

Modern Binders
“Barrier technology you can trust”

POLYESTER INNOVATIONS

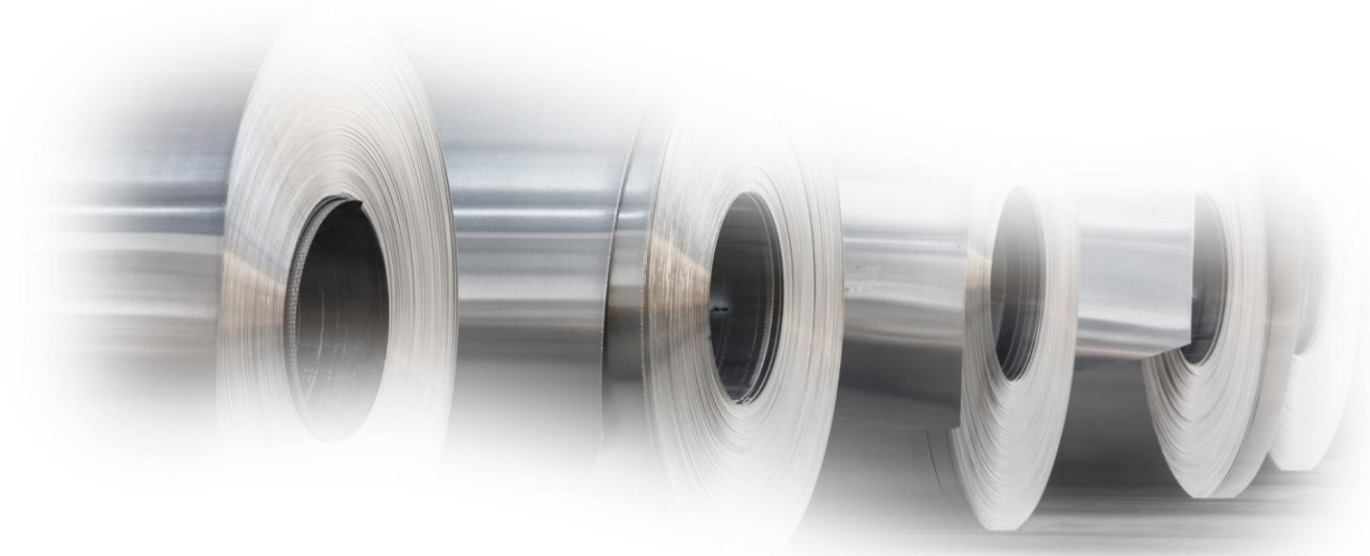
FOR COATINGS & PAINTS



POLYESTER INNOVATION



ENVIRONMENTALLY FRIENDLY HIGH-QUALITY COATINGS RESINS



Our solutions and services stand for quality and innovation

We have a wide range of water-borne and solvent-borne and also modified polyester resin technologies that when formulated into coatings provide an optimal performance and durability.





SOLVENT-BORNE POLYESTER INNOVATION

We have a wide range of solvent-borne; high molecular and solvent-free polyester resin technologies that when formulated into coatings provide an optimal performance and durability. Also we offers modified polyester resins; urethane modified, acrylic modified, epoxy modified, silicone modified polyester (SMP) resins, used in high quality, long life industrial finishes, light amature finishes and high performance primers.



WOOD
PROTECTIVE
CAN
COIL
METAL
PLASTIC
AUTOMOTIVE
FLOORING
ADHESIVE
CASTING



Coating resins for cans & containers

In metal cans and other rigid metal packaging, our broad range of saturated polyester coating resins is helping the industry move away from suspect raw materials and replace them with more sustainable alternatives.

All this while staying true to our long-established reputation in this business for durable and highly adhesive resins that are flexible enough to work with a wide range of different products – while enabling the high line speeds that are so important to manufacturers. From caps and closures to aerosols, and from tubes to both two-piece and three-piece cans, our resins for white base coat and overprint varnish can do the job.

HIGH-QUALITY RESINS FOR RELIABLE METAL COATING SOLUTIONS



Protection and decoration: These are the two main functions of can coatings. These coatings must meet very strict requirements, especially with regard to their protective function.

It is impossible to imagine our everyday life without the tin can. To prevent any interaction between the metal and the contents, an interior coating is essential.

It is impossible to imagine our everyday life without it and it can be found in every supermarket: the tin can - indestructible container for food of all kinds. The can owes its entry into almost every household shelf in the world to none other than Napoleon Bonaparte.

To prevent any interaction between the metal wall and the actual contents of the can, an inner coating of the cans is essential. This must be particularly efficient and be characterised by high elasticity and resistance. This means that even if the can is dented, the food inside remains well protected. For years, epoxy resin-based products have established themselves as the industry standard. However, these have been the subject of public debate for some time due to their harmful raw material base bisphenol-A (BPA).

Polyester for the interior coating of cans
with excellent protective properties !

New Generation of coatings for the internal
protection of food 3 piece cans and ends.



BPA-NI-, thanks to our innovation we can!

"A good example is our work in developing tailor-made BPA-NI products that meet the increasingly stringent regulations for metal applications. Our new polyester range, designed for food contact, is able to replace epoxy products with BPA.

Our products are used in gold, clear and white internals for all types of cans and closures. Many developments are linked to various regulatory issues. For example, there is an increasing requirement to remove materials such as naphthalene and tin.



BPA-NI-, thanks to our innovation we can!

CANS & CONTAINERS COATING

Performance Expectations for High Quality and UV-Durable Coil Coatings

Coil coating is a special industrial process and most notably highly automated and continuous. In this form of coating, metal is pretreated which means that the coating is applied before it gets cut or formed thus allowing for firmly adhering and bonding finishes. Furthermore, coil coated metal can be far more resistant to corrosion and more durable due to these perfectly tight coatings. Most of the time, formed metal parts tend to have holes, valleys or recessed areas that make them hard to postcoat evenly – that is why precoating is the go-to process for non-stop productions and where highly durable coatings are required. However, coil coatings also require a great flexibility property.



A BROAD PORTFOLIO OF
MODERN RESINS FOR
ADVANCED COIL COATING
APPLICATIONS

Coil Coatings with VaraPol: Harder, Better, Faster, Stronger

VaraPol; Saturated polyester, solvent-based, solvent-free, industrial coatings

Product	Supply Form [%]	Viscosity [mPa.s]/23°C	Acid Value [mgKOH/g]	Tg [°C]	Mn	OH-Value [mg KOH/g]	Main uses and characteristics
CC 1865	65 in S1/B	2.400 – 3.000	≤ 5,5	8	230 0	89	For coil coatings and general industrial with amino or blocked urethane resins in the formulation of backing coatings such as primers with very good weather stability. CC 1865 is conform to FDA § 175.300.
CC 1829	66 in S1/BG	900 – 1.400	≤ 6	12	450 0	59	CC 1829 S1BG-66 is cost effective, general purpose polymer, fast curing at high line speed, good flexibility, good durability, good flow and gloss. recommended for general purpose coil and metal packaging coatings.
CC 1849	65 in S1/BG	1.500 – 2.500	≤ 10	5	450 0	50	CC 1849 S1/BG-65 is an oil free saturated polyester recommended for cost effective backers & exterior coil and metal packaging coatings with good adhesion to PU foam.
CC 1851	50 in S2/S1	2.000 – 4.000	≤ 3	30	600 0	30	Sterilizable stamping enamels for can coatings, tube and aerosol can coatings (metal decorating enamels) twist off closures.
CC 1852	55 in S2/BG	2.000 – 4.000	≤ 3	32	600 0	20	CC 1852 S2BG-55 is commended for deep drawable, sterilizable stamping enamels for can coatings, tube and aerosol can coatings (metal decorating enamels) twist off closures; coil coating primers for aluminium and one coat-systems for aluminium, top coats for interior architecture, vehicle cladding and home appliances.
CC 1832	65 in S2/BG	2.200 – 3.500	≤ 3	17	500 0	33	CC 1832 S2/BG-65 is linear saturated polyester with medium molecular weight. Recommended in combination with amino or crosslinking polyurethane systems for exterior topcoats coil coating, industrial stoving enamels, which offer supper UQV-A stability and super durability.
CC 1822	70 in S1	3.000 – 4.000	≤ 15	15	330 0	85	CC 1822 is high solid, high reactive saturated polyester resin. In combination with amino or crosslinking baking urethane for coil coatings enamels and specific for coil coating corrosion protection primers..
HM 1970	40 in S1/E5	3.500 – 4.500	0 - 4	67	150 00	7	High molecular weight polyester resin, flexibility, adhesion on HDG and aluminium, corrosion resistance, conform to FDA approved.
HM 1971	50 in S2/F	3.000 – 5.000	0 - 3	67	150 00	10	High molecular weight polyester resin, flexibility, adhesion on HDG and aluminium, corrosion resistance.
HM 1973	40 in S1/E5	3.800 – 4.700	8 - 10	65	200 00	7	High molecular weight polyester resin, flexibility, adhesion on HDG and aluminium, corrosion resistance, conform to FDA approved for interior cans.
HM 1974	40 in S1/E5	2.900 – 3.500	0 - 5	42	150 00	7	High molecular weight saturated polyester. Good porosity & flexibility
HM 1976	40 in S1/E5	3.500 – 4.500	0 - 3	40	150 00	7	High molecular weight saturated polyester. Good porosity & flexibility and compatibility.
HM 1978	50 in S1/E5	6.800 – 8.800	0 - 3	20	100 00	12	High molecular weight saturated polyester. Good porosity & flexibility. For interior can coatings.
CC 1989	60 in S2/F	6.000 – 8.000	1 - 4	51	500 0	23	Linear saturated polyester for primer coating.
CC 2800	60 in S2/G3	4.500 – 5.500	1 - 4	27	600 0	20	For the formulation of coil coating topcoats and offers flexibility, adhesion on aluminium, good gloss level and outdoor durability.
CC 2802	50 in D/S2	2.400 – 3.200	2 - 5	45	500 0	50	High reactive saturated polyester resin specific for can and aerosols coating. 2802 is recom-mended for highly flexible over print varnish and sheet coatings for metal packaging with forming / stamping resistance; sterilization resistance and special for wet on wet applications.
CC 2804	65 in S2	4.200 – 4.700	1 - 4	23	300 0	32	Outdoor durable coil coatings, QUV resistance.
CC 2805	65 in S2/BG	2.600 – 3.600	4 - 8	0	300 0	105	High reactive saturated polyester resin specific for high solid; can and coil coating; topcoat with high reactivity and for back coating. The product complies with the requirements of FDA 21 CFR § 175.300, Part vii polyester.

VaraPol; Saturated polyester, solvent-based, solvent-free, industrial coatings

Product	Supply Form [%]	Viscosity [mPa.s]/23°C	Acid Value [mgKOH/g]	Tg [°C]	Mn	OH-Value [mg KOH/g]	Main uses and characteristics
CC 2808	50 in S2/BG	2.000 – 2.800	2 - 5	24	7000	35	Used in can-white base coat, 3-P-Cans and overprint varnish and coil outdoor durable coatings. Offers hardness, flexibility, sterilization resistance, outdoor durability and reactivity.
CC 2831	60 in S2/BG	2.700 – 3.600	2 - 5	25	5000	30	Recommended in combination with hexamethoxymethylol melamine HMMM or isocyanate for coil topcoats, general industry topcoats and also automotive, durable topcoats with weathering resistance, reactivity and flexibility.
CC 2833	55 in S2	3.000 – 4.400	1 - 5	32	6000	20	CC 2833 S2-55 is recommended for coil coating; domestic appliances and indoor use and also for can coating; general purpose and twist off closures with outstanding features of the resin include: deep drawing properties, hardness and drying speed.
CC 2841	60 in S2/G3	1.800 – 2.200	0 - 1	18	4500	28	CC 2841 S2G3-60 is recommended in combination with HMM melamine for coil topcoats (claddings) and offers flexibility/ aging resistance, outdoor durability and cold flex.
CC 2842	60 in S2	14.000 – 18.000	5 - 10	25	5500	25	CC 2842 S2-60 is recommended for tube coating; white base coat and 3-P-Cans & general line. Outstanding features of the resin include: flexibility (deep drawn), flexibility (cold crush) and flexibility (block resistance). FDA Compliance Binder (EU) 10/2011.
CC 2844	60 in S2/G3	2.800 – 3.200	0 - 4	19	4000	30	Coil coatings; topcoat (HMMM and isocyanate cure).
CC 2852	60 in S2/F	4.500 – 6.500	4 - 7	23	4500	45	For can coating; white base coat; 3-piece cans and also for general line and gold-laquer for interior / exterior applications with high flexibility and sterilization resistance.
CC 2857	70 in S1/BG	2.700 – 3.400	2 - 5	8	2500	50	High reactive saturated polyester resin specific for high solid; can and coil coating; topcoat with high reactivity and for back coating. The product complies with the requirements of FDA 21 CFR § 175.300, Part vii polyester.
CC 2859	50 in S2/BG	2.400 – 3.000	0 - 5	70	5500	47	Interior can coatings, aluminium coil and foil for packaging, primers coil architectural. Principal properties; FDA approved raw materials. (also for alcoholic content). Good adhesion on aluminium, reactive and hardness / abrasion resistance.
CC 2869	55 in S2/F	6.000 - 7.500	6 - 9	-10	6000	20	For sterilisation resistance can coatings. Offers reactivity and adhesion. Provides flexibility and good gloss level.
HF 2865	75 in S2	6.000 – 7.000	3 - 7	-17	4500	22	Saturated polyester resin for blending to obtain a more flexible coating.
CC 1875	75 in S1/X	2.500 – 4.000	2 - 5	-15	5500	105	For high solid topcoat and back coat coil coating applications.
CC 2806	in S2/BG	1.800 – 3.000	0 - 1	14	3200	40	Outdoor durable coil coatings, QUA resistance.



VaraPol; Saturated polyester, solvent-based, solvent-free, industrial coatings

Product	Supply Form [%]	Viscosity [mPa.s]/23°C	Acid Value [mgKOH/g]	Tg [°C]	Mn	OH-Value [mg KOH/g]	Main uses and characteristics
E 1800	Solvent-free	25.000 – 36.000	≤ 3	-	-	215	In combination with polyisocyanates, used in flexible two-component polyurethane coatings for wood substrates, parquet and plastics.
E 1805	65 in MPA	17.000 – 23.000	≤ 3	-	-	290	E 1805 MPA-65 is mainly used in combination with aliphatic or aromatic polyisocyanates in two-component coatings with excellent weatherstability, gloss retention, good chemicals and abrasion resistance; primarily for high grade industrial coating.
E 800	Solvent free	70% in MPA 700 – 1000	≤ 3	-	-	285	For air-drying 2K coatings yielding hard, chemically resistant films; high impact resistance, toughness and abrasion resistance; in combination with E 1800 for highly abrasion-resistant floor coatings.
E 1162	Solvent-free	15.000 – 20.000	≤ 3	-	-	43	In certain combinations, e.g. with E 1808, E 1800 the addition of E 1162 increases the toughness and resistance to wear and abrasion of the paint films. Such combinations can be used to coat furniture, floors and parquet.
E 1135	Solvent-free	5.000 – 20.000	≤ 16	-	-	43	The main field of application for E 1135 in combination with Desmodur L or HL - is the furniture sector.
E 1130	75 in xylene	2.000 – 3.000	≤ 16	-	-	93	PU- and nitrocellulose-combi wood finishing.
E 1188	75 in BuAC	3.500 – 5.500	≤ 12	-	-	122	E 1188 can be combined with nitrocellulose to formulate high-quality wood and metal finishes which can be oversprayed without any risk of lifting.
E 1181	75 in MPA	6.800 – 9.000	≤ 12	-	-	158	Polyester polyol. Used as a co-reactant in the formulation of air-drying two-pack coatings for wood such as boats and parquet flooring.
P 1625	75 in X	3500 – 4500	≤ 15	-	-	145-155	For the production of weather- and water-resistant two-component PUR coatings and also high quality 1K-aminoplat coatings.
P 1631	67 in MPA	20.000 – 3.000	≤ 3	-	-	265	Saturated type for air-drying two pack-PU-coatings.
P 1674	80 in BuAc	10.000 – 20.000	≤ 3	-	-	135	For the manufacture of solvent-based, ultra high solids two component PUR systems.
P 1675	78 in BuAc	20.000 – 50.000	≤ 3	-	-	185	For the manufacture of solvent-based ultra high solids two component PUR systems for industrial and car repair coatings with good mechanical properties.
PU 1565	100	3.000 – 4.000	≤ 2	-	-	150-170	A low viscous and solvent-free branched polyol with ester and ether groups and is mainly used for the formulation of solvent-free coatings, sealings and adhesives in combination with modified polyisocyanates.
PU 1530	100	2.500 – 3.500	≤ 2	-	-	220-240	A low viscous and solvent-free branched polyol with ester and ether groups and is mainly used for the formulation of solvent-free coatings, sealings and adhesives in combination with modified polyisocyanates.
P 1813	100	1.700 – 2.700	≤ 2	-	-	310-350	Low viscous polyester resin, due to its wide compatibility suitable for various systems, e.g. as modifying component for solvent and water-based isocyanate and amino resin crosslinking coatings to improve flexibility, flow, chemical and mechanical resistance and to increase solids content, corresponds to FDA § 175.300.
P 1811	100	1.500 – 3.000	≤ 2	-	-	310-350	Low viscous polyester resin, due to its wide compatibility suitable for various systems, e.g. as modifying component for solvent and water-based isocyanate and amino resin crosslinking coatings to improve flexibility, flow, chemical and mechanical resistance and to increase solids content, excellent weather resistance.
P 1677	78 in BuAC	10.000 – 45.000	≤ 2	-	-	257	For chemical resistance two pack PU-systems, is used in chemical resistant two component topcoats.



VaraPol; Liquid modified polyester resins, industrial coatings

Product	Supply Form [%]	Viscosity [mPa.s]/23°C	Acid Value [mgKOH/g]	Tg [°C]	Mn	OH-Value [mg KOH/g]	Description
SC 1890	50% in S2/G3	800 – 1.000	45 - 50	33	3100	35	Acrylic modified saturated polyester for can coating, 2-Pice, B&B. SC 1890 offers adhesion to aluminium and tinplate, acceptance of UV curable printing inks.
SC 1893	65% in S2/G3	7.500 – 8.500	42 - 48	20	2700	17	Acrylic modified saturated polyester for can coatings, 2-Pice, B&B.
SE 1901	55% in S2/G3	4.500 – 5.500	3 - 8	-	-	-	Epoxy modified saturated polyester resin for can coatings. Reactivity and adhesion to aluminium and tinplate.
SB 1921	55% in S1/S2/S4	5.000 – 6.500	6 - 10	25	5000	58	Selfcrosslinking saturated polyester resin with blocked isocyanate, for can and tube coatings applications with sterilization resistance; printability and flexibility.
SB 1950	60% in S2/S1/G3	2.600 – 3.100	0 - 4	9	4000	32	Saturated polyester with blocked isocyanate for topcoat and primer.
SQ 1871	60% in F/B	50 – 1.500	2 - 6	-	-	35	Silicon modified saturated polyester resin, good exterior durable coil coatings (if mixed with compatible polyester resin). Used in high quality, long life, industrial finishes, light armature finishes and good exterior durable coil coatings (if mixed with (compatible) regular polyester resins). Offers adhesion, yellowing resistance and outdoor durability.





Saturated polyester, solvent-based, solvent-free, for automotive metal & plastic coatings

Our additives and resins enable the use of high-performance, low-VOC waterborne, solventborne, and high solids automotive OEM coatings by optimizing the automotive coating formulation, application process, and final coating system, thus improving coating performance and environmental friendliness while reducing cost.

Our products provide benefits to all layers of automotive OEM coatings: primer/surfacer, base coat, and clear coat.

AUTOMOTIVE COATING

VaraPol; Saturated polyester, solvent-based, solvent-free, automotive coatings

Product	Supply Form [%]	Viscosity [mPa.s]/23°C	OH /Solid [%]	Description	Primer	Basecoat	Clearcoat	Topcoat	1K	2K
E 1068	60 in X	2.250 – 3.250	3.0	Air-drying automotive	X	X		X		X
E 1105	70 in X	3.000 – 4.000	2.6	For clearcoat and topcoat with excellent adhesion to steel and aluminium and offers high solid content with outdoor durability.			X	X	X	
E 1108	60 in X/BGA	500-900	3,0	2K-PU-Systems, low viscose, high solid, goes adhesion and flexibility.	X			X		X
E 1120	70 in X	4.000 – 6.000	2.4	1K-stoving primers, topcoat and basecoat for Automotive OEM and railway.	X	X		X	X	
E 1121	72 in S1/X	4.500 – 5 800	4.0	Automotive OEM clear coats with excellent UV- and chemical resistance			X	X	X	
E 1122	70 in S1	6 000 – 8.000	2.5	Solid color topcoats specific for 1K-stoving primers, topcoats and basecoat for automotive OEM and 2K-PU auto refinish and plastic coatings.	X	X		X	X	X
E 1130	75 in X	2.000 – 3.000	3.1	Two-component air drying PU-Systems, car refinishing and 1K-OEM.	X	X		X	X	X
E 1138	65 in X	600 – 1.100	2.5	Automotive OEM base coats.		X			X	
E 1805	65 in MPA	17.000-23.000	8.8	Excellent weather stability, lightfastness, gloss retention, good chemicals and abrasion resistance			X	X		X
E 1862	70 in S1/F	3.000 – 6.000	2.8	Automotive primer surfacers.	X				X	
E 1828	80 in BuAC	3.500 – 5.500	5.2	Automotive OEM and repair coatings. In combinations with polyisocyanates very good chemical and weather resistance and excellent low temperature flexibility will be achieved.			X	X		X
E 1870	80 in BuAC	2.600 – 3.400	4.5	Air and forced drying ultra high-solid two-component polyurethane systems for industrial and automotive repair coatings.			X	X		X
E 3802	100	3.000– 10.000	3.0	For flexible 2-component NCO-curing systems.	X			X		X
E 2549	75 in BuAC	2.000 – 5.000	4.4	Higher solids, high durability, no loss of gloss and no yellowing in QUV.	X		X	X	X	X
E 1140	100	4.000 – 7.000	1.7	A linear, solvent free polyester containing hydroxyl groups in the formulation of flexible PU coatings.			X	X		X
E 1162	100	15.000-20.000	1.3	The flexibilizing component				X		X

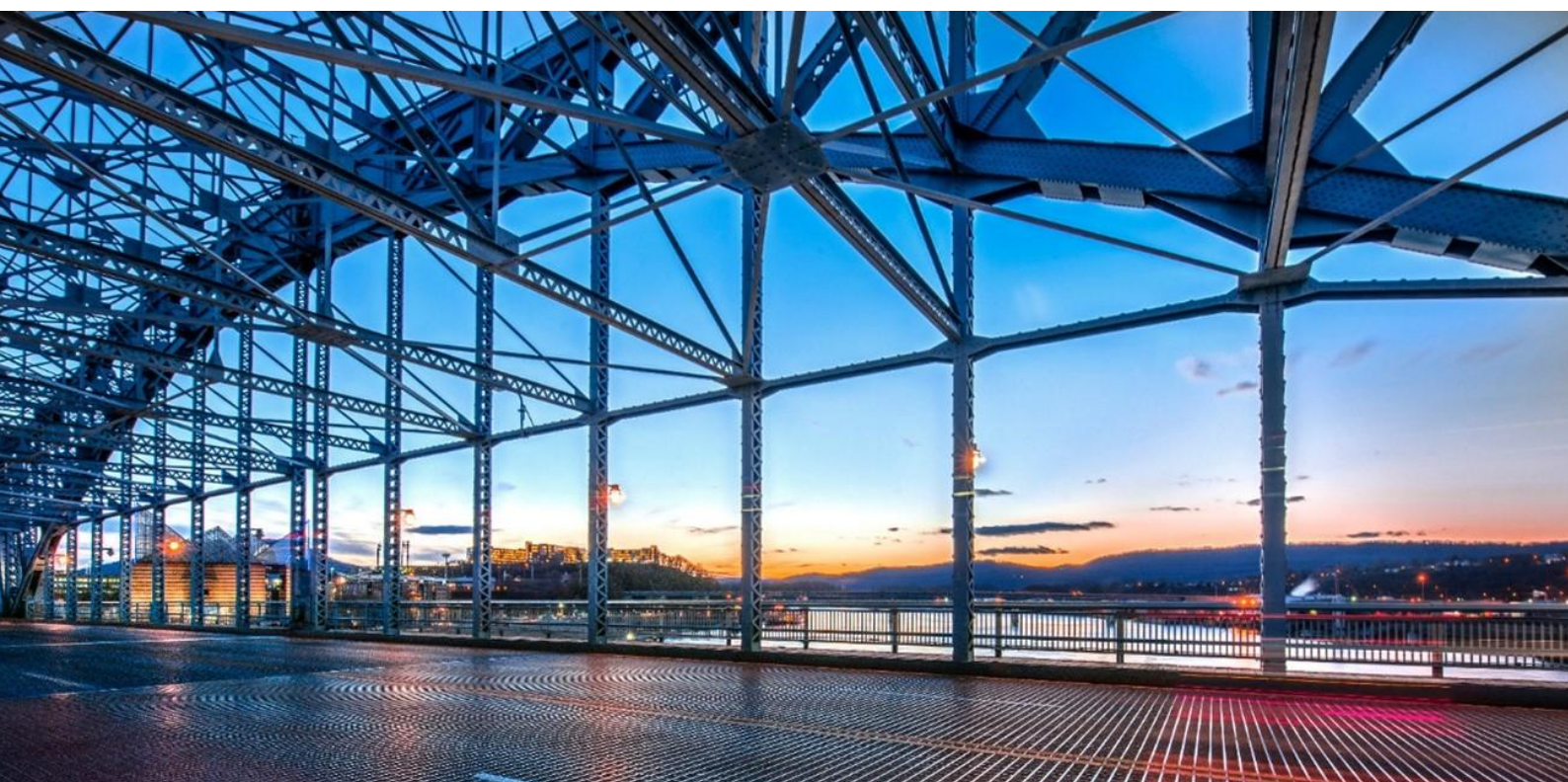
VaraPol; Saturated polyester, solvent-based, solvent-free, automotive coatings

Product	Supply Form [%]	Viscosity [mPa.s]/23°C	OH /Solid [%]	Description	Primer	Basecoat	Clearcoat	Topcoat	1K	2K
E 1125	81 in BuAC	9.000-13.000	5.0	It is therefore particularly suitable for the formulation of anti corrosive primers for industrial use, finishes for agricultural machinery.	X			X	X	X
E 1135	100 75 X 75 BuAC	5.000-20.000	5.0	Excellent wetting properties, good compatibility. In combination with aliphatic or aromatic polyisocyanates, air- and stove-drying two-component coatings with good weathering resistance.	X			X	X	X
E 1180	100	18.000-23.000	2.2	In combination with Desmodur for the production of highly flexible 2-K adhesives for glossy foil lamination and for softfeel coatings, high flexibility.	X		X	X		X
E 1181	81 in BuAC	2.200 – 3.800	6.0	Low molecular linear polyester polyol resin, for the formulation of 2-K-PU for high build coatings.		X	X	X		X
FS 1300	100	2.500 – 4.500	4.7	Polyester-polyether polyol, for 2-K coatings and castings. Automotive refinish, underbody, plastic coatings with excellent chemical resistance.	X		X	X		X
AB 1733	90 in X	2.000 – 2.400	-	Used in heavy duty top coats for metal, marine; protective paints and concrete and masonry paints and reinforced polyester coatings. Offers good gloss level, solvent and water resistance, solids content, flexibility and hardness.	X			X	X	



VaraPol; Modified polyester, solvent-based, solvent-free, automotive coatings

Product	Supply Form [%]	Viscosity [mPa.s]/23°C	OH/Solid [%]	Description	Primer	Basecoat	Clearcoat	Topcoat	1K	2K
SC 1891	65 in X/E	3.000 – 5.000	6,3	Acrylic modified polyester, offers reactivity and adhesion			X	X	X	X
PU 841	95 in X	12.000-16.000	5,5	Ultra high solid normal and forced-drying, two-component polyurethane systems. Adhesion on metal and plastics with flexibility and outdoor durability.	X		X	X		X
PU 846	100	800 – 1.100	7,0	Polyester for 2-component polyurethane coatings, high gloss, UV light and heat resistance, weathering resistance	X		X	X		X
PE 1423	78 in BuAC	10.000-45.000	7,8	Polyester for 2-component polyurethane coatings, high gloss, UV light and heat resistance, weathering and chemical resistance.				X		X
W 2341	Solvent free	< 1000	6,0	A saturated, aliphatic, extremely low viscosity polyester resin for the modification of 2K primers, single-coat and topcoats.	X	X		X		X
P 1625	75 in BuAC	3500 – 4500	4,4	2K-PU and 1K-aminoplast. Extremely good outdoor durability, no loss of gloss and no yellowing.			X	X	X	X



POLYURETHANE CHEMISTRY

For flexible plastics, coatings must not only protect the plastic substrate, but also be just as elastic. With their tunable flexibility, polyurethanes are an ideal solution.

Most polyurethanes are reactive systems that require curing with the use of a hardener or crosslinker. Yet, some plastics are sensitive to the reactive curing process. For sensitive substrates, it is preferable to use a non-functional or non-reactive flexible polyurethane system that cures via a physical drying process.

VaraFlex non-functional linear polyurethanes from VARENA are designed for the formulation of flexible, physically drying solventborne primers, basecoats and topcoats for plastics.

The hardness of these coatings is due to interactions between the polymer molecules, rather than through the formation of a crosslinked network. They are very flexible as a result.

The addition of a polyisocyanate that can undergo a mild crosslinking reaction with moisture in the air once the coating is applied is an effective way to increase the solvent resistance of coatings based on physically drying VaraFlex binders. Desmodur N 75 (10-20% based on solid resin) is a recommended grade for this purpose.

VARAFLEX non-functional resins are also used as co-resins in coatings applied to other flexible substrates.

PLASTIC COATINGS

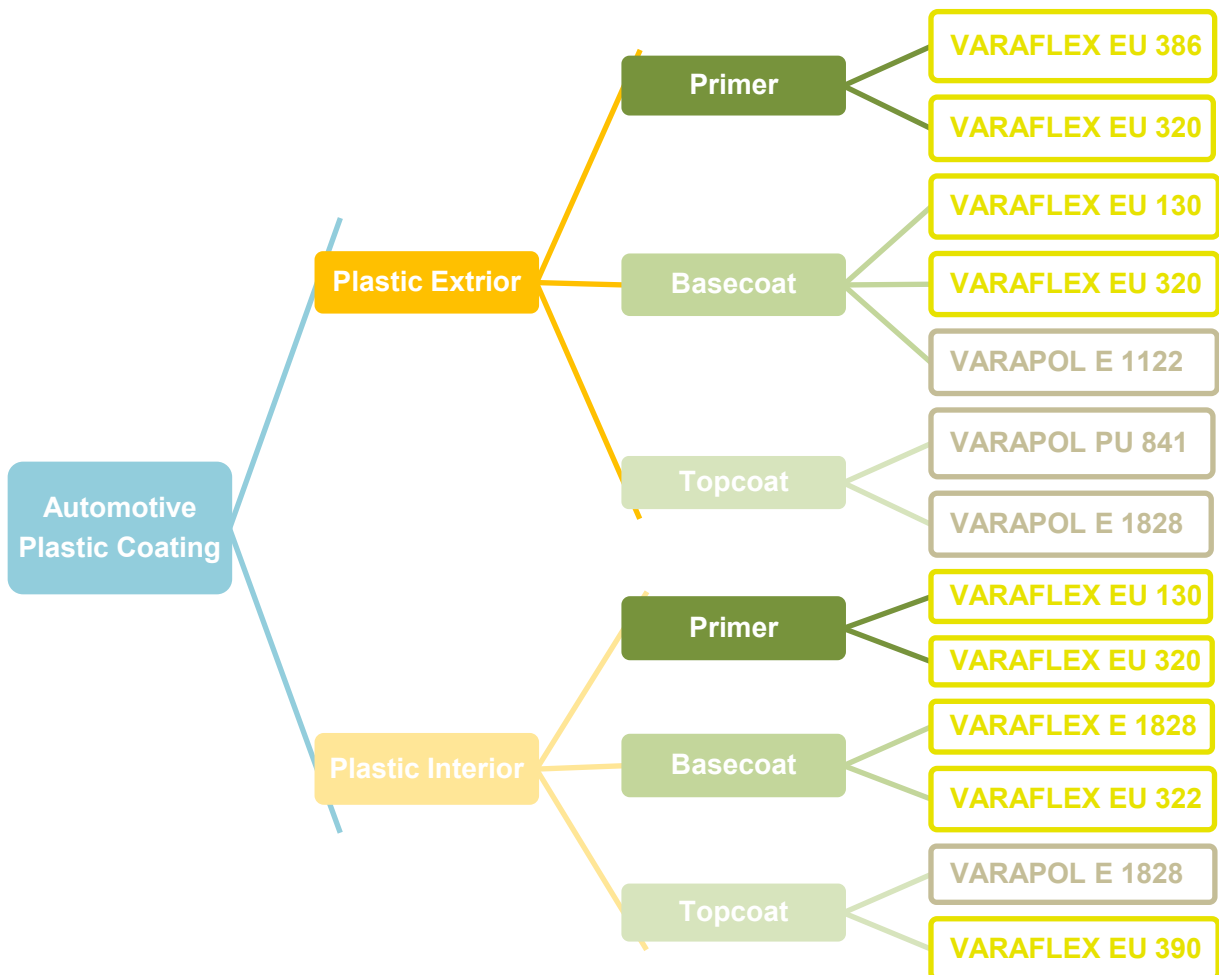
VaraFlex adheres to all kinds of plastic substrates. Resistance to abrasion, chemicals or light, pigmentability, good compatibility with other systems or flexibility – all these specifications are met efficiently by this VARENA product line, facilitating the formulation of outstanding plastic coatings and primers.

In **Shoe-Sole Coatings** **VaraFlex** contributes the necessary flexibility and also promotes adhesion, abrasion resistance and gloss. In artificial-leather applications, VaraFlex provides the material with protective properties and gloss, while additionally preventing brittleness. In the field of Rigid Plastic, enormous benefits are derived from VaraFlex acting as co-binders in polyurethane plastic coatings for plastics, such as **PS, PP, ABS, PMMA, PVC, PUR, PP/EPDM, PA and PC**: our products enable optimum adhesion, including intercoat adhesion, are extremely resistant to chemicals, abrasion and light, and have good pigmentability.



PU-PLASTIC COATING

Plastics Product Selector



The exterior of a vehicle is a particular challenge to every paint system. Apart from environmental influences such as the weather and chemicals, designers must bear abrasion resistance, stone-chipping and other such factors in mind. We offer complete binder technologies for complete coating, paint and colouring systems for these complex plastics applications.

VaraFlex; Solvent-borne, 1K- and 2K- urethane elastomer for plastic coating

Product	Supply Form [%]	Viscosity [mPa.s]/23°C	Isocyanate Modification	Description	Primer	Basecoat	Topcoat	1K	2K
EU 130	30 in M	6.400 – 9.000	aliphatic	Plastic coatings: clear and pigment dent coatings for PVC, PA, ABS, PUR foam and in mould coatings. Metallic base coats for plastics	X			X	
EU 386	35 in X	700 – 1.200	aromatic	Flexible primer for PP, PP/EPDM. Car refinish. Excellent adhesion to common plastics types, brilliant metallic and deep glossy blacks.	X			X	
EU 320	30 in tert.B / BuAC	250 – 650	aliphatic	Solvent based elastomeric with good adhesion on flexible and rigid substrates. Excellent adhesion, good mechanical properties, can be crosslinked with isocyanates.	X	X		X	X
EU 322	51 in M	4.000 – 6.000	aliphatic	An aliphatic polyurethane elastomer with reactive hydroxyl groups, which in combination with poly-isocyanate resins, e.g. Tolonate HDB or Desmodur N, provide flexible coating systems with good adhesion to many plastic substrates.	X	X		X	X
EU 390	30 in M	550 – 1.000	aliphatic	EU 109 is aliphatic polyurethane elastomer for clear and pigmented coatings for PVC, ABS, PUR, Automotive: metallic basecoats for plastics.		X	X	X	
EU 391	30 in IB/X	1.700 – 2.300	aliphatic	Clear and pigmented coatings for solvent sensitive plastics, PS, ABS, printing inks. Physically drying Automotive metallic base coats for plastics.			X	X	

Elastomer coatings solution that meet the most stringent automotive requirements





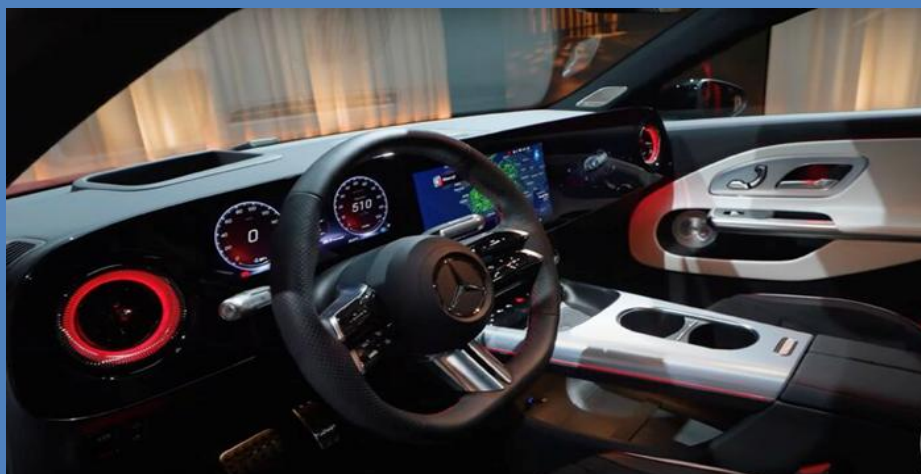
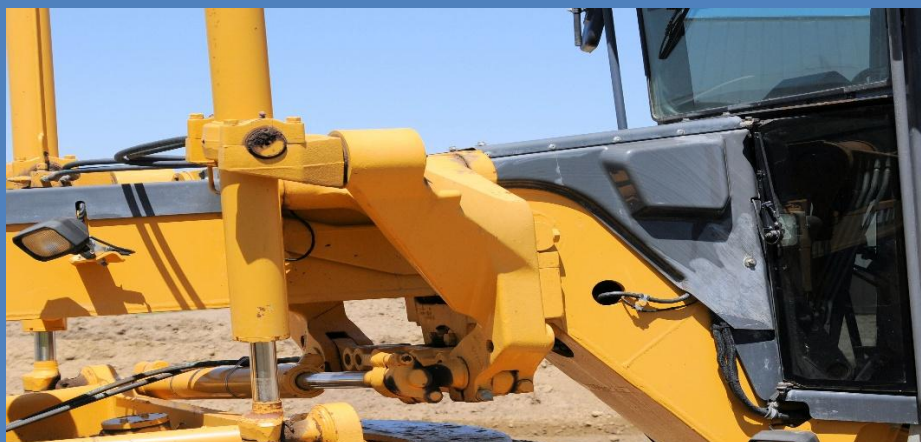
Wood & Joinery Coatings

Selection of Products and Technologies for Industrial Wood Coatings

VaraPol; Saturated polyester, solvent-based, solvent-free and water-based

Product	Supply Form [%]	Viscosity [mPa.s]/23°C	Acid Value [mgKOH/g]	OH-Value [mg KOH/g]	Main uses and characteristics
E 1800	Solvent-free	25.000 – 36.000	≤ 3	215	In combination with polyisocyanates, used in flexible two-component polyurethane coatings for wood substrates, parquet and plastics.
E 1805	65 in MPA	17.000 – 23.000	≤ 3	290	E 1805 MPA-65 is mainly used in combination with aliphatic or aromatic polyisocyanates in two-component coatings with excellent weatherstability, gloss retention, good chemicals and abrasion resistance; primarily for high grade industrial coating.
E 1162	Solvent-free	15.000 – 20.000	≤ 3	43	In certain combinations, e.g. with E 1800 the addition of E 1162 increases the toughness and resistance to wear and abrasion of the paint films. Such combinations can be used to coat furniture, floors and parquet.
E 1135	Solvent-free	5.000 – 20.000	≤ 16	43	The main field of application for PE 1135 in combination with Desmodur L or HL - is the furniture sector.
E 1130	75 in xylene	2.000 – 3.000	≤ 16	93	PU- and nitrocellulose-combi wood finishing.
E 1188	75 in BAC	3.500 – 5.500	≤ 12	122	PE 1188 can be combined with nitrocellulose to formulate high-quality wood and metal finishes which can be oversprayed without any risk of lifting.
E 1181	75 in MPA	6.800 – 9.000	≤ 12	158	Polyester polyol. Used as a co-reactant in the formulation of air-drying two-pack coatings for wood such as boats and parquet flooring.
E 1450	95	500 – 700	≤ 15	280	A water thinnable, low viscous, high reactive polyester resin without amine addition. For the manufacture of water thinnable, acid curing impregnations and lacquers for wood.







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