



ART EPOXY RESIN

Slow-curing, very good lightfast epoxy-doming system

ART EPOXY RESIN is a glass-clear, largely crystallization-resistant, very light-colored and very good lightfast epoxy resin system for many applications in the coating sector.

Maximum layer thickness approx. 1 mm. This system cures tack-free even in the thin layers at 20°C.

Product specification

- transparent 2-component-epoxysysteme
- long potlife, medium viscosity
- solvent- and phenol-free
- curing range +20°C to +60°C
- impact- & scratch resistant, high glossy surface
- repeatedly grind- and polishable
- very good chemical resistance and mechanical properties

Properties of resin / hardener

	ART EPOXY RESIN (resin)	ART EPOXY RESIN (hardener)	remarks
Density [g/cm³]	1,132 - 1,152	1,026 - 1,046	20°C
Viscosity [mPas]	2.500 - 6.000	3.000 - 4.000	25°C
Mixing ratio	100	55	by weight
Storage [°C]	+15 to +25°C		
The specified mixing ratio must be observed as accurately as possible. Deviations cause an unbalanced curing process with possibly unsatisfactory results.			

Preliminary datasheet - products under development

Application

ART PRO EPOXY RESIN			remarks
Material-temperature	[°C]	+20-23°C	
Ambient temperature	[°C]	+20-23°C	
Substrate temperature	[°C]	+20-23°C	
Rel. air humidity	[%]	< 85	
Potlife (100 g mixture / 23°C)	[minutes]	40 ~ 60	material temperature 23°C
Viscosity of mixture	[mPas]	4.200 - 6.000	at 25°C
Firm to grip	[h]	~ 7 - 8	at 23°C
Max. waiting period before next coating without sanding**	[h]	24 h	
Mechanically workable after	[days]	2	at 23°C curing-temperature
Chemically loadable after	[days]	7	
Thermally resistance	[°C]	~ 55°C	after curing 23°C/14 days
Surface Hardness, thickness 5 mm Hardness tester Kern/Sauter HBD 100-0, cone 30°, Testparameters: 5 kg compression-load 15 seconds (similar to DIN ISO 7619-1)	[Shore D, ± 2]	70	after 24 h / 23°C
		80	after 48 h / 23°C
		test is running	after 7 days / 23°C
Lower layer thickness and / or lower curing temperatures provoke longer curing times and slower increase of the surface hardness. The values given are average results and may vary depending on the processing method and curing conditions. It is essential to protect surfaces from moisture (dew, condensation water), dust etc. during the curing time. **Longer cured surfaces must be sanded to ensure optimum adhesion properties before over-coating.			

Consumption

Coating-system	approx. 1,15 - 1,20 kg per m ² for a layer-thickness of 1 mm
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Packing (2-component-pack)

ART EPOXY RESIN (Resin)	645 g	1290 g	2580 g	
ART EPOXY RESIN (Hardener)	354 g	710 g	1420 g	

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Storage

Store at dry condition at +20°C to +25°C. Shelf life is one year when stored in original closed containers. Keep packages tightly closed after withdrawal.

The resin is sensitive to cold storage and/or transport temperatures below +10°C. Fogging and highly visible turbidity up to crystallization may occur. Please check the resin before processing if totally transparent.

Regeneration without loss of quality can be achieved by heat treatment. Regenerate the resin ideally at approx. +55°C in the delivered packing over a period of 24 hours. Open the cap slightly to allow pressure equalization. After the cooling down to room-temperature work with the resin as usual.

The hardener tends to carbamate under the influence of oxygen and/or high humidity. Crystallized hardener is not regenerable. The hardener must be disposed in a safe way. Always close can well after use.

Safety advises

Epoxy-resins and -hardeners are rated & labelled according to REACH-, CLP/GHS-regulations. Please note the danger-signs and safety-advises on the product-label and the statements in the relevant material-safety-data-sheet (MSDS).

Disposal of product residues and containers

Liquid materials and containers have to be disposed in a safe way (hazardous waste) - observe local regulations. Avoid subsoil penetration. Prevent product from entering drains.

All information complies with our current state of knowledge and experience. Technical data are average values, determined under lab-usual conditions, which represent no warranty of fitness for a special purpose and constitute no legal relationship. The technical data do not correlate compulsively with results determined at the finished part. The user is responsible to ensure the required results regarding the intended application purpose. Our information does not relieve the user from the obligation to implement application-, performance and load-tests (mechanical & chemical) in view to the practical suitability of the manufactured part.

Manufacturing methods and raw materials are adjusted to the current state of the technology continuously, respectively to statutory toxicological regulations.

Compliance with national and local regulatory requirements in connection with the use and processing of these products is solely in the user's responsibility.

Furthermore, our general sales- & delivery conditions are valid in any case.
