



SOLVENT FREE AMINE CURED EPOXY REP-321

PRODUCT DESCRIPTION

REP-321 is a modified ultra-high build solvent free two component coating based on epoxy and polyamine resins. This product approved Epoxy solvent free for buried pipes according to standard 10289 from National Iranian South Oil Laboratory. It can be used on steel and concrete substrates and for protection of splash zone of marine structures and external coating system of buried pipe-lines. High impact and abrasion resistance properties make this product suitable for many heavy industrial applications.

When exposed to direct sun light in outdoor service become discolor and decrease of gloss.

GENERAL PROPERTIES

Adhesion	Excellent to Steel and FBE coated surfaces
Corrosion Resistance	Excellent corrosion resistance and superior resistance to cathodic disbandment.

PHYSICAL PROPERTIES

Colors	RAL NO
Finish	Gloss
Volume Solid	98±2%
Theoretical spreading rate	2.45 m ² /liter @ 400 Mic. Dft.
Flash point	90°C
Specific gravity	1.6±0.05 kg/liter
V.O.C.	Max 10 g/l
Shelf life	1 Years (25°C) from time of production. Depending on storage condition, mechanical stirring may be necessary before usage. Storage environment should be ventilated and away from sunlight and high temperature (above 30 ° C).

MIXING

Mixing ratio (by weight)	Component A: 5	Component B: 1
Pot life	30 min (25 °C)	

APPLICATION

Conditions	The temperature of the substrate should be minimum 10°C and at least 3°C above the dew point of the air, temperature and relative humidity measured in the vicinity of the substrate. Good ventilation is usually required in confined areas to ensure proper drying. The moisture content in the concrete should not exceed 4 % (by weight). The coating should not be exposed to oil, chemicals or mechanical stress until fully cured.	
Method	Airless sprays	Brush, Roller (touch-up)
Thinner (max. vol.)	RTH-104 (5%)	RTH-104 (5%)
Pump ratio minimum	45:1	
Tip size	0.023" – 0.027"	
Tip pressure	150 bar / 2100 Psi	
Cleaning of tools	RTH-104	
Indicated film thickness, dry	400-800 microns	
Indicated film thickness, wet	408-815 microns	

DRYING AND CURING TIMES AT (25 °C)

Condition	Drying times are generally related to air circulation, temperature, film thickness and number of coats, and will be affected correspondingly. The figures given in the table are typical with: * Good ventilation (Outdoor exposure or free circulation of air) * Typical film thickness * One coat on top of inert substrate
Dry to touch	4-5 hours
Hard dry	6 hours
Full curing	7 days
Recoat interval, min	8 hours
Recoat interval, max	4 days

APPLICATION AND CURING CONDITIONS

New steel	Steel surface should ideally be abrasive blast cleaning to minimum Sa 2½. The surface must be completely clean and dry prior to application. And its temperature must be at least 3°C above the dew point to avoid condensation.
Concrete	All concrete damaged by exposure to chemicals, contaminated by any substance or unsound in any way, shall be removed to expose sound concrete. Concrete surface preparation by using dust free captive blasting units, grinding equipment, sand blasting or high pressure water jetting is critical to achieving the right surface profile prior to paint application. Contact your RSI office for more information. The coating may be used on other substrates. Surface preparation be done according to SSPC SP13/NACE NO 6 /ASTM D4258 -05 /ICRI TECHNICAL GUIDELINE 03741.
Primed surfaces	The surface must be completely clean and dry at the time of application, and its temperature must be above the dew point to avoid condensation. The surface should be stable, firm, dry and free of dust, sand, loose old paint, dirt, grease and oil. It is recommended to apply mid coat before exceeding maximum interval of primer. For zinc primed surfaces, ensure that the surface is clean, dry and free from any contamination and zinc salts before application.

REMARKS

Film thickness	May be specified in another film thickness than indicated depending on purpose and area of use. This will alter spreading rate and may influence drying time and recoating intervals.
Thinning	The type and amount of thinner depend on application conditions, application method, temperature, ventilation, and substrate. (i) <i>A completely clean surface is mandatory to ensure inter coat adhesion, especially at long recoating intervals. Any dirt, oil, and grease have to be removed, e.g. with suitable detergent.</i> (ii) <i>Salts to be removed by fresh water hosing. To check an adequate quality of the surface cleaning a test patch is recommended before actual recoating.</i>

SAFETY

Handle with care. Before and during use, observe all safety labels on packaging and paint containers, consult RSI material safety data sheets and follow all local and national safety regulations. Harmful or fatal if swallowed; immediately seek medical assistance. Avoid inhalations of possible solvent vapors or paint mist, as well as paint contact with skin and eyes. Apply only on well-ventilated areas and ensure that adequate forced ventilation exists when applying paint in confined spaces or when the air is stagnant. Always take precautions against the risks of fire and explosions.

RSI Co.

Product data sheet REP-321

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