

ZINC SILICATE PRIMER RHR-102

PRODUCT DESCRIPTION

RHR-102 is a two-component, solvent-borne, self-curing, inorganic zinc silicate with outstanding resistance against weathering and abrasion. It has excellent chemical resistance within the pH range 6-9. Offers cathodic protection of local mechanical damage. It conforms to the compositional requirements of SSPC paint 20, level 1.

This product designed for a general purpose, heavy-duty, rust-preventing primer. And As a single, complete coating for long term protection of steel exposed moderately to severely corrosive environment and to abrasion.

GENERAL PROPERTIES			
Adhesion Temperature resistance Zinc content in dry film	 Min. 4B on Sa2 ½ blasted and cleans surfaces. Resistant to permanent dry temperatures up to 400°C. Resistant to occasional short-term heating (peak temperatures) up to 420°C while permanent service temperatures are otherwise below 400°C. In the case of cyclic service conditions with regular periods of low and high temperatures, the temperature should be kept below 400°C Min 85% 		
Colors/Shade No	Grev		
Finish	Elat-matt		
Volume Solid	62±3 %		
Theoretical spreading rate	8.26 m2 /liter 75 Mic. Dft.		
Flash point	15 °C		
Specific gravity	2.7±0.05 kg/liter		
V.O.C.	455 gr/liter		
Shelf life	6 months (25°C) from t temperature. Shelf life store above 40°C.	ime of production. Shelf life is reduced at storage temp	e is dependent on storage eratures above 25°C. Do not
MIXING			
Mixing ratio (by weight)	Component A: 5	Component B: 3	Component C: 25
Pot life	4 hours (25 °C)		
APPLICATION			
Conditions	The surface must be completely clean and dry with a temperature above the dew point to avoid condensation. At temperatures ranging from -10°C to 40°C.Curing needs minimum 65% relative humidity.		
Method	Airless sprays	Air spray	Brush (touch-up)
Thinner (max. vol.)	RTH-107 (0-5%)	RTH-107(0-10%)	RTH-107(0-5%)
Pump ratio minimum	45:1		
Tip size	0.017" – 0.021"	1.8 mm	
Tip pressure	150 bar / 2175 Psi	5 – 6 bar	
Cleaning of tools	RTH-107		
Indicated film thickness, dry	50-80 micron		
Indicated film thickness, wet	80-130 micron		

DRYING AND CURING TIMES

Condition	The drying and curing times, as well as over coating intervals for inorganic zinc ethyl silicates are measured under controlled temperatures (20-25 °C), relative humidity (RH) 65 % during application and curing, and at average of the DFT range for the product. Higher RH will increase the curing speed.
Dry to touch	10-20 min
Full curing	3 days
Recoat interval, min	After curing time , MEK rub Test No
Recoat interval, max	limited

APPLICATION AND CURING CONDITIONS

Surface condition

Remove oil and grease, etc. with suitable detergent. Remove salt and other contaminants by (high-pressure) fresh water cleaning. Grit blasting to minimum Sa $2\frac{1}{2}$ with a surface profile equivalent to Rugotest No. 3, BN10a, and Keane-Tator Comparator, min. 3.0 G /S, or ISO Comparator rough MEDIUM (G). In case of new steel to be exposed to no more than medium aggressive (industrial) environment and without any extraordinary demands to lifetime, a surface preparation degree of SSPC-SP6 may suffice.

Substrate	Surface preparation		
	Minimum	Recommended	
Carbon steel	Sa 2½ (ISO 8501-1) with a	Sa 2½ (ISO 8501-1) with a	
	surface profile Fine to	surface profile Fine to	
	Medium G (ISO 8503-2)	Medium G (ISO 8503-2)	

Maintenance

Touch-up with zinc rich epoxy primer quality is recommended prior to application of mid coats.

REMARKS	
Subsequent Coat	Epoxy tie coat (REP-301)
Recoating	Minimum interval at 25 °C, 55% RH for recoating with sealer Epoxy, 3 days Recoating intervals are strongly dependent on both temperature and humidity. Deviations from the standard conditions may shorten or prolong the recoating intervals. subsequent coat is applied more than 1 week after (20°C), 75% RH, and humid weather.
Film thickness	If top coated with a heavy- duty system, 30-50 micron dry film thickness is recommended. (Shop Primer) For long-term protection without topcoat, 75 micron dry film thickness is generally recommended.
Thinning	The type and amount of thinner depend on application conditions, application method, temperature, ventilation, and substrate. RTH-107 is recommended in general.
(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.

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