



## Anticorrosive epoxy coating

### epoxa us™ 107-01

#### Description

epoxa us™ 107-01 epoxy coating mixed with epoxa us 14-01 curing agent reacts creating a very strong and durable anticorrosive coating, it can be used with fiberglass or carbon fiber and it resists acids, solvents and diverse chemical products. It also exhibits excellent mechanical properties and superb adherence to metals, concrete, wood and other surfaces.

This system can also be used with quartz sand, colloidal silica and other materials to create mixes or mortars with high chemical characteristics.

#### Applications

- \* Metal tank coatings resistant to acids and chemical products
- \* Concrete coatings for water treatment
- \* Coatings for walls, floors, metallic structures
- \* Adhesive for anti-acid tiles
- \* Maintenance and repair

#### Key Features and Benefits

- \* Can be used with selected hardeners
- \* Can be applied with brush or roller if desired
- \* Versatile epoxy compound
- \* Cures at room temperature or faster by applying moderate heat
- \* Can be sanded and recoated for smooth finish

#### Sales Specification

Property	Resin	Curing Agent	Test Method/Standard
Color	Red	Amber	Visual
Viscosity at 25°C cps	1500-2000	5000	
Specific gravity	1.30	1.11	

#### Typical Properties

Property	Units	Value	Test Method/Standard
Vapor pressure 25c (77f)	mm Hg	0.046	
Density @ 25 °C mixed	lbs/gal	12.1	ASTM D1475

Flash point PMCC	° C	>159	D 93
Appearance		semi-viscous liquid	
Mix ratio with 14-01		100 to 50 by weight	

### Selected Curing Agent Properties

	Color Visual	Viscosity 25c 77f cps	Density 25c lbs gall	Shelf life months minimum
<b>epoxa us 14-01 curing agent</b>	Amber	5000-6000	8.1	24
<b>epoxa us 10-01 curing agent</b>	Amber	50-100	8.2	24

**epoxa us 14-01:** Slow cure at room temperature (15c / 59f minimum) or by applying moderate heat. The system allows a variety of fillers to be added to manipulate final characteristics. Silicas of different types and mesh, quartz, barium sulfate and others can be used.

**epoxa us 10-01:** Fast cure at room temperature (0c / 32f minimum) can be mixed in combination with fillers as well and allows faster curing times with a slight decrease in chemical resistance to some chemicals and better to other.

### Handling Properties

Viscosity, Mixed 14-01 / 10-01	cP	3000 / 1500
Peak Exotherm film / in mass (250gr)	°C	76 / 101
Pot life, 250 g, 25 °C	min	35 / 30

### Cured Properties

Heat Deflection Temperature 14-01 / 10-01	°C	573 / 89
Tensile Strength 14-01 / 10-01	psi	7,732 / 8689
Tensile Elongation 14-01 / 10-01	%	3 / 2

### Notes

Results will vary depending on several factors. High humidity could affect bonding, bad mixing will affect results because the system cures only when mixed with it's curing agent and not with air.

Surface contaminants and oils could play a part in final properties if not cleaned.

Small pre-tests are recommended to obtain desired properties.

Not recommended for below 35f application.

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

If used with epoxa us 10-01 this system will cure 50% faster than when used with other curing agents. Fibers or surfaces to be saturated should be contaminant free and ready before mixing occurs. Very strong adhesions can be obtained with any hardener choice and excellent final properties and ease of use make this system one of the most popular among different industries.

## Curing

epoxa us resin 107-01 used with epoxa us curing agents 14-01 and 10-01 curing times:

**epoxa us 10-01:** 10-20 hours at 25c 77f or 4 hours at 60c 140f.

**epoxa us 10-01:** 4-6 hours at 25c 77f or 2 hours at 60c 140f.

These hardeners are sensitive to humidity, keep containers closed when not in use and store them in a dry and cool place away from direct sunlight.

## Resistance to Chemicals

epoxa us epoxy resin 107-01 when used with curing agents 14-01 / 10-01 exhibit great resistance to general chemicals and acids. Impermeability is one of its properties although submerging in water or acids for long periods of time is not recommended.

The system is intended for indoor and outdoor use, weather will not damage the product with time and small discoloration may occur after long periods of exposure to direct sunlight for many years.

## Pigmentation

epoxa us 107-01 anticorrosive epoxy resin system or the selected two curing agents 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.

## Preparation

epoxa us 107-01 anticorrosive epoxy system should be mixed as stated before in its container reaching all corners of it to assure proper mixing. Regular preparation may include sanding and degreasing of the surfaces to be bonded.

Some materials like aluminium synthetic rubber or plastics could required a chemical treatment to achieve desired results

107-01

### Storage, Handling and Safety

Please read and understand the latest MSDS before using epoxa us 107-01

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.

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