



RSI
INDUSTRIAL
PAINTS Inc.

SOLVENT FREE AMINE-CURED EPOXY (HYGIENIC) REP-323

PRODUCT DESCRIPTION

REP-323 is a two component, solvent free, self-primed, amine cured epoxy coating. It is specially designed for drinking water tanks and pipelines. This product can be used as primer and finish coat in atmospheric, splash zones and immersed environments. Suitable for properly prepared carbon steel, stainless steel, aluminium and concrete substrates, This product manufactured by BS 6920:2014 and ANSI/AWWA standard C210-2015.

GENERAL PROPERTIES

Adhesion	Excellent to prepared carbon steel, stainless steel, aluminium and concrete substrates.
Corrosion Resistance	Excellent corrosion resistance and superior resistance to cathodic disbandment.
Service temperature	Dry film: Up to 80 °C

PHYSICAL PROPERTIES

Colors/Shade No	RAL No, As Required
Finish	Gloss
Volume Solid	99±1%
Theoretical spreading rate	1.25 m ² /liter @ 800 Mic. Dft.
Flash point	90°C
Specific gravity	1.5±0.05 kg/liter
V.O.C.	0 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 volume)	Component A: 2	Component B: 1
Pot life	45 min (25 °C)	10 min (60 °C)

APPLICATION

Conditions	To avoid condensation, apply on a clean and dry surface with a temperature that is at least 3°C above the dew point. Surface temperature must be above 10°C during application and curing. Relative humidity during application should be less than 85%. Good ventilation is usually required in confined areas to ensure proper drying. The coating should not be exposed to oil, chemicals or mechanical stress until fully cured.		
Method	Airless spray	Dual airless spray	Brush, Roller (touch-up): Recommended for small areas.
Thinner	RTH-104 (5%)	No need.	RTH-104 (5%)
Pump ratio minimum	68:1	1:66	
Tip size	0.025" – 0.029"	0.025" – 0.029"	
Tip pressure	200 bar / 2900 Psi	429 bar/6200 psi	
Cleaning of tools	RTH-104 * Painting internal pipeline required Special equipment * The Spray set up depend on the pipe size.		
Indicated film thickness, dry	500-1000 microns		
Indicated film thickness, wet	500-1000 microns		

DRYING AND CURING TIMES

Condition	Drying times are generally related to air circulation, temperature, film thickness and number of coats, and will be affected correspondingly.
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Surface temperature	25 °C
Dry to touch	5 hours
Hard dry	17 hours
Full curing	7 days
Recoat interval, min	8 hours
Recoat interval, max	3 days

APPLICATION AND CURING CONDITIONS

Steel

Prior to blast cleaning, the steel surface shall be dry and free from surface defects (such as slivers and laminations), contamination (such as oil, grease, hydrocarbons and temporary corrosion protection), previously applied coatings and deleterious materials. The preblasting surface preparation processes may be used such as chemical treatment, solvent cleaning, water jetting and use of hand or power tools. These processes shall be approved by purchaser. After blast cleaning the degree of cleanliness shall be SA 2 ½ or better in accordance with ISO 8501-1 and the roughness RZ shall be between 50 - 100 µm as measured in accordance with ISO 8503-5.

The pipe surface shall be maintained at least 3 °C above the dew point temperature and humidity shall not exceed 85% during cleaning and prior to coating.

The maximum residual chloride level on the blast-cleaned surface shall be 20 mg/m² in accordance with BS EN ISO 8502-6. Contaminants (e.g. residual abrasive dust and grit) shall be removed from all blasted surfaces prior to coating application. Dust contamination shall be a maximum of class 2, in accordance with BS EN ISO 8502-3. A tape test shall be conducted to verify that the surface is free of contaminants. Prepared surface shall be visually inspected for surface defects and surface imperfections that may cause holidays in the coating.

After blast cleaning, the surface of the pipe shall be inspected. All slivers, laminations, weld spatters and other surface imperfections made visible by the blast cleaning process shall be removed. After removal of these defects, the residual thickness of pipe shall satisfy the minimum requirements specified by IGS-M-PL-001-2(1) standard.

Aluminium

Abrasive blast cleaning to achieve a surface profile using non-metallic abrasive media which is suitable to achieve a sharp and angular surface profile.

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) *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.*
- (ii) *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.*

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-323

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