WE INVEST

IN CAPACITY AND QUALITY.

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Epilox® EPOXY RESINS

Epilox® REACTIVE DILUENTS

Epilox® HARDENERS

Epilox® systems
Binders for paints and coatings
PRODUCT CATALOGUE

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Epilox® SYSTEMS:

PROVEN, SUCCESSFUL, INNOVATIVE.

Epilox® PRODUCT OVERVIEW

Epilox® Epoxy Resins

Epilox® epoxy resins are manufactured from bisphenols and epichlorohydrin. Epoxy resins react with compounds containing amino, mercapto, acid anhydride, isocyanate, phenolic and carboxylic acid groups. Cured epoxy resins are thermosets with outstanding physical properties and exhibit excellent chemical resistance.

Epilox® Reactive Diluents

Reactive diluents are low-viscosity glycidyl ethers of aliphatic alcohols and alkylphenols. They are mainly used for diluting high-viscosity epoxy resins based on bisphenols and novolacs. The use of reactive diluents improves properties such as processing viscosity, pot life and wettability of pigments or additives.

Epilox® Hardeners

Epilox® hardeners from LEUNA-Harze GmbH are mainly polyamines, polyaminoamides and polyamine adducts based on aliphatic and cycloaliphatic amines. The choice of a suitable hardener has a critical effect on the final properties of cured resins.

Development of product solutions

Our development and application technology department helps you to find solutions for your specific problems. Please contact us if you are looking for a special resin or a special hardener.

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Epilox® EPOXY RESINS:

1. UNMODIFIED LIQUID RESINS

Product	Epoxy equivalent weight (g)	Viscosity at 25 °C (Pa·s)	Description	Applications
Epilox® A 18-00	175–185	8–10	Bisphenol A resin, low viscosity	General purpose epoxy resin
Epilox® A 19-00	182–192	9–13	Bisphenol A resin, medium viscosity	General purpose epoxy resin
Epilox® A 19-02	185–200	14–18	Bisphenol A resin, higher viscosity, reduced crystallization tendency	General purpose epoxy resin
Epilox® A 19-03	182–192	10–14	Bisphenol A resin with reduced content of saponifiable chlorine	Potting and sealing in electrical and electronic applications
Epilox® A 19-04	184–189	12–15	Bisphenol A resin with reduced content of saponifiable chlorine	Potting and sealing in electrical and electronic applications, cataphoretic paints
Epilox® F 17-00	165–173	2,5–4,5	Bisphenol F resin	Solventless coatings, construction
Epilox® T 19-27	175–185	6–8	Bisphenol A/F resin, crystallization-resistant	Potting, solventless coatings, construction
Epilox® AF 18-50	173–183	5–7	Bisphenol A/F resin, crystallization-resistant, reduced viscosity compared to Epilox® T 19-27	Potting, solventless coatings, construction
Epilox® AF 18-30	170–180	4–6	Bisphenol A/F resin, crystallization-resistant, reduced viscosity compared to Epilox® AF 18-50	Potting, solventless coatings, construction
Epilox® A 17-01	171–176	max. 6	Bisphenol A resin (high-purity resin)	Potting and sealing in electrical and electronic applications
Epilox® F 16-01	157–167	1,2–1,6	Bisphenol F resin (high-purity resin)	Potting and sealing in electrical and electronic applications

Epilox® EPOXY RESINS:

2. SOLID RESINS

Product	Epoxy equivalent weight (g)	Viscosity at 25 °C (mPa·s)	Description	Applications
Epilox® A 50-02	450–500[1)]	5–10[2)]	Bisphenol A resin	Industrial and powder coatings
Epilox® A 85-02	800–900[1)]	20–40[2)]	Bisphenol A resin	Industrial and powder coatings

[1)] Other limits and delivery in solutions are available on request.
[2)] 40% solution in methyl ethyl ketone.

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Epilox® EPOXY RESINS:

3. MODIFIED EPOXY RESINS[1)]

Product	Epoxy equivalent weight (g)	Viscosity at 25 °C (Pa·s)	Description	Applications
Epilox® T 19-32/700	165–180	0,5–0,9	Bisphenol A resin, difunct. reactive diluent	Solventless coatings
Epilox® T 19-32/1000	170–185	1,0–1,3	Bisphenol A resin, difunct. reactive diluent	Solventless coatings
Epilox® T 19-34/700	165–180	0,5–0,9	Bisphenol A/F resin, difunct. reactive diluent, crystallization-resistant	Solventless coatings, high filler levels
Epilox® T 19-35/500	165–180	0,4–0,7	Same as Epilox® T 19-34/700, reduced viscosity, crystallization-resistant	Solventless coatings, high filler levels
Epilox® T 19-36/700	190–210	0,65–0,75	Same as Epilox® T 19-36/1000, reduced viscosity	Solventless coatings, high filler levels
Epilox® T 19-36/1000	190–210	1,0–1,3	Bisphenol A resin, monofunct. reactive diluent	Solventless coatings
Epilox® T 19-38/500	180–200	0,45–0,55	Bisphenol A/F resin with reduced viscosity, monofunct. reactive diluent, crystallization-resistant	Solventless coatings, high filler levels, injection resin
Epilox® T 19-38/700	180–200	0,5–0,9	Bisphenol A/F resin, monofunct. reactive diluent, crystallization-resistant	Solventless coatings, high filler levels
Epilox® T 19-38/1000	180–200	0,9–1,05	Bisphenol A/F resin, monofunct. reactive diluent, crystallization-resistant	Solventless coatings

[1)] Other limits are available on request.

Epilox® EPOXY RESINS:

4. PAINT RESINS

Product	Epoxy equivalent weight, solids (g)	Viscosity at 25 °C (Pa·s)	Description	Applications
Epilox® L 50-54	450–500	7–11	Bisphenol A resin, 75% solids in xylene	Solvent-based coatings
Epilox® L 25-80	230–265	0,6–0,9	Bisphenol A resin, 80% solids in xylene	Solvent-based coatings, high-solids paints
Epilox® M 1032	approx. 405	1,7–2,3	Modified bisphenol A resin, 75% solids in xylene	Solvent-based coatings, high-solids paints

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Epilox® EPOXY RESINS:

5. FLEXIBILIZING EPOXY RESINS

Product	Epoxy equivalent weight (g)	Viscosity at 25 °C (Pa·s)	Description	Applications
Epilox® TE 19-50	240-270	3–5	Modified bisphenol A resin, considerable flexibilization	Crack-bridging coatings
Epilox® E 50-20	420-480	10–16	Araliphatic polyether, contains epoxy groups	Flexibilizer, modifying agent

Epilox® EPOXY RESINS:

6. EPOXY RESIN FOR CHEMICAL RESISTANCE COATINGS

Product	Epoxy equivalent weight (g)	Viscosity at 25 °C (Pa·s)	Description	Applications
Epilox® M 1049	190–210	3–5	Modified, solventless bisphenol F resin	With Epilox® hardener H 10-69 for chemical-resistant coatings

Epilox® REACTIVE DILUENTS:

7. REACTIVE DILUENTS

Product	Epoxy equivalent weight (g)	Viscosity at 25 °C (mPa·s)	Description	Applications
Epilox® P 13-16	210–240	2–6	Monoglycidyl ether of 2-ethylhexanol, very good dilution effect	Floorings, concrete repair, general-purpose diluent
Epilox® P 13-18	270–305	5–10	Monoglycidyl ether of C_{12}-C_{14} alcohol, good dilution effect, weak flexibilization	Floorings, concrete repair, general-purpose diluent
Epilox® P 13-19	285–315	5–15	Monoglycidyl ether of C_{13}-C_{15} alcohol, good dilution effect, weak flexibilization	Floorings, concrete repair
Epilox® P 13-20	140–160	15-25	Diglycidyl ether of 1,6-hexanediol, low volatility	Floorings, concrete repair, general-purpose diluent
Epilox® P 13-21	125–145	12–22	Diglycidyl ether of 1,4-butanediol	Laminates, concrete repair, electrical applications
Epilox® P 13-30	140–160	130–200	Triglycidyl ether of trimethylolpropane	Solventless coatings, laminates, adhesives, casting resins
Epilox® P 13-31	130–140	100–150	Triglycidyl ether of trimethylolpropane	Solventless coatings, laminates, adhesives, casting resins
Epilox® P 13-42	310–350	40–70	Diglycidyl ether of polyoxypropylene glycol, flexibilizing	Coatings, electrical applications
Epilox® M 985	425–500	40–90	Diglycidyl ether of polyoxypropylene glycol, flexibilizing	Coatings, electrical applications

Epilox® HARDENERS:

8. EPOXY-AMINE ADDUCTS AND BLENDS

Product	Description	Amine equivalent weight (g)	Viscosity at 25°C (mPa·s) DIN 16 945	Colour (Gardner) DIN ISO 4630	Pot life T_{max} with Epilox® T19-34/700 (100 g, 23 °C) min	°C	Gel times (25 °C) with Epilox® T19-34/700 (min) DIN 16 945 (A)	Surface properties (standard conditions)	Applications
Epilox® hardener H 10-30	Modified cycloaliphatic amine adduct	93	200–300	max. 2	25	150	120	very good	Higher reactivity compared to Epilox® hardener H 10-33
Epilox® hardener H 10-31	Modified cycloaliphatic amine adduct	112	400–600	max. 2	50	130	180	very good	General-purpose hardener, low yellowing tendency
Epilox® hardener H 10-32	Modified cycloaliphatic polyamine	85	15–20	max. 2	60	150	210	good	Low viscosity, high filler levels, nonylphenol-free coatings
Epilox® hardener H 10-33	Modified cycloaliphatic amine adduct	93	80–120	max. 2	40	150	180	very good	Mix ratio with Epilox® T19-38/700 = 2 : 1 (pbw resin : hardener)
Epilox® hardener H 10-34	Modified cycloaliphatic amine adduct	93	70–120	max. 1	35	140	170	very good	Low yellowing tendency
Epilox® hardener H 10-36	Modified cycloaliphatic polyamine	85	40–60	max. 2	25	160	120	good	Higher reactivity compared with Epilox® hardener H 10-32, nonylphenol-free coatings
Epilox® hardener H 10-41	Modified cycloaliphatic amine adduct	93	70–120	max. 2	35	160	180	very good	General-purpose hardener, nonylphenol-free coatings
Epilox® hardener H 10-69	Amine adduct	46	20–40	max. 3	30[1)] 25	150[1)] 150	90[1)]	good	Special hardener for Epilox® M 1049, for chemical-resistant and nonylphenol-free coatings
Epilox® hardener M 989	Modified amine adduct	63	200–300	max. 2	75	155	200	good	Nonylphenol-free coatings, mix ratio with Epilox® T19-38/700 = 3 :1 (pbw resin : hardener)
Epilox® hardener M 1128	Modified amine adduct	93	290–340	max. 2	25	175	130	very good	Nonylphenol-free coatings, mix ratio with Epilox® T19-38/700= 2 :1 (pbw resin : hardener)
Epilox® hardener M 1131	Modified amine adduct	94	120–240	max. 2	25	160	165	very good	Nonylphenol-free coatings, mix ratio with Epilox® T19-38/700= 2 :1 (pbw resin : hardener)

[1)] With Epilox® M 1049.

Epilox® HARDENERS:

9. WATERBORNE HARDENERS

Product	Description	Amine equivalent weight, delivery form (g)	Viscosity at 25 °C (mPa·s) DIN 16 945	Colour (Gardner) DIN ISO 4630	Pot life to T_{max} with Epilox® A 19-02 (100 g, 23 °C)		Processing time to diluted resins at 25 °C (min)	Surface properties (standard conditions)	Applications
					min	°C			
Epilox® hardener M 715	Modified polyamine adduct, 56% in water	185	1500–2500	max. 2	–	–	approx. 45	very good	Emulsifying hardener for water-dilutable paints and coatings, curing down to +10 °C
Epilox® hardener H 12-01	Polyaminoamide, 50% in water	210	13000–23000	max. 12	–	–	approx. 45	good	Emulsifying hardener for water-dilutable paints and coatings, curing down to +10 °C

Epilox® HARDENERS:

10. POLYAMINOAMIDES

Product	Description	Amine equivalent weight, delivery form (g)	Viscosity at 25 °C (mPa·s) DIN 16 945	Colour (Gardner) DIN ISO 4630	Pot life to T_{max} with Epilox® A 19-02 (100 g, 23 °C)		Gel times (25 °C) with Epilox® A 19-02 (min)	Surface properties (standard conditions)	Applications
					min	°C			
Epilox® hardener H 10-25	Polyaminoamide, 70% in xylene	340	440–1200	max. 8	› 8 h	–	–	very good	Hardener for coatings and paints, curing down to +10 °C



Epilox® SYSTEMS:

IDEAL FOR YOUR APPLICATIONS.

Our **Epilox®** systems are suitable for a wide range of applications and they are used in more and more innovative products, such as wind power plants, vehicle laminated springs, boat hulls, airplane parts, industrial floorings, building adhesives and electrical/electronic applications.

Epilox® systems are used as binding agents:

- in coatings, adhesives and injection products for the construction sector
- for corrosion protection systems in the paint industry
- in fibre-reinforced plastics
- as casting, bonding and laminating resins in the electrical industry

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Epilox® SYSTEMS:

PACKAGE SIZES AND TERMS OF DELIVERY.

We supply Epilox® products in the following package sizes:

- Drum, 200 litres
- IBC, 1000 litres
- Road tanker

Please note:

Our technical advice is based on current knowledge. It does not release you from the obligation to test the products supplied by us as to their suitability for the intended processes and uses. The application, use and processing of the products are beyond our control and therefore entirely the customer's responsibility. We guarantee the quality of our products in accordance with our General Conditions of Sale and Delivery.

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