



RSI
INDUSTRIAL
PAINTS Inc.

ZINC RICH EPOXY PRIMER REP-111

PRODUCT DESCRIPTION

REP-111 is a two component polyamide cured zinc rich epoxy coating. It is a very high zinc dust containing product. It conforms to the compositional requirements of SSPC paint 20, level 1. It provides very good corrosion protection as part of a complete coating system. To be used as primer in atmospheric environments. Suitable for carbon steel, repair of inorganic zinc silicate coating and damaged galvanised steel substrates.

Standard color availability Manufactured only in metal gray color.

GENERAL PROPERTIES

Adhesion	Excellent to both grit blasted and manually prepared surfaces.
Corrosion Resistance	Excellent on correctly prepared surfaces.
Zinc content in dry film	Min. 85%
Salt spray ASTM B117	1500 hours in single layer

PHYSICAL PROPERTIES

Colors/Shade No	Grey
Finish	Flat-matt
Volume Solid	65±3 %
Theoretical spreading rate	13 m ² /liter at 50 Mic. Dft.
Flash point	27 °C
Specific gravity	2.8±0.05 kg/liter
V.O.C.	Max. 350 gr/liter
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: 10	Component B: 1
Pot life	6 hours (23 °C)	

APPLICATION

Conditions	Do not apply when relative humidity exceeds 80% or when the surface to be coated is less than 3 °C above the dew point.	
Method	Airless sprays	Brush (touch-up)
Thinner (max. vol.)	RTH-104 (10%)	RTH-104(5%)
Pump ratio minimum	30:1	
Tip size	0.015"-0.021"	
Tip pressure	110-150 bar	
Cleaning of tools	RTH-104	
Indicated film thickness, dry	50-80 microns	
Indicated film thickness, wet	80-120 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. 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
Surface temperature	23 °C
Dry to touch	1 hour
Hard dry	3 hours

Full curing	7 days
Recoat interval, min	8 hours
Recoat interval, max	see REMARKS

APPLICATION AND CURING CONDITION

Surface preparation

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 above the dew point to avoid condensation. Optimum performance, including adhesion, corrosion protection, heat resistance and chemical resistance is achieved with recommended surface preparation.

Substrate	Surface preparation	
	Minimum	Recommended
Carbon steel	St 3 (ISO 8501-1)	Sa 2½ (ISO 8501-1)

REMARKS

Subsequent Coat

Epoxy intermediate and Epoxy Top Coat.

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. Normal range is 50-80 microns.

Thinning

The type and amount of thinner depend on application conditions, application method, temperature, ventilation, and substrate. RTH-104 is recommended in general.

Recoating and drying/curing time

Physical data versus temperatures					
Surface temperature		5°C	10°C	23°C	30°C
Dry to touch approx.		4 hours	2 hours	1 hours	40 min.
Resist condensing humidity/ light showers after		4 days	2 days	48 hours	24 hours
Fully cured		20 days	14 days	7 days	5 days
Recoating interval with epoxy and polyurethane top coats	Min	16 hours	12 hours	8 hours	3 hours
	Max	60 days	45 days	30 days	15 days

- (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.

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Product data sheet REP-111
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