

“Advanced Acrylic Resins for Modern Coatings”

PRODUCTS WITH PERSPECTIVE
INNOVATIONS IN SOLVENT- & WATER-BASED ACRYLIC RESINS

THE RIGHT RESIN FOR
YOUR PROJECT





Acrylic resins play a crucial role in the coatings industry. They help achieve optimal performance, durability, and aesthetic appeal in many acrylic resin paint and coating formulations. Their unique combination of properties makes them indispensable in various applications.

This makes acrylic paints and coatings suitable for architectural paints, wood coatings, ACE, can & coil coatings, marine & protective coatings, automotive, flooring and road marking and adhesives.

ACRYLIC POLYOL THERMOSETTING 2K & 1K

for

COATINGS & PAINTS

High solids and Fast Cure found in one cost effective resin

VaraCryl® provides excellent cure in a very high solids acrylic polyol with a low hydroxyl number geared for high value, high solids urethane topcoat systems used in particular in the Marine and Protective Industry, Automotive OEM, Refinishing, DTM, Wood, Plastic and Metal Coatings, more....



VaraCryl; Acrylic resins, solventbased, hydroxy groups, thermosetting

Product	Solvent	Solid [%]	OH-value [%]	Viscosity [mPa.s]/20°C	Main uses and characteristics
A 988	S100	65	4.2	4.500 – 8.000	2-K-PU Automobile and plastic coating.
A 924	BuAC / S100 / X	55	2.3	1.000 – 2.000	Automobile coating and plastic coating.
AHS 972	EEP	70	3.1	4.000 – 6.000	ACE (agriculture and construction equipment), car refinish, commercial vehicles and protective marine coatings.
AHS 970	BuAC	70	2.4	2.200 – 3.800	Automobile coating and protective and marine coatings.
AHS 916	BuAC	70	4.5	7.000 – 11.000	PU-repair and big rolling stock, general industry, plastic.
A 918	S100 / BuAC / X	55	4.7	4.000 – 7.000	PU-repair and big rolling stock, general industry, plastic.
A 931	X	50	1.3	1.000 – 1.400	Auto repair, general industry, plastic.
A 960	S100	60	2.6	2.300 – 3.300	PU-repair primer, marine paints and protective coating.
A 961	X	60	2.6	1.300 – 2.300	PU-repair primer, marine paints and protective coating.
F 22	X	60	2.2	2.500 – 4.500	Solid color, clear primer and top coat for genral industrial coatings, air and oven drying 2 pack lacquers, with good curing time, light fatness, weathering resistance, good chemical resistance and adhesion on non-ferrous metals.

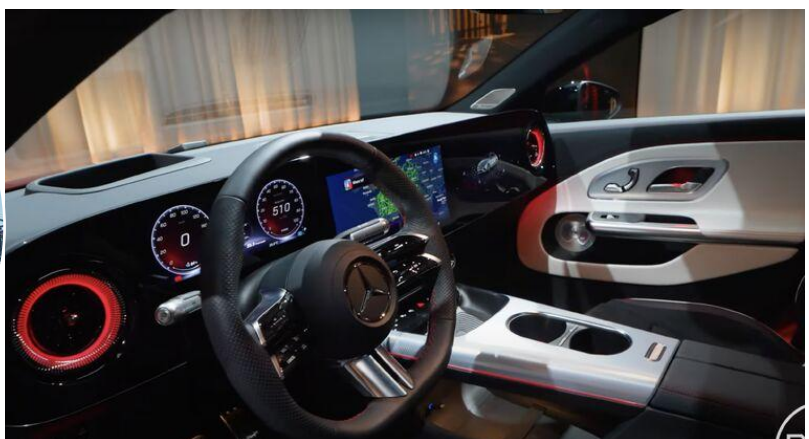


VaraCryl; Acrylic resins, solventbased, hydroxy groups, thermosetting

Product	Solvent	Solid [%]	OH-value [%]	Viscosity [mPa.s]/20°C	Main uses and characteristics
A 2135	X	60	3.5	3.000 – 4.000	Acrylate copolymer for the manufacture of industrial coatings with very good resistance against water and other agents.
A 2218	BuAC	50	1.8	5.000 – 7.000	High reactivity and long pot life, for fast drying wood and furniture lacquers, CAB compatible.
A 2220	BuAC	60	2.0	1.000 – 2.000	Acrylate copolymer for the manufacture of high quality plastic coatings.
A 3220	BuAC	50	2.0	2.000 – 3.000	For the high quality wood and furniture lacquers, good initial drying.
A 2114	S100	60	1.4	2.000 – 4.000	For quick drying industrial coats with high gloss and good stability.
A 1216 CR	S100	60	1.6	2.000 – 2.500	For fast drying industrial paints with good gloss, also for decorative paint in combination with Thix A 2125 for effect finishes.
A 2126	X	60	2.6	1.000 – 3.000	Can be crosslinked with aliphatic polyisocyanate to formulate two component systems for metal, wood and plastics, the aliphatic system shows excellent hardness, good chemical resistance and a good outdoor durability.
A 2130	X / BuAC / S100	60	3.0	3.500 – 7.000	For two component industrial paints with good mechanical properties and high gloss with good outdoor durability.
A 2230	BuAC / X / S100	60	3.0	1.000 – 2.000	For high-quality air and forced-drying topcoats and clear coats, especially in the field of industrial and machine painting. The acrylic resin is characterized by rapid drying and drying and high gloss. Crosslinking with aliphatic isocyanates achieves good adhesion to steel.
A 2210	S 100	60	1.0	17.000 – 22.000	For very fast drying primers and fillers with very good adhesion properties on different substrates, also usable as a one component system.
A 2244	X / BuAC / S100	60	4.5	3.000 – 5.000	For high quality industrial and machine paints, also for car finishes with excellent UV-stability.
A 2231	S 100	60	1.3	80 – 150 s	For quick drying two component primers and top coats.
A 2233	X / BuAC / S100	60	3.5	4.000 – 6.000	For formulating high quality air- and forced drying top and clear coats, fast hardness development and very good adhesion for different metals.
AHS 2214	BuAC	70	4.2	10.000 – 15.000	For the production of high quality industrial PU-coatings, varnishes based on A 2214 show excellent water, solvent and chemical resistance. This resin can also be used for the formulation used by car refinish paints. Crosslinking with aliphatic isocyanates achieves good adhesion to steel. Tg=36°C.
AHS 2212	BuAC	70	3.6	1.000 – 3.000	With Desmodur N, in the formulation of high-solids two-K polyurethane coatings with good gloss retention, light fastness and resistance to chalking; especially suitable for automotive finishing applications.
AHS 2136	BuAC	75	3.6	5000 – 8.500	For high quality topcoats, clearcoats auto refinishing.
CY 2463	BuAC	50	2.0	3.300 – 4.800	Industrial wood coatings, primers and clear coats and topcoats, with good compatibility, very high reactivity, pot life, stack ability, and yellowing resistance. CY 2463 is recommended for 2-component PU auto refinish, plastic and industrial coatings.

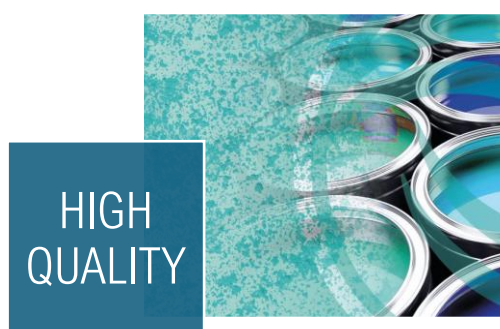
VaraCryl; Acrylic resins, solventbased, hydroxy groups, thermosetting

Product	Solvent	Solid [%]	OH-value [%]	Viscosity [mPa.s]/20°C	Main uses and characteristics
AHS 2141	BuAC	70	4.1	25.000 – 35.000	A 2141 is an acrylate polymer for the production of high quality industrial paints. Such two component lacquers are high-solid systems. Even dried at room temperature you get coatings which show outstanding gloss, hardness, chemical- and weather-resistance. Application fields for A 2141 are high solid paints for façade elements, caravans and plastics. Tg=38°C.
AHS 2221	BuAC / X	70	1.2	5.000 – 10.000	For air-dried and forced drying two-component paints, when diluting the solution clears up, which also colorless coatings easily can be produced. A 2221 is particularly suitable for quick drying production of primers, which can be sanded after a very short time. In top coat systems achieve gloss systems with good gloss retention.
AHS 2222	BuAC	70	2.7	2.000 – 5.000	Styren acrylate for high solid two component polyurethane primers and top coats, high hardness, rapid drying and good outdoor properties.
AHS 2220	S100	75	1,0	7.500 – 17.500	A fast-drying, high-solids acrylate resin for the production of physically drying low VOC primers with very good adhesion properties on various substrates.
CY 2205 CR	S100 / X / B	50	-	400 – 700	A thermosetting hydroxyacrylate resin used in combination with crosslinkers such as melamine resins baking coatings, e.g. automotive coatings with good weather resistance, hardness, gives excellent flow properties and high gloss.
CY 2206 CR	X / B	50	-	400 – 700	A thermosetting hydroxyacrylate resin used in combination with crosslinkers such as melamine resins baking coatings, e.g. automotive coatings with good weather resistance, hardness, gives excellent flow properties and high gloss.
CY 2207 CR	S100 / B / X	50	-	500 – 700	A thermosetting hydroxyacrylate resin used in combination with crosslinkers such as melamine resins baking coatings, e.g. automotive coatings with good weather resistance, hardness, gives excellent flow properties and high gloss.
A 2229	BuAC	50	1.8	3.000 – 7.000	A 2229 is a polyisocyanate crosslinkable acrylate resin for the production of quick-drying wood and furniture varnishes.
AHS 2219	BuAC	70	2,5	2.000 – 5.000	For air- and forced drying 2-component PUR topcoats for the steel construction, agricultural machinery and construction vehicle painting. The Paints have a good drying, high gloss and high hardness.
AHS 2309	X	70	2.5	2.000 – 5.000	For 2-component PUR topcoats for the steel construction, agricultural machinery and construction vehicle painting.
AHS 2139	X / S100	70	2.7	800 – 3.000	In combination with aliphatic polyisocyanates in air and forced drying 2-component paints for industrial coatings with good mechanical properties and chemical resistance.
AHS 2211	S100	75	1.3	5.000 – 10.000	A low-viscosity polyisocyanate-crosslinkable acrylic resin for the production of 1 and 2 K primers, as well as 2 K single-coat paints, quick drying, high hardness and good adhesion properties.



VaraCryl; Acrylic resins, solventbased, hydroxy groups, thermosetting

Product	Solvent	Solid [%]	OH-value [%]	Viscosity [mPa.s]/20°C	Main uses and characteristics
A 2430	S100	60	2.6	3.000 – 5.000	A 2430 is for air- and forced-drying metal, wood and plastic lacquers. Already at room temperature drying gives paint films, the high hardness, chemical resistance and extreme weather resistance. Field of application for A 2430 is the range of agricultural machinery, construction vehicle and plastic coating
AHS 2431	BuAC	70	4.4	35.000 – 50.000	For air- and forced-drying metal, wood and plastic lacquers, already at room temperature drying to obtain coatings, the especially high gloss, hardness, chemical resistance and extreme weather resistance and abrasion resistance.
A 2432	X / BuAC	60	1.3	5.000 – 7.000	For air two-component polyurethane and forced drying metal, wood and plastic paint. Even at room temperature drying to obtain coatings with the high hardness, chemical resistance and excellent weather resistance.
AHS 2260	BuAC	70	2.0	15.000 – 25.000	A styrene acrylate resin for the preparation of high solids 2K high solid topcoats, good drying, final hardness, good mechanical properties, high chemical resistance and a good weather resistance.
A 2444	BuAC	60	4.5	2.000 – 4.000	For production of high quality 2K topcoats, industrial and machine painting, as well as for the painting of large vehicles up to car refinish paints, excellent mechanical properties, weather stability and chemical resistance.
AHS 2466	BuAC	70	4.5	7.000 – 11.000	In combination with aliphatic polyisocyanates in high quality 2K clear and topcoats used for industrial coatings,
A 2296	BuAC	60	1.6	2.000 – 2.500	As a co-reactant, primarily for Desmodur N, for the production of quick-drying industrial coatings with good properties.
A 2202	MIBK	51	1.5	1.800 – 3.000	For air-drying polyurethane-systems, quick curing, high hardness and high gloss, weather and chemical resistance.
A 2245	BuAC	45	1.5	2.000 – 4.500	An acrylic copolymer for the manufacture of high quality 2K-polyurethane wood and furniture coatings.
A 2305	S100 / MPA	60	1.5	200 – 400	Polyisocyanate crosslinkable, high solid, acrylic resin, in combination with aromatic and aliphatic polyisocyanates for quick drying 2 pack-HS polyurethane coatings with high gloss and wetting, wood, especially for furniture paints.
A 2298	BuAC	50	1.5	3.000 – 8.000	Industrial wood coatings, clear, pigmentes primers and top coats.
AHS 2217	BuAC	75	1.7	4.000 – 8.000	A low-viscosity styrene acrylate resin for the production of high-solids, fast drying 2K primers and topcoats, and one-coat paints.



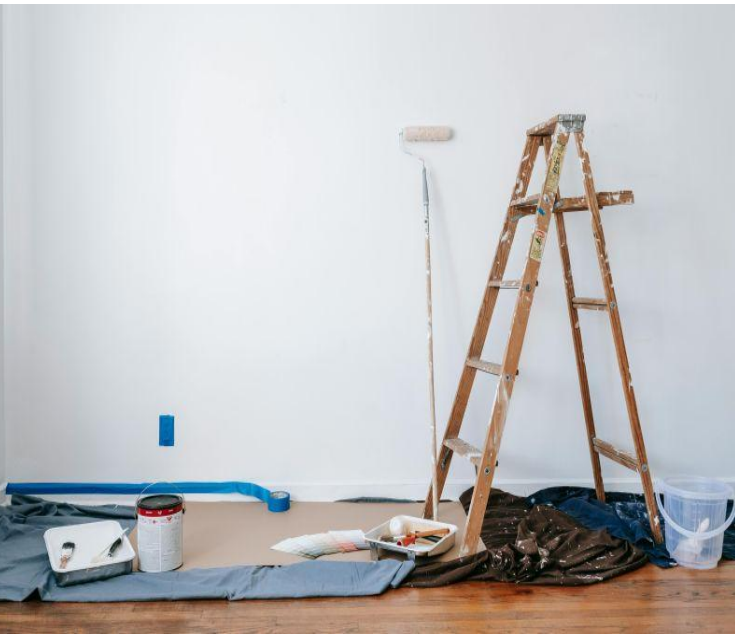
VaraCryl; Acrylic resins, solventbased, hydroxy groups, thermosetting

Product	Solvent	Solid [%]	OH-Value [%]	Viscosity [mPa.s]/20°C	Main uses and characteristics
AHS 2379	BuAC	70	3.9	2.000 – 4.500	In combination with aliphatic polyisocyanates for 2K-clear- and topcoats used in high-quality industrial coating., the hardened paint films are hard, viscoplastic, high glossy, filling, also weather and light resistance and good solvent and gasoline resistance and fast drying.
A 2311	X / BuAC	60	1.8	1.000 – 3.000	A low-viscosity styrene acrylate resin for the production of high-solids, fast drying 2K primers and topcoats, and one-coat paints., metal and plastic, good adhesiv good hardness and good resistance properties.
A 2560	MPA	60	6.0	2.000 – 7.000	A polyisocyanate crosslinkable, polyester-modified acrylic resin, for the production of high quality, especially resistant topcoats.
A 2566	MIBK / BuAC	60	6.0	1.000 – 3.000	Acrylate copolymer for the production of high quality, especially resistant topcoats.
A 2315	PM	65	4.3	4.000 – 6.000	Acrylate for the production of PU-systems, high quality, high solid, especially resistant topcoats and primers.
UHS 3263	BuAC	80	4.5	2.000 – 6.000	UHS 3263 is modified acrylic resin for 2 K-PU systems, high solid clearcoats.
UHS 3314	BuAC	80	4.3	6.000 – 7.000	A low-viscosity modified acrylate for the production of high-solids 2K primers and topcoats, used as a sole binder or combination partner in high quality 2K industrial coatings with excellent toughening elasticity.
UHS 3233	BuAC	78	3.9	10.000 – 30.000	Modified high solid acrylic resin for 2-component polyurethane coatings, and also for auto refinsh.
UHS 3246	BuAC	79	4.5	5,000 – 15,000	Fast drying and high initial- and end.hardness. Paint films with high weather- and chemical resistances.
AHS 2545	BuAC	75	4.5	2.500 – 7.500	For the preparation of high quality, high solids 2K-PU top coats, with high chemical resistance, it suitable for formulation of high quality car refinsh paints.

VaraCryl high- and ultra high-solid
refinishing solution !



VARACRYL
ACRYLIC RESINS



ACRYLIC POLYOL THERMOPLASTIC 1K *for* COATINGS & PAINTS

VARENA thermoplastic acrylic resins

VARENA's line of Thermoplastic Acrylic (TPA) resins sold globally under the **VaraCryl®** brand names have been designed for use as both sole and blending binders.



They are used globally in the development of coatings for a broad range of markets including; industrial, decorative, construction, vehicle refinish, marine and protective. The applications are also very diverse finding use in road marking, industrial maintenance, and aerosols. TPA resins are desirable resins as they provide adhesion to multiple substrates like metal, plastic and cementitious, are durable, high gloss, provide alkali resistance, are fast drying and adhere to a broad substrate range.



VaraCryl TPA; Acrylic resins, solventbased, thermoplastic, 1-component

Product	Solvent	Solid [%]	Acid-Value [mgKOH/g]	Viscosity [mPa.s]/20°C	Tg [°C]	Main uses and characteristics
TPA 5668	S100	60	-	500 – 3.000	-	A neutral, physically drying, odorless methacrylic acrylate for quick 1-K-curing paints.
TPA 5604	Ethanol	50	15-25	max. 3.000	30	A neutral, physically drying, odorless acrylate for quick 1-K-curing paints, spay and aerosol coating.
TPA 5680	S100	50	max. 3	500 – 1.000	83	Physically drying thermoplastic acrylate resin for different coating systems to improve hardness, gloss and adhesion. TPA 5680 is compatible with alkyd resins.
TPA 5670	X	55		max. 3.000	17	A neutral, physically drying, odorless acrylate for quick 1-K-curing paints, aerosol coatings.
TPA 5659	S100	50	max. 3	1.500 – 3.000	83	TPA 5659 is a physically drying thermoplastic acrylate resin for different coating systems to improve hardness, gloss and adhesion. TPA 5659 is compatible with alkyd resins.
TPA 5658 HS	Isoparaffine KW 170-200	70	max. 5	3.000 – 7.000	-	A neutral, physically drying, odor-resistant acrylic resin, mainly for use in ceiling and wall colors. 5658 is particularly suitable for the production of ceiling and wall paints. TPA 5658 is a soft acrylic resin. Additional plasticizers are not required. Wall paints based on 5658 are low odor and isolate water-soluble nicotine, smoke and chimney stains.
TPA 5682 HS	KW 160-200	70	max. 5	5.000 – 10.000	-	A self-crosslinking thermoplastic acrylate for the modification of low VOC alkyd resin paints. It accelerates the drying and increases the film hardness, in addition, it can optimize the gloss and gloss retention.
TPA 5641	HC 170-200	60	max. 5	80 – 120 s	-	Neutral low odour acrylic thermosetting resin, mainly for wall and ceiling paints, very good insulating coat for nicotine, chimney and water spots, for chlorine free formulation, without plasticizer.
TPA 5660	X	60	-	10.000 – 15.000	-	As a decorative and quick drying paints. Industrial quality quick drying paints / as acrylic topcoat for textured paints. Road marking paints for pavements / kerb stones / pathways. Clear lacquers for PVC leather cloth / over lacquering and Metallizing / Coatings for electronic equipment. Scratch resistance protective coats and polycarbonate glazing.
TPA 5624	X	60	-	10.000 – 15.000	-	As a decorative and quick drying paints. Industrial quality quick drying paints / as acrylic topcoat for textured paints. Road marking paints for pavements / kerb stones / pathways.
TPA 5694	X	50	max. 3	2.000 – 4,000	40	A neutral, physically drying, odorless acrylate for quick 1-K-curing paints, spay and aerosol coating.
TPA 5656	MPA	60	max. 5	1,500 – 3.500	10	A neutral, physically drying, odorless acrylate for quick 1-K-curing paints, aerosol coatings, plastic and wood coating.
TPA 5629	X	60	max. 1	1.300 – 3.000	-	Thermoplastic acrylic resin, used in low odor wall paints, nicotine barrier primers and quick-renovation paints, offers adhesion to hard plastics.
TPA 5647	S100	60	max. 5	2.000 – 6.000	-	A neutral, physically drying, odorless acrylate for quick 1-K-curing paints and for the production of ceiling and wall colors. TPA 5647 is a soft acrylic resin.



1-component acrylic coatings



VaraCryl TPA; Acrylic resins, solventbased, thermoplastic, 1-component

Product	Solvent	Solid [%]	Acid-Value [mgKOH/g]	Viscosity [mPa.s]/20°C	Tg [°C]	Main uses and characteristics
TPA 5676	S100	55	max. 35	max. 8000	-	For 1K-special lacquers in category I. 1-component acrylic paint, application by spraying (air flow cup), suitable for painting plastic parts, machine and housing parts, e.g. in metallic shades.
TPA 5623	KW 180-220	50	max. 10	80 – 110 s	-	TPA 5623 is mainly used for the production of insulating and as a primer, is characterized by outstanding penetration.
TPA 5630	KW 100-140 / Aceton	60	10 – 15	5.000 – 15.000	42	TPA 5630 is used for its rapid physical drying road marking paints as well as in the building protection.
TPA 5611	Isoparaffin KW 170-200	55	5 – 10	180 – 200 s	9	TPA 5611 is particularly suitable for the production of ceiling and wall paints. TPA 5611 is a soft acrylic resin. Additional plasticizers are not required. Wall paints based on TPA 5611 are low odor and stand out good workmanship. The paints isolate water-soluble nicotine, smoke and chimney stains. Solvent sensitive substrates such as e.g. Polystyrene is caused by wall paints base of TPA 5611 / Isoparaffin not dissolved.
TPA 5616	X	60	8 – 12	2.000 – 4.000	11	A physical drying acrylic resin for general coatings.
TPA 5622	BuAC	60	10 – 14	6.000 – 10.000	39	TPA 5622 is particularly suitable for the production of quick-drying primers. Anti-rust primers based on AC 5622 have opposite alkyd primers have the following advantages: they have a faster drying behavior on and can be painted over at any time (including with 2K-topcoats). In addition, they have significantly better adhesion properties to critical substrates. OH= approx. 1%.
TPA 5600 HS	S100	75	6 – 100	7.500 – 17.500	-	TPA 5600 HS is a fast-drying, high-solids acrylic resin for the production of physically drying low VOC primers with very good adhesion properties on various substrates.

VaraThix; Thixotropic acrylic resins

Type	Oil [%]	Oil type	PA [%]	Color / Gardner	Acid value [mgKOH/g]	Flow time 20°C [s]	Supply Form [%]	Main uses and characteristics
TA 1420	-	-	-	max. 1	max. 12	Thixotropic soft gel	50 in BuAc	Thixotropic, hydroxyfunctional pure acrylate for two component finishing lacquers. Hydroxyl content = 2.0%
TA 2117	-	-	-	max. 1	max. 15	Thixotropic soft gel	70 in BuAc	Thixotropic, hydroxyfunctional acrylic resin for 2-PU-system topcoats and primers. Hydroxyl content (on solid) = 1.6%
TA 2125	-	-	-	max. 1	-	Thixotropic gel	50 in xylene	Thixotropic styrene acrylic for thick layer coatings and textured finishes. OH=2.5%
TA 2126	-	-	-	max. 1	-	Thixotropic gel	60 in xylene	Can be crosslinked with aliphatic polyisocyanates to formulate two component systems for metal, wood and plastics, the aliphatic system shows excellent hardness, good chemical resistance and a good outdoor durability. Hydroxyl content (on solid) = 2.3%
TA 2242 W	-	-	-	max. 1	-	Thixotropic gel	58 in W/BuAc/EEP	Thixotropic water-thinnable hydroxyl acrylate for formulating high quality two component structure paints, as combination partner in aqueous two component topcoats for improving antisagging properties. OH = 4.2%
TA 2636	-	-	-	max. 1	max. 12	Thixotropic soft gel	50 in X/X/BuAc	For high quality air and forced drying 2-components PU-systems, very good hardness, chemical resistance and weather resistance.
TA 2313	-	-	-	max. 1	-	Thixotropic soft gel	60 in MPA	Thixotropic water-thinnable hydroxyl acrylate for formulating high quality two component air- and force-drying industrial paints. Hydroxyl content (on solid) = 1.3%
TA 2335	-	-	-	max. 1	max. 16	Thixotropic soft gel	60 in X/BuAc/S1	For formulating high quality air- and forced drying top and clear coats, fast hardness and very good adhesion for different metals. Hydroxyl content (on solid) = 3.5%
TA 3013	-	-	-	max. 1	-	Thixotropic gel	50 In Kw 160-200	Thixotropic thermoplastic 1K-airdrying acrylic resin for different coatings-systems, compatible with acrylic resins.





VARAMul

ADVANCED WATERBORNE ACRYLIC DISPERSIONS

HIGH QUALITY ACRYLIC DISPERSION

VARENA waterbased acrylic dispersions

The stability of commercially available anionic acrylate copolymers in water is improved by neutralising existing acid groups (e.g. acrylic acid) with alkaline neutralising agents such as ammonia. The addition shifts the pH from the acidic to the basic alkaline range.

The stability of cationic acrylates is also improved, but the charges are reversed - basic monomers such as dimethylaminoethyl acrylate are used instead of acrylic or methacrylic acid. These are then neutralised with an acid such as formic acid. Neutralisation thus shifts the pH from the basic to the acidic alkaline range.

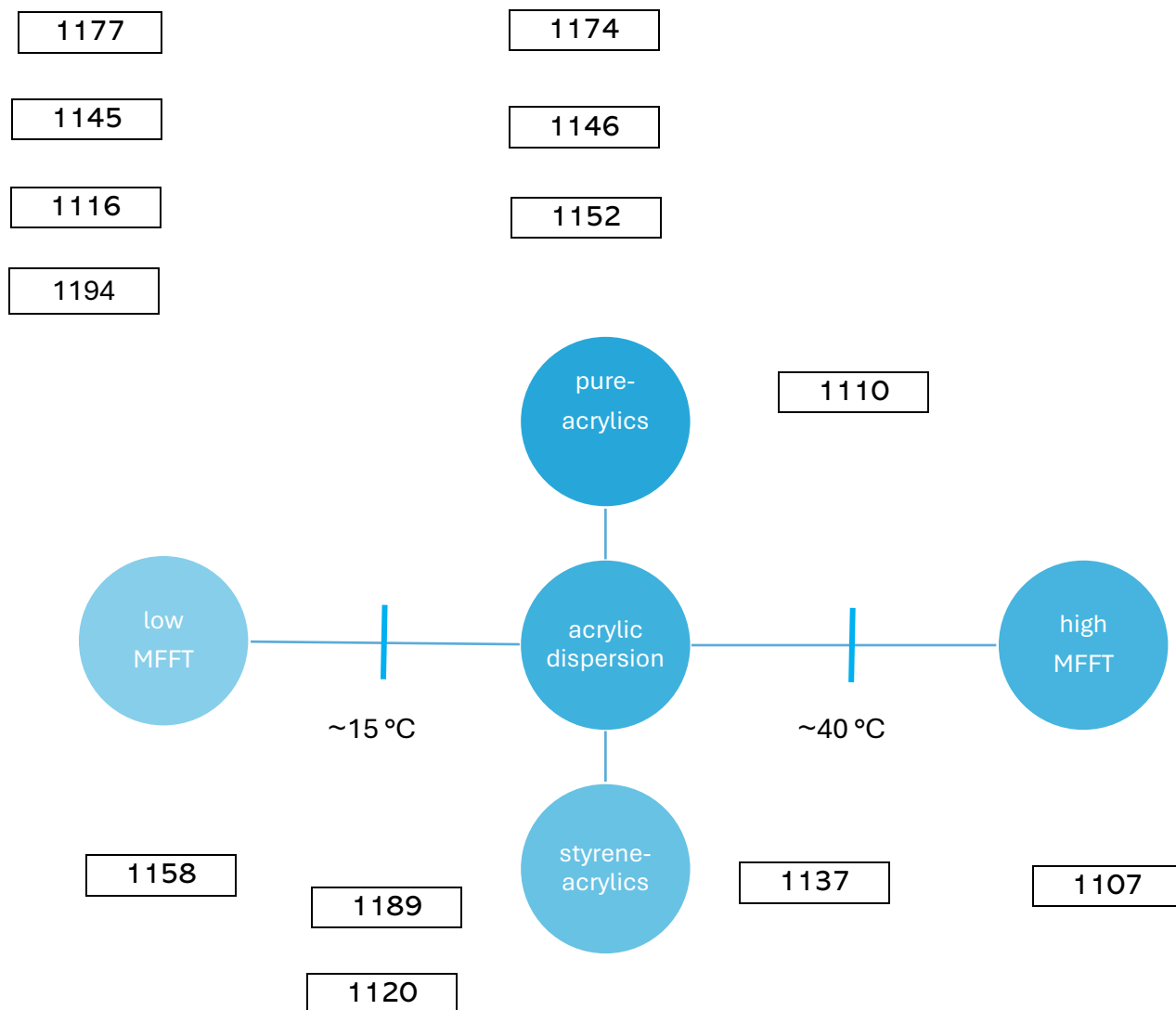
Accordingly, cationic acrylates differ from anionic acrylates in the charge of the polymer chain. The positive charge also leads to the main advantage of this binder group: the excellent insulating properties against wood ingredients and other anionic contaminants.



VaraMul AE 11-series; acrylic dispersions

Core-shell

Cross-linking



Insulating effect

There are 25,000 different species of wood in the world, hundreds of which are regularly traded. Wood has many characteristics - it 'works' (shows shrinkage/expansion due to water absorption or release); it has different proportions of hardwood and softwood; it must be protected from infestation; and it contains different wood constituents. Some of these wood ingredients are water-soluble and are dissolved by the immigrating water when coated with waterborne coating systems. When the water evaporates during the drying process, it transports the dissolved contents to the paint surface. Because some of these ingredients are coloured, the surface turns yellowish or reddish. This process is called 'bleedthrough'.

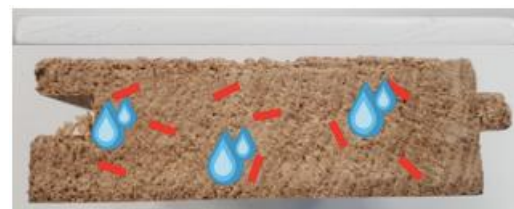
The type and quantity of water-soluble wood ingredients varies greatly. Tropical woods in particular contain very high amounts. In Europe, oak is one of the wood species with a very high content.

The main wood constituents are the tannins, some of which have an acidic character and can thus form a negative charge or partial charge. A cationic binder provides an electrostatic barrier for these anionic molecules. Thus, the colourant molecules do not reach the coating surface and discoloration is prevented.

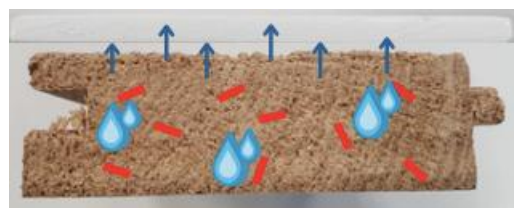
The mechanism of insulation described allows a visible insulating effect to be achieved as early as the application of the first coat, whereas aqueous anionic insulating coatings require at least two coats. The mechanism of action of alkyd resins/emulsions, for example, is good penetration and thus impregnation - the water of the second coating no longer reaches the tannins.



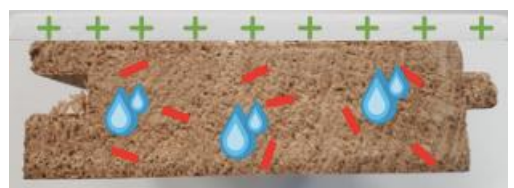
Wood contains water-soluble components



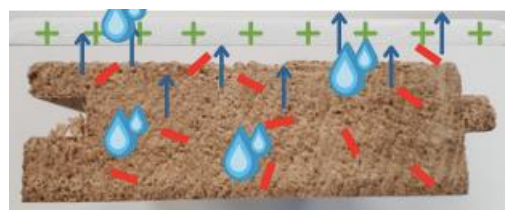
applying a waterborne paint, water migrates into the wood



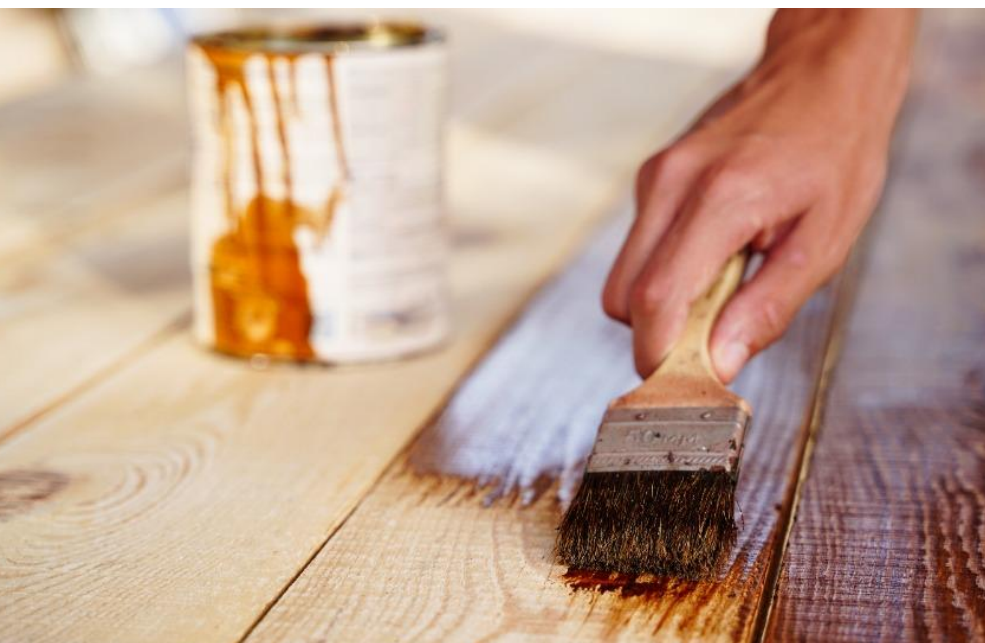
The evaporating water transports water-soluble ingredients to the surface - this leads to discolorations



The positively charged parts of the cationic layer form a barrier



This barrier retains the mostly negatively charged wood constituents



VaraMul & VaraHdyrol

DISPERSION RESINS FOR PAINT AND COATINGS

VaraMul AE; Acrylic resins, waterbased dispersions, solutions

Product	Monomer	Supply Form [%]	pH value	MFFT [C°]	Viscosity [mPa.s]/20°C	Main uses and characteristics
AE 1107	Methacrylic copolymer	40 in water	7.2-8.0	>95	max. 500	As mixing component universally suitable for improving film hardness, sandability, blocking resistance and stackability.
AE 1120	Styrene acrylic emulsion	49 in water	8.2-9.0	15	200-800	Corrosion inhibiting primers, DTM on different metals (e.g. iron, aluminium), wood with weather resistance.
AE 1135	Styrene acrylic emulsion	42 in water	7.5-8.5	39	max. 100	Topcoats on metal, DTM, wood, plastics (PS, ABS), also for temporary anti-corrosive primers on metal, can be combined with water-thinnable alkyd resins.
AE 1137	Styrene acrylic emulsion	42 in water	7.5-8.5	28	max. 200	Allround emulsion for topcoats on plastic, metal, wood and for corrosion inhibiting primers with very good adhesion on steel and low water absorption, that is an excellent start for a DTM coating.
AE 1158	Styrene acrylic copolymer emulsion	49 in water	7.5-8.0	5	max. 500	Self-crosslinking styrene modified acrylic emulsion for primers with excellent results in corrosion protection tests, that is an excellent start for a DTM coating.
AE 1177	Core-shell-dispersion	45 in water	7.0-8.0	5	max. 500	Core-shell-dispersion for the production of solvent-free decorative paints and glazings.
AE 1186	Pure acrylic emulsion	46 in water	8.0-9.0	56	max. 500	Very hard polymer improving the surface properties like hardness, sanding and blocking resistance in water soluble lacquer systems. Very good compatibility with AE 1177.
AE 1189	Methacrylic copolymer emulsion	49 in water	7.0-8.0	16	max. 200	Flexible binder for fast setting high initial, for the production of synthetic, resin-bound renderings, wall paints, flagstone- and building adhesives.
AE 1117	Modified styrene emulsion	45 in water	7.8-8.9	0	max. 200	Especially suitable for the production of slip-resistant coatings for insulation boards.
AE 1110	Pure acrylic	45 in water	8.0-9.0	39	max. 500	Self-crosslinking acrylic polymer for the formulation of aqueous furniture lacquers with good resistance against household chemicals.
AE 1145	Pure acrylic emulsion	45 in water	7.0-8.0	0	max. 500	Good blocking stability, in combination with PU-dispersion wood, parquet lacquers and topcoats for wood can be formulated.
AE 1116	Pure acrylic emulsion	55 in water	7.0-8.0	0	max. 500	Self-crosslinking pure acrylic emulsion with high solid content for formulating block-resistant, high gloss emulsion paints with very good leveling properties, low VOC value in pigmented topcoats, solvent-free formulations are possible for glazings and colourless systems. AE 1116 is an excellent start for a DTM coating.
AE 1146	Pure acrylic emulsion	55 in water	7.0-8.0	13	200 – 800	Self-crosslinking pure acrylic emulsion for the formulation of blocking resistant, high gloss brushable paints with a low VOC-content.
AE 1152	Acrylic emulsion	50 in water	8.5-9.0	14	600 – 2.400	For manufacturing dispersion paints for indoor and outdoor application and coloured quartz sand plaster.
AE 1104	Copolymer dispersion	60 in water	2.5-5.0	0	max. 2.000	A soft copolymer dispersion with a high solids content, for pressure-sensitive adhesives (labels, adhesive tapes) or as co-binders in other aqueous adhesive, good adhesion on difficult surfaces, flexible and self-adhesive film.
AE 1129	Acrylic emulsion	50 in water	8.5-9.0	5	max. 2.000	For manufacturing dispersion paints for indoor and outdoor application and coloured quartz sand plaster.

VaraMul AE; Acrylic resins, waterbased dispersions, solutions

Product	Monomer	Supply Form [%]	pH value	MFFT [C°]	Viscosity [mPa.s]/20°C	Main uses and characteristics
AE 1156	Styrene acrylic copolymer	40 in water	7.5-8.5	12	max. 200	Excellent adhesion on various substrates, for topcoats on plastics, metal and wood. Low water absorption.
AE 1174	Aqueous, self-crosslinking acrylate dispersion	40 in water	7.5-8.5	14	max. 200	AE 1174 is suitable for the production of wet-transparent wood stains with good ethanol resistance. The binder is suitable for spray application and shows a very high drying speed, naturally depending on the solvent selection.
AE 1112 H	Cationic pur-acrylic emulsion	40 in water	4.0-6.0	-	5.000 – 8.000	AE 1112 H is ideal as filler binder or as colorless or pigmented sealing primer on woods with a high proportion of soluble wood content AE 1112 H is also particularly suitable for the production of nicotine insulating paints and transparent glazing. Excellent barrier effect. and also pigment compatibility.
AE 1171 W	Cationic pur-acrylic emulsion	26 in water	4.5-5.5	-	300 – 800	AE 1171 W is ideal as filler binder or as colorless or pigmented sealing primer on woods with a high proportion of soluble wood content. The product prevents the bleeding of these ingredients and protects the following applied coatings against discoloration, blistering and loss of adhesion. AE 1171 W is also particularly suitable for the production of nicotine insulating paints and transparent glazing. Excellent barrier effect. and also pigment compatibility.
AE 1151	Anionic styrene acrylic dispersion	50 in water	7.5-8.5	20	2.000 – 5.000	For the production of emulsion paints for the Painting area inside and outside. The MFT can with the usual film-forming aids be set. The product is also suitable for the production of synthetic resin plaster. Fine dispersible, with high pigment binding capacity, good water and alkaline resistance, excellent compatibility with pigments and fillers.
AE 1175	Cationic acrylic copolymer dispersion	45 in water	4.0-5.0	15	max. 300	For the production of insulating wall paints, colorless and pigmented primer on woods with penetrating ingredients. Excellent barrier effect and very good water resistance.
AE 1194	Copolymer dispersion	50 in water	8,3-8,7	0	1.000 – 2.000	For the production of emulsion paints indoors and outdoors, broad compatibility with pigments and fillers, good gloss, water and alkali resistance, fast drying and very high transparency, also for leather coating.
AE 1299	Metzl salt-containing acrylate solution	27 in water	8.0-9.0	-	max. 200	For producing water-resistant polymer films, high mechanical resistance, and good removability. Re-removability of the films by alkaline cleaners is possible. This product is recommended for use in floor care.
AE 1126	HS acrylate dispersion	62 in water	5.5-6.5	0	100 – 1.000	AE 1126 allows the formulation of clear caulks with an outstanding combination of rheology, adhesion and high solids using a single dispersion, with outstanding characteristics: - high-elastic and transparent in thick layers, TG = 8°C.
AE 1276	Metal salt-anionic acrylate solution	27 in water	8.0-9.0	-	max. 200	For producing water resistant polymer films with high scratch resistance. Re-removability of the films alkaline cleaner is possible without residue.

VaraMul AE; Acrylic resins, waterbased dispersions, solutions

Product	Monomer	Supply Form [%]	pH value	MFFT [C°]	Viscosity [mPa.s]/20°C	Main uses and characteristics
AE 1225	Anionic pur-acrylic emulsion	50 in water	8.5-9.0	14	1.600 – 2.400	For the production of emulsion paints in indoor and outdoor with broad compatibility with pigments and fillers, good gloss, water and alkali resistance, flexible and blockproof in balanced measure.
AE 1298	Very finely dispersed acrylate dispersion	30 in water	4.5-5.5	-	max. 300	AE 1298 is due to its low particle size in particular dimensions for the production of plaster depths. For the formulation of a ready-to-use base, we recommend the setting a solid of about 15%. The weather and saponification stability of the solvent-free dispersion enables the outdoor use.
AE 1271	Hard methacrylate copolymer dispersion	50 in water	7.5-8.5	95	500 – 3.000	Very hard polymer for improving the surface properties in water-based paint systems.
AE 1273	Methacrylat Copolymer Dispersion	52 in water	7.0-8.0	13	max. 300	A binder for the production of cementitious coatings as well as tile adhesives and building adhesives. It is characterized by high initial adhesion and fast setting. Excellent alkali and cement compatibility and high flexibility.
AE 1274	Cationic acrylic dispersion	36 in water	4.0-5.0	9	max. 500	AE 1274 is particularly suitable for the production of colorless and pigmented primers on wood for the isolation of soluble wood ingredients with excellent barrier effect and very good water resistance.
AE 1241	Aqueous pure acrylate dispersion	45 in water	7.0-8.0	13	max. 1.000	For the formulation of aqueous wood and furniture lacquers with good resistance against household chemicals.
XK-4498	Pure acrylic dispersion	45 in water	7.0-8.5	<1	max. 500	Self-crosslinking pure core-shell dispersion that incorporates excellent block and alkaline resistance and extraordinary wet adhesion with minimal water absorption. The product displays early water resistance and very good weathering, as well as a non-yellowing elastic film. This emulsion shows excellent adhesion to difficult substrates such as metals, DTM and plastics. This emulsion is APEO free.
AE 1219	Cationic acrylic copolymer dispersion	38 in water	4.5-5.5	15	max. 500	For the production of colorless and pigmented primers on wood for the isolation of soluble wood ingredients with excellent barrier effect and very good water resistance.
AE 1340	A super hydrophobic acrylic dispersion	47 in water	7.0-8.0	16	700 – 3.000	Self-crosslinking super hydrophobic acrylic dispersion for anti-corrosive paints, DTM, stain locking, and adhesion promoted two phase acrylic dispersion with low MFFT combined with high surface hardness, less VOC demand in formulations, fast drying and high blocking resistance, high level of elasticity and fast sandability.



VaraHydrol; Acrylic resins, waterbased, containing hydroxyl groups

Product	Solvent	Solid [%]	pH value	OH-Value [%]	Viscosity [mPa.s]/20°C	Main uses and characteristics
AOH 9530	Water / solvent blend	44	7.0 - 9.0	3.0	max. 6.000	Water emulsified hydroxyacrylate for the production of exterior resistant isocyanate crosslinked two component topcoats with outstanding drying properties
AOH 9540	Water / solvent blend	45	7.0 - 9.0	4.1	max. 25.000	For the production of isocyanate crosslinked exterior resistant two component top coats with exhibit long potlife, high gloss and good adhesion properties.
AOH 9542	Water / propylenglycol-n-butylether / S100	45	7.0 - 8.5	4.1	max. 6.000	VaraHydrol AOH 9542 is a water-emulsified hydroxyacrylate for the preparation of isocyanate-cured, exterior-resistant 2K topcoats, characterized by long pot life,.
AOH 9560	Water / Butylglycol / KW 155-180	43	7.0 - 9.0	6.0	max. 8.500	Water emulsified hydroxyacrylate for the production of exterior resistant isocyanate crosslinked two component topcoats, aircraft coatings, with outstanding drying properties, film hardness and gloss. Good adhesion properties and resistance to Skydrol (Solutia) and mark brake fluid.
AOH 9533	Water	42	7.0 - 9.0	3.3	<2.000	VaraHydrol AOH 9533 is a water-emulsified hydroxyl acrylate for the preparation of isocyanate-curing two component topcoats which exhibit long pot-life and good adhesion properties.
AOH 9504	Water / EEP Butylglycol	45	7.0 - 9.0	4.1	<6.000	A water-emulsified hydroxyl acrylate for the preparation of isocyanate-curing 2K furniture lacquers.
AOH 9587	Water / Butylglycol / S100	43	7.0 - 9.0	6.0	<8.500	Water emulsified hydroxyacrylate for the preparation of isocyanate-crosslinked skydrol-resistant 2K topcoats, which have a long pot life, high gloss, good adhesion.
AOH 9543	Water / butylglycol / EEP	45	7.0 - 9.0	4.1	<20.000	For the preparation of isocyanate-cured, exterior-resistant 2K topcoats, which are characterized by a long pot life, high distinguish gloss and good adhesion properties.
AOH 9531	Water	45	7.0 - 9.0	3.0	<2.000	Water-dispersed hydroxyacrylate for the preparation of isocyanate-cured 2K topcoats, characterized by long pot life, good adhesion properties and high UV resistance.
AOH 9529	Water	45	7.0 - 9.0	3.0	<1.000	VaraHydrol AOH 9529 is an acrylic polyol emulsion designed for 2K and for 1K stoving systems. It can be used for plastic and metal applications.
AOH 9525	Water	45	7.0 - 9.0	2.5	<2.000	Water-dispersed hydroxyacrylate for the preparation of isocyanate-cured 2K topcoats, characterized by long pot life, good adhesion properties and high UV resistance.
AOH 9515	n-Butanol	50	7.0 - 9.0	1.5	900 – 1.200	For use in low bake stoving system with amino resin, used in application industrial coatings.
AOH 9526	Water	42	7.0 - 9.0	2.5	max. 2.000	A water emulsified hydroxylated for the production of isocyanate crosslinked two component topcoats.
AOH 9518	W/BG/BA	47	7.0 - 9.0	1.8	max. 25.000	A water-emulsified hydroxyl acrylate for the preparation of 2K-PU furniture and wood lacquers and topcoats.
AOH 9541	W/BG/S100	45	7.0 - 9.0	4.1	max. 25.000	A hydroxy-functional, aqueous acrylate resin for the production of high quality, aqueous wood and furniture varnishes, topcoats.
AOH 9544	Water	42	7.0 - 9.0	4.2	max. 2.000	For the production of isocyanate cross-linked two component topcoats which exhibit long pot-life.
AOH 9545	Water / EEP butyl acetate	58	6.0 - 9.0	4.2	8.000 - 20.000	For the manufacture of outdoor resistant topcoats.

VaraLan; Polyurethane- / epoxy silan-curable, dispersions acrylic resins

Product	Monomer	Supply Form [%]	pH value	Tg [°C]	Viscosity [mPa.s]/20°C	Main uses and characteristics
KX-4499	Hydroxyl Functional Cationic Acrylic	29 – 31 in water	5.0-6.0	32	300 – 800	KX-4499 is a polymer for water-based paint and coatings for exterior concrete. Some applications these are best used on are parking lots, surrounding pool areas, and garage paint. This polymer will crosslink at room temperature with polyisocyanates and epoxy silanes (Epoxy Silane Z-6040). The ambient dried film will have excellent resistance to solvents, such as, MEK, Acetone and IPA. Detergents and cleaners will not remove this film. Water resistance is excellent. The dried film will also resist staining.
KX-4470	Hydroxyl Functional Cationic Acrylic	37 – 39 in water	5.0-6.0	32	500 – 1.500	Hydroxyl functional cationic acrylic emulsion Polymer. This polymer will crosslink at room temperature with polyisocyanates and epoxy silanes. The fastest and most resistant coating can be formulated with the combination of a polyisocyanate and an epoxy silane.
KX-4463	Hydroxyl Functional Cationic Acrylic	39 – 41 in water	5.0-6.0	38	500 – 1.500	This polymer will crosslink at room temperature with polyisocyanates and epoxy silanes (Epoxy Silane Z-6040). The ambient dried film will have excellent resistance to solvents, such as, MEK, acetone and IPA. Detergents and cleaners will not remove this film. Water resistance is excellent. The dried film will also resist staining. OH= 65-80%)
KX-4672	Hydroxyl Functional Cationic Acrylic	39 – 41 in water	5.0-6.0	10	500 – 1.500	Hydroxyl functional cationic acrylic emulsion Polymer. This polymer will crosslink at room temperature with polyisocyanates and epoxy silanes. The fastest and most resistant coating can be formulated with the combination of a polyisocyanate and an epoxy silane.



VARALan

ACRYLIC EPOXY URETHANE DISPERSIONS



VaraLan

ACRYLIC DISPERSION COPOLYMER

EPOXY SILAN CURABLE

VaraCor special acrylic dispersions for household chemicals, shoe care products, floors, etc.

Polymer dispersions - acrylic film formers

Ready-made concentrates for polishes

Self-emulsifying waxes



VaraCor; Special acrylic resins, waterbased dispersions

Product	Monomer	Supply Form [%]	pH value	Tg [°C]	Viscosity [mPa.s]/20°C	Main uses and characteristics
WA 7303	Metal free, alkali soluble emulsion of a high molecular weight acrylic resin	40 in water	2.0-4.0	67	max. 200	Excellently suited as a component for improving the levelling of dry bright emulsions. The product can also be used for the manufacture of clear polishes with medium and high polymer content and as an additive for increasing the hardness of the dry residue.
WA 7330	High molecular acrylic	30 in water	7.5-8.5	49	300 – 700	WA 7330 has been particularly useful as a mesh resin and to improve the course the production of care and cleaning agents based on polymer dispersions proven, good flow properties and high gloss.
WA 7402	Acrylic copolymer dispersion	38 in water	7.2-7.8	-	max. 200	WA 7402 is a soft dispersion that works great as a binder for leather coatings and shoe polish has proven. Leather and shoe coatings based on WA 7402 have a very good water resistance, but are still permeable to water vapor.
WA 7516	Acrylic copolymer dispersion	45 in water	6.5-9.5	-	max. 300	WA 7516 has proven itself as a mixed polymer in leather preparation. The addition of WA 7516 reduces in polishable and non-polishable systems the surface smoothness.
WA 7570	Acrylic copolymer dispersion	41 in water	7.0-8.0	-	max. 300	WA 7570 is used in cosmetic products as a film former. This product is listed in the following registers: United States E.P.A., TSCA Inventory and Cosmetic, Toiletry and Fragrance Association Cosmetic Ingredient Dictionary (CTFA). MFT / 18 °C.
WA 7530	Hard methacrylate copolymer dispersion	40 in water	5.0-6.0	-	max. 200	WA 7530 is ideal as a polymer component for the formulation of carpet shampoos.
WA 7587	PUR anionish acrylic dispersion	40 in water	8.2-8.8	-	max. 200	WA 7587 is ideal as a polymer component for the production of hard floor coatings, hard polymer body and excellent water resistance.
WA 7360	Styrene copolymer	14 in water	8.0-9.5	-	max. 500	WA 7360 is particularly suitable for the production of floor care products as an additive for improving wetting and leveling properties, especially when good alcohol resistance is required.
WA 7711	PUR cationic acrylic dispersion	26 in water	approx. 5	-	300 – 800	Good compatibility with cationic systems.
WA 7799	Styrene acrylic dispersion, with metal	38 in water	8.1-9.1	-	max. 300	WA 7799 is outstandingly suitable for the production of highly polymer-containing self-shining emulsions and wiping agents with good detergent resistance and very good durability. It is particularly suitable for the production of high-speed polishable coatings. The care films of this product are characterized by their lightness removability with alkaline cleaners.
WA 7292	Styrene acrylic copolymer dispersion, Containing metal salt	40 in water	8.5-9.1	-	max. 200	For production of high gloss Self-gloss emulsions with very good mechanical properties and detergent resistance. In combination with waxes and possibly acrylate resins, such. B. WA 7301, leave with WA 7292 also very good formulations in the high - speed range create.
WA 7301	High molecular acrylic	25 in water	8.0-9.0	67	max. 800	WA 7301 is ideal as a blending component to improve the Course of self-shine emulsions. The product can also be very good for the production of medium wipes and high polymer content and as an additive to increase the hardness of the dry residue be used.
WA 7272	Styrene acrylic copolymer dispersion, Containing metal salt	40 in water	8.0-9.0	-	max. 300	WA 7272 is mainly used in the application of floor care products, large consumers, e.g. authorities or hospitals, proven. This product has exceptionally good resistances, e.g. against alcoholic cleaner, and is therefore suitable for "high-speed" polishing.





VARAMul

ADVANCED WATERBORNE ACRYLIC DISPERSIONS



VaraThix



VARACOR

ACRYLIC EMULSION



VaraHydrol

ADVANCED WATERBORNE ACRYLIC POLYOL



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