NMI COATING

PRODUCT DATA
NMI 681070

PRODUCT DESCRIPTION:
ZINC ETHYL SILICATE PRIMER 681070.

NMI ZINCSILICATE 681070 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. For service temperature range, see below. Applicable by airless spray. Offers cathodic protection of local mechanical damage.

NMI ZINCSILICATE 6810770 is designed for a general purpose, heavy-duty, rust-preventing primer. And As a single, complete coating for long-term protection of steel exposed to moderately to severely corrosive environment and to abrasion.

Standard color availability: Metal gray.

Zinc Content in dry Film: **≥90%**
Salt Spray Resistance(Astm B117): **1000 Hrs of one Layer and 1500 Hrs of System(P+M+T)**

GENERAL PROPERTIES:

Adhesion: -Min.4B on A.3 blasted and clean surfaces.
Temperator: - Resistant to permanent dry temperatures up to 400°C/752°F.
Resistance: - Resistant to occasional short-term heating (peak temperatures) up to 400°C/752°F while permanent service temperatures are otherwise below 400°C/752°F.
- In the case of cyclic service conditions with regular periods of low and high temperatures, the temperature should be kept below 400°C/752°F. In the case of service temperatures above 400°C/752°F, it is of advantage to apply a topcoat of NMI SILICONE ALUMINIUM 840581.

PHYSICAL PROPERTIES:

Colors/Shade No	Grey
Finish	Flat.
Volume Solid	55±2 %
Theoretical spreading rate	7.3 m2 /liter 75 Mic. Dft.
Flash point	25 °C
Specific gravity	2.3-2.4 kg/liter
V.O.C.	Max. 250 gr/liter
Shelf life	3 Mount (25°C/77°F) from time of production. Shelf life is dependent on storage temperature. Shelf life is reduced at storage temperatures above 25°C/77°F. Do not store above 40°C/104°F. Shelf life is exceeded if the liquid is gelled or if the mixed product forms gels before application.

MIXING

Mixing ratio	Component A 681070	Component B 681071
(by weight)	**1**	**2.5**
Pot life	4 hours (25 °C/ 77°F)	

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/15°F to 40°C/105°F. Curing needs minimum 65% relative humidity.		
Method	Airless spray	Air spray	Brush (touch-up)
Thinner (max. vol.)	30007 (10-30%)	30007(50%)	30007 (10%)
Spray setting			
Pump ratio minimum	30:1		
Tip size	0.019" – 0.023"	1.8 mm	
Tip pressure	100 bar / 1500 Psi	5 – 6 bar	
	(Airless spray data are indicative and subject to adjustment)		
Cleaning of tools	Thinner 30007		
Indicated film thickness, dry	55 microns		
Indicated film thickness, wet	100 microns		

Issued : Sep 2018

DRYING AND CURING TIMES AT 25°C/77°F (65-75% RH)

Dry to touch	Max.20 min
Full curing	4 (approx.) days
Recoat interval, min	8 hours
Recoat interval, max	None, see REMARKS

SURFACE PREPARATION

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 2½ with a surface profile equivalent to Rugotest No. 3, BN10a, 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.

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

REMARKS:

SUBSEQUENT COAT None or according to specification.

RECOATING Minimum interval at 20°C/68°F, 65-75% RH for recoating with: NMI HB 780116 (system/high-build) 3 days, NMI HB 780116 (25 micron/1 mil) 24 hours.
Recoating intervals are strongly dependent on both temperature and humidity. Deviations from the standard conditions may shorten or prolong the recoating intervals.
The recoating interval of 24 hours for 25 micron/1 mil NMI HB 780116 is only valid in case the subsequent coat is applied more than 1 week after (25°C/77°F), 75% RH, and humid weather. Otherwise, the minimum recoating interval is the same as for system/high-build.

Film thickness **If top coated with a heavy- duty system, 50-75 micron/2-3 mils dry film thickness (75 micron/3 mils wet)**
is recommended. For long-term protection without topcoat, 75 micron/3 mils dry film thickness (100-125 micron/4-5mils wet) is generally recommended. In tanks 100 micron/4 mils dry film thickness (150 micron/6 mils wet) is recommended but may be applied in 125 micron/5 mils dry film thickness (200 micron/8 mils wet).

Thinning The type and amount of thinner depend on application conditions, application method, temperature, ventilation, and substrate. Thinner 30007 is recommended in general.

A completely clean surface is mandatory to ensure intercoat adhesion, especially at long Recoating intervals. Any dirt, oil, and grease have to be removed, e.g. with suitable detergent.
Salts to should 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 NMI 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.

ISSUED: Sep 2018

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