV curing, coil, and other coating systems for improving flow and leveling (orange peel).
FL 151	Acrylic polymer	50	0.2 – 2.0	For water- and solvent-based systems, imperfections such as craters, pinholes, fisheye, orange peel and swim-out.
FL 40-50	Silicon-free polyme	50	0.4 – 4.0	As FL 20, but with improved efficiency.
FL 40	Acrylic polymer	98	0.2 – 2.0	Used in solvent based coatings, high solids, coil coating and powder systems, it will correct surface imperfections, improve flexibility and increase adhesion.
FL 292	Acrylic polymer	67	0.1 – 1.0	Silicone free levelling agent with air release properties for different reactive resin systems, printing inks, eliminates or reduces peel; it improves the flow, dispersion and floating behaviour, prevents air entrapment.
FL 247	Flourine modified acrylic polymer	70	0.3 – 2.0	Fluorine modified polymeric flow control agent for solvent based systems. For high-speed applications like coil coatings; improves substrate wetting, leveling and deairing, avoids / reduces surface imperfections.
FL 337-70	Flourine modified acrylic polymer	70	0.3 – 2.0	Fluorine modified polymeric flow control agent for solvent based systems, like polyester, acrylic, epoxy, alkyd and urethane resins. It reduces surface imperfections such as craters, pinholes, fisheye, orange peel and swim-out.
FL 101	Colourless, high viscouse liquid	approx. 98	0.1 – 1.0	Silicon-free acrylic flow control agent for solvent-based and free coatings, printing inks, **FDA § 21 CFR § 175.300**

THORLEX; Adhesion promoter

Product	Chemical characteristic	Active substance [%]	Use level [%] (on total formulation)	Highlighted application / Effect
EP 580 N	Specially mod. epoxy ester	70	1.0 – 5.0	Aqueous baking enamels and polyurethane systems.
EP 584	Specially mod. epoxy ester	77	1.0 – 3.0	Solvent-borne baking enamels and PU-systems.
SP 586	Special polyester	75	1.0 – 3.0	Solvent-borne air-drying and stoving polyurethane systems: stable up to 180°C.
SP 587	Special polyester	75 – 80	1.0 – 3.0	Solvent-borne air-drying and stoving polyurethane systems; stable up to 180°C; NMP-free.
PU 548	Isocynate functional polymer	80	2.5 – 5.0	Solvent-borne and solvent-free polyurethane systems.
SP 590	Special modified polyester	100	1.0 – 3.0	Improves adhesion of solvent borne stoving- and polyurethane system, PURSILAN-systems on metals and melamine resin coated chipboards.
EP 790	Specially mod. epoxy ester	73	5.0 – 15.0	Used as additive for waterborne stoving enamels; humidity- and corrosion resistance, adhesion, chemical resistance, stain resistance, pasteurisation resistance.
SP 711	Solution of a modified polyester	70	3.0-15.0	Improves adhesion and flexibility of solvent-borne coatings on steel, galvanized steel, aluminium and plastics.

TIXTHOR; Thickeners and rheology-control agents

Product	Chemical characteristic	Active substance [%]	Use level [%] (on total formulation)	Highlighted application / Effect
RC 53 L	White liquid (emulsion)	approx. 30	1,0 – 5.0	Highly effective rheology-control thickeners for a wide range of water-based coatings, anti-settling & anti-sagging agent.
RC 54 L	White liquid (emulsion)	approx. 30	1,0 – 5.0	Highly effective rheology-control thickeners for water-based systems, especial automotive OEM.

THORSIL; Silicone surface additives

Product	Chemical characteristic	Active substance [%]	Use level [%] (on total formulation)	Highlighted application / Effect
SIL 511	Polyethermod. PDMS	10 / 30	0.1 – 1.0	For solvent-borne air- and UV-drying systems; multifunctional additive to improve leveling and scratch resistance; presents pigment floating.
SIL 512	Polyethermod. PDMS	10	0.1 – 1.0	Especially for aroma-free decorative and DIY coatings.
SIL 515	Polyethermod. PDMS	10	0.1 – 1.0	Silicone paint additive to improve surface slip, mar resistance, substrate wetting, flow and leveling and gloss; particularly for clear-coat formulations.
SIL 527	Polyethermod. PDMS	20	0.1 – 1.5	For solvent-based, air-drying coatings; provides high mar resistance by increasing the surface slip
SIL 528	Polyethermod. PDMS	100	0.2 – 1.0	For 2 K PUR and UV curing varnishes and printing inks; highly effective at low concentrations.
SIL 530	Mod. PDMS	10	0.3 – 0.5	For water-thinnable systems; improves the overspray absorption in wet-in-wet applications; reduces/avoids edge pulling.
SIL 540	Special modified silicone polyether	100	0.1-1.0	Greatly improves the wetting of water borne coatings and inks on difficult substrates.
SIL 551	Turbid, creamy silicon modified liquid	70	0.1-1.0	High molecular silicon additive for outstanding slip, mar resistance and antiblockings.
SIL 552	Turbid, creamy silicon modified liquid	70	0.1-1.0	High molecular silicon additive for outstanding slip, mar resistance and anti-blockings.
SIL 573	Org. mod. PDMS	3	0.2 – 1.0	For alkyd-based decorative paints and DIY lacquers for brush and roll application; multi-functional.
SIL 556	Solution of a polyester-modified polydimethylsiloxane.	30	0.2 – 1.0	For solvent-based paints and coatings incl. curtain coatings; stable to 200°C. It is recommended for decorative paints, stoving enamels metallic car paints.
SIL 529	Org. mod. PDMS	10	0.2 – 1.0	For solvent-borne matted systems; supports the rising and orientation of silica-based matting agents and improves matting.
SIL 555	High molecular PDMS	78	0.3 – 1.0	For 2 K PUR systems; improves scratch resistance of water-thinnable lacquers and printing inks as well as satin gloss to glossy systems; significantly reduces blocking.
SIL 553	High molecular PDMS	70	0.1 – 1.0	For water-thinnable and alcohol-based paint, printing inks and overprint varnishes
SIL 580	Org. mod. PDMS	30	0.2 – 1.0	For solvent-based paints and coatings incl. curtain coatings; stable to 200°C.
SIL 545	Hydroxylborne-polyethermod. PDMS	100	0.01 – 0.5	For solvent- and water-based paints and lacquers, printing inks, overprint varnishes and UV-hardening systems; improves leveling and scratch resistance; prevents pigment floating and surface defects.
SIL 585	Polyethermod. PDMS	100	0.01 – 0.5	For solvent- and water-based paints and lacquers, printing inks, overprint varnishes and UV-hardening systems; improves leveling and scratch resistance; prevents pigment floating and surface defects.
SIL 510	High molecular PDMS in xylene	15	0.1 – 0.5	Hammerstone additive for preparation of effect lacquers for solvent borne coatings.
SIL 560	Dioctylsulfosuccinate / PDMS	70	0.3 – 1.5	For water borne coatings, by reducing the surface tension causes. The penetration in porous substrates such as wood or paper is improved. Surface defects as craters, orange peel and edge pulling are signify-cantly reduced.

THORTEC; PVC adhesion promoter

Product	Supply Form [%]	Viscosity [mPa.s/23°C]	AMV [mg KOH/g]	Main uses and characteristics	1K
TEC 600	100%	7000-10000 at 25°C	270 – 310	DOP free adhesion promoter for PVC plastisols mainly used in the automotive industry as underbody coating and bodysealer.	X
TEC 601	100%	1500-2500 at 25°C	360 – 390	TEC 601 is an DOP free adhesion promoter for PVC plastisols mainly used in the automotive industry as underbody coating and bodysealer.	X
TEC 605	100%	1000-1500 at 75°C	370 – 400	An DOP free adhesion promoter for PVC plastisols mainly used in the automotive industry as underbody coating and bodysealer.	X
TEC 608	100%	1000-2000 at 75°C	380 – 410	TEC 608 is an DOP free adhesion promoter for PVC plastisols mainly used in the automotive industry as underbody coating and bodysealer.	X
TEC 610	100%	400-800 at 75°C	270 – 300	An DOP free adhesion promoter for PVC plastisols mainly used in the automotive industry as underbody coating and bodysealer.	X
TEC 614	100%	300-800 at 75°C	220 – 260	TEC 614 is an DOP free adhesion promoter for PVC plastisols mainly used in the automotive industry as underbody coating and bodysealer.	X
TEC 640	100%	5000-6000 at 25°C	440 – 550	TEC 640 is an DOP free adhesion promoter for PVC plastisols mainly used in the automotive industry as underbody coating and bodysealer.	X

THORBOND; Special primers / adhesion promoter

Product	Properties	Non-volatiles [%]	Flash point [°C]	Solvent	Appearance / Use
PM 810	Adhesion promoter for flexible substrates; for immediate or subsequent paining, printing, gluing and labeling	4	25	xylene	White pigmented solution; ready for use.
PM 830	Adhesion promoter for flexible substrates; for immediate or subsequent painting, printing, gluing and labeling	4	25	xylene	White pigmented solution; ready for use.
PM 840	Adhesion promoter for undercoat polyethylene for subsequent coating or printing	5	25	xylene	Yellowing to brown, low viscosity liquid; dilute down to 2.5% solids.
PM 820 W	Aqueous adhesion promoter based on specially modified, low-chlorinated polypropylene	30	n.a.	water	Low-viscosity, brownish and turbid liquid; dilute down to 10% solids or incorporate in adhesives, ins and paints.
PM 825	Adhesion promoter especially for polypropylene; use on other substrates may be possible (testing)	2.5 or 5	25	xylene	Yellowing, low-viscosity liquid; ready to use (2.5%); dilute down to 2.5%.
PM 870	Adhesion promoter for undercoat polypropylene for subsequent painting, printing, best adhesion properties	2.5	25	xylene	Colourless to yellowish, clear liquid, ready to use.
PM R-800	Transparent adhesion promoter for use on uncoated plastics. Composition based on chlorinated polyolefine. Gives excellent adhesion on exterior plastic car parts. Uncoated exterior plastic types e.g. AAS, ABS, PBTP, PC, PP/EPDM, PVC, SMC, GFK,	16	25	xylene	Yellowing, low-viscosity liquid; ready to use .

THORFLOW; Additives for powder coatings

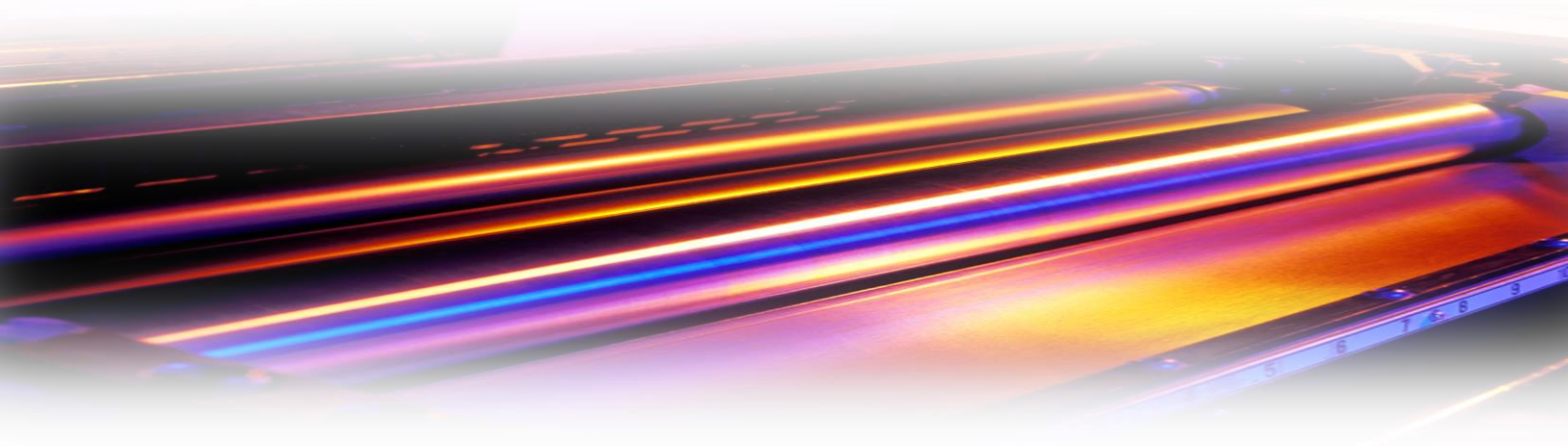
Product	Appearance	Active substance [%]	Highlighted application / Effect
PC 60	Flated solid	0.5 – 2.0	Low molecular weight, hydroxyl functional polymeric silicon additive for better mar resistance, slip and flow.
PC 90	White powder	0.5 – 1.5	For reducing the melt viscosity, thus improving dealing and degassing, best results in combination with very low amounts of benzoine (0.1-0.2%), especially suitable for non-yellowing powder coatings, for instance when cured in gas fired ovens.
PC 94	White powder	0.5 – 4.0	For reducing the melt viscosity, thus improving dealing and degassing, best results in combination with very low amounts of benzoine (0.1-0.2%).
PC 95	White powder	1.5 – 2.5	Catalyst for better mechanical properties of GMA acrylic powder systems based e.g. on Isocryl EP 570.
PC 120	White powder	0.3 – 6.0	Micronized synthetic wax improving and mar resistance of powder coatings, excellent deairing effect, at higher concentrations is may also function as a flatting agent.
PC ST-70	White powder	0.1 – 0.5	Stannous octoate catalyst for PU-powder coatings.
PC 77	White powder	0.7 – 1.5	Silicon-free powder anti-crating agent, also suitable for powder clear and UV systems.
PC 67	White powder	0.7 – 1.5	Silicon-free powder flow control agent with good allround properties.
PC 55	White powder	0.5 – 1.5	Silicon-free powder flow control agent for powder coatings of all types, very free flowing and yellowing resistant.
PC 88	White powder	0.5 – 1.5	As flowing ADD TOL 55, but on another silicate carrier.
PC 82	White powder	0.5 – 1.5	Anti-cratering agent with running properties in powder coatings of different composition applies.
PC 246	White powder	0.5 – 1.5	Add 246 is used in epoxy, hybrid, polyester, polyurethane, acrylic and other powder coating systems. Add 246 improves the course and may include air pockets, orange peel skin, pinholes, craters and others reduce surface defects.
PC 200 P	White powder	0.5 – 1.5	Silicone-free powder additive used for the production of structure powder coatings. 200 P is recommended for epoxy, hybrid, polyester, acrylic and other powder coating systems.
PC 18	White powder	0.5 – 2.0	Specifically developed as a flow and levelling agent to correct surface imperfections in powder coatings based on different resins.
PC 120 P	White powder	0.5 – 1.5	Used in epoxy-, hybrid-, polyester-, acrylic and other powder coating systems. Add 120 P improves leveling and eliminates air entrapment, orange peel, pinholes, craters and other surface defects.
PC 29	White powder	0.2 – 1.0	Catalyst designed to produce wrinkle and textured finishes in weatherable powder coatings.

THORCAT; Catalyst

Product	Appearance	Non-volatiles [%]	Use level [%] (on total formulation)	Use level [%] (On total formulation)
CAT 3000	Clear to slightly hazy low viscouse liquid	approx. 20	0.5 – 1.2	Catalyst for solvent-based and aqueous isocynate crosslinking systems.
CAT 3030	Clear, amber coloured, low viscouse liquid	approx. 28	0.4 – 2.0	Catalyst for solvent and water-based stoving finishe, improves water, salt spray and detergent resistance.
CAT 3700	Clear, brownish, liquid	approx. 12	0.5 – 2.0	Cobalt-free catalyst to support the oxidative drying of aqueous systems, metal complex.
CAT 3560	Brownish liquid	approx. 12	1.5 – 3.0	Cobalt-free drier for alkyd systems; free from 2-ethyl hexanoic acid.
CAT 3050	Clear liquid	approx. 30	0.3 – 0.8	Tinn-free organometallic catalyst for use in 2K PU-Systems.
CAT 3937	White powder	approx.. 95	0.2 – 1.0	Catalyst designed to produce wrinkle and textured finishes in weatherable powder coatings.

THORCURE; Special additive for UV-curing systems; solvent free

Product	Properties	Non-volatiles [%]	Colour / Gardner	Viscosity [mPa.s]/23°C	Appearance / Use
RAD 2084	Increase surface hardness	100	max. 2	max. 700	Modified solvent-free acrylic resin for UV-curable paints and coatings.
RAD 2251	VP-Z 2251 improves adhesion especially on metals and on glass.	80	max. 2	30.000 – 60.000	Special modified epoxy ester. The optimum addition amount is about 1% calculated on the binder.
RAD 2328	Surface slip & mar resistance, for non-aqueous formulations.	100	max. 2	-	Hydroxyl content silicon additive for 2 K-PUR, UV-curing lacquers and printing inks as well as other systems.
RAD 2400	A silicone based special paint additive.	100	max. 2	270 – 640	For water thinnable airdrying and stoving coatings and UV-lacquers and printing inks. Add 1400 is effective at very low concentrations for improving flow out, levelling and gloss, deairing and degassing, reducing cratering and orange peel, improving mar resistance and slip.
RAD 2010	Non-silicone flow levelling and wetting additive.	100	max. 2	High viscos liquid	Used in coatings and inks. Promotes flow, levelling and substrate wetting.
RAD 2450	Based on polydimethyl siloxane	100	max. 2	60 – 90	Additive for the reduction of surface tension in water dilutable and radiation curing paint systems. Improves substrate wetting of liquid paint systems even on difficult surfaces.



PRODUCTS WITH PERSPECTIVE

Adding value to your products

PRODUCTS WITH PRESPECTIVE

TECHNOLOGIES FOR A SECURE FUTURE

Markets & Applications

From building and construction to flexible packaging, from furniture to vehicles, and from consumer goods to general industrial applications like ACE, our sustainable resins are proven to perform – and so is the knowledgeable team behind them.

VARENA CHEMICAL is a global company in the intermediates, coating, adhesives, inks and composite and solid surface resins, thermoset compounds, gel-coats and niche specialties and specialty additives for coatings and inks.

VARENA CHEMICAL is known for its superior quality and impressive range of products and with its excellent distribution network it can provide first-class service to customers whatever their market. Customer Service and Technical Service teams are renowned for their customer focus, offering the best service even after products have left manufacturing.

The group strives to keep customers satisfied, assisting them in producing premium quality products every time they use its products.

Product innovation is important for the group's business and it's the reason for which it constantly works with customers to find solutions to problems.

Introducing new or improved products ensures that VARENA CHEMICAL continue not only to deliver what the market wants and needs, but also when it is wanted and needed.

WATER-BORNE
VARANOVA
PRODUCTS WITH PRESPECTIVE

VARENA.tpt
your competent partner for procurement of raw materials