



Curing Agents

epoxa us™ 25-01

Description

epoxa us™ 25-01 curing agent is a aliphatic amine based compound engineered to create a high gloss, transparent, glass-like coating intended for decoupage, art and hobby applications. It can be used as an encapsulator, an adhesive and for any other purpose where a thin or thick clear layer is required. The formulation allows to modify the mixing ratio to obtain defferent flexibility levels from completely hard to very flexible.

Applications

- * Decoupage
- * Glaze and high build coatings
- * FRP
- * Encapsulation
- * Casting compounds

Key Features and Benefits

- * Low Color
- * Provides blush free coatings
- * Sweat-out free films
- * Mixing ratio controls flexibility
- * Positive cure at room temperature

Sales Specification

Property	Units	Value	Test Method/Standard
Primary Amine % of total	%	97	ST 5.34
Viscosity at 25°C	cST	10.5	
Color	Visual	Transparent	ASTM D1544

Typical Properties

Property	Units	Value	Test Method/Standard
Equivalent weight, approx.		61	
Density @ 25 °C	lbs/gal	7.9	ASTM D1475

25-01

Flash point	°C	>123	PMCC
Appearance		Transparent	
Mix ratio with			
EEW 188-192 epoxy	phr	25-75	

Performance Properties

Properties of epoxa us 25-01 curing agent

Components	Method	Units	Value
epoxa us 25-01		pbw	50
epoxa us 1600-01 epoxy		pbw	100

Mix part A thoroughly with part B for 5 minutes and transfer to another clean mixing cup to avoid any potential unmixed material to affect the final look and properties of the system. Bubbles will normally disappear by themselves and hot air can be used to get rid of stubborn ones although not necessary under normal conditions.

Handling Properties

25°C

Viscosity, Mixed		P	70-90
Peak Exotherm film / in mass (250gr)		°C	65 / 110
Pot life, 250 g, 25 °C		min	7

Cured Properties

Heat Deflection Temperature	ASTM D648	°C	53
Tensile Strength	ASTM D638	psi	7,249
Tensile Elongation		%	19

Physical Properties

Percent of solids in epoxa us 25-01			100
-------------------------------------	--	--	-----

Results will vary depending on several factors. High humidity could affect finish, bad mixing will affect the project because the system cures only when mixed and not with air.

Surface texture or absorption could play a part in final results.

Small tests are recommended to obtain desired results.

Not recommended for below 45f application.

Curing times depend on temperature and mass (quantity of product mixed) higher temperature, faster curing, more mass, faster curing.

Thin film

Pot life at 25 °C	minutes	7
-------------------	---------	---

Dry times

Dust-free	hours	2-3
Tack-free	hours	2-3
Through-cure	hours	4-6

250 gr mass

Pot life at 25 °C	minutes	7
-------------------	---------	---

Dry times

Gel Time	minutes	17
Cure	minutes	30-60
Final Properties	days	3-5

Resistance to Chemicals

epoxa us curing agent 25-01 when used with epoxa us resin 1600-01 or 1679-01 exhibits great resistance to general chemicals and light acids. Impermeability is one of it's properties although submerging in water for long periods of time is not recommended.

The system is intended for indoor use, direct sunlight will damage the transparency with time and make it yellowish, away from direct sunlight it will retain the transparency and last for many years.

Pigmentation

epoxa us 25-01 curing agent when used with epoxa us 1600-01 or 1679-01 epoxy resin can be pigmented with different minerals to achieve desired color. Some types of acrylic copolymer liquid pigments can be used as some types of paint coloring. These pigments are usually applied to the resin part of the system prior to mixing with the curing agent.

Encapsulation

Encapsulating artifacts of any kind is easy with the system and should not required any special tools or preparations, just mix the desired amount of resin and hardener in the desired ratio to achieve preferred flexibility and pour. If using a mold this should have some type of releasing agent like epoxa us 707-01 or other types available to avoid adherence of the resin to the mold.

epoxa us 1679-01 / 25-01 system will adhere very strongly to steel, glass, wood, concrete, glass fiber, carbon fiber, aluminium and almost any type of surface that is clean of contaminants.

This system is also used in the electric and electronic industries as an insulator to achieve dielectric results in machinery of all types.

Storage, Handling and Safety

Please read and understand the latest MSDS before using epoxa us 25-01

Please refer to epoxa us website for more information on shelf life.

Exposure to these materials should be minimized and avoided, if feasible, through the observance of proper precautions, use of appropriate engineering controls and proper personal protective clothing and equipment, and adherence to proper handling procedures. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheet (MSDS) for these and all other products being used are understood by all persons who will work with them. Questions and requests for information on epoxa us incorporated products should be directed to your epoxa us sales representative. Information and MSDSs on non epoxa us products should be obtained from the respective manufacturer.

Packaging

Available in gallon and drum quantities.

Contact Information

For product prices, availability, or order placement, MSDS and technical help please contact us.

www.epoxaus.com

® and ™ Licensed trademarks of epoxa us incorporated

Disclaimer

The information provided herein was believed by epoxa us incorporated to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. All products supplied by epoxa us are subject to epoxa us terms and conditions of sale. **EPOXA US MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY EPOXA US** except that the product shall conform to epoxa us specifications. Nothing contained herein constitutes an offer for the sale of any product.

9G2211JGHU