IL FIORE DELLA PITTURA
vernital

SCHEDA TECNICA

VERZINC	COD. 70000907

Description	Two component moisture curing agent zinc rich (alkyl) silicate coating
Use and principal characteristic	• Tank coating with excellent solvent and chemical resistance. • To be used as tank coating or as a primer in various paint systems based on unsaponifiable binders. • Can withstand substrate temperatures ranging from - 40°C up to 400°C, under normal atmospheric exposure conditions. • High zinc content resulting in excellent cathodic protection similar to galvanizing. Recommended for marine, coastal, heavy industrial environments. In corrosive chemical exposure, Chemical Resistant Topcoats should be used. • Good impact and abrasion resistance • ust not be used for immersion in alkaline (more than pH 9) or acidic (less than pH5) liquids

Resistance to

Exposure	Immersion	Splash and spillage
Acids	N.R.	Very Good
Alkalis	N.R.	Very Good
Solvents	Excellent	Excellent
Salt	Excellent	Excellent
Water	Excellent	Excellent
Gasoline	Excellent	Excellent

Flexibility	Fair
Weathering	Excellent
Abrasion resistance	Excellent. Abrasion resistance increases with age
Top coat required	May be topcoated with epoxies, phenolics, vinyls, acrylics, silicones, chlorinated rubbers or others as recommended. Under certain conditions a mist coat or tie coat may be desirable to prevent topcoat blistering.

Basic data at 20°

Colour and gloss	Metal grey -M matte finish
Mass density	Approx. 2,62 kg/l
Solids content by volume	Approx. 65% by volume
Recommended dry film thickness	Average dft 75 m with a minimum of 60 m on smooth non pitted, blast cleaned steel Average dft 100 m with a minimum of 75 m on rough or pitted, blast cleaned steel. Heavy pitted steel substrate is not acceptable
VOC	123 g/kg (Directive 1999/13/EC) Component A+B

Coverage theoretical

300 gr/ m2 for 75 m. The practical coverage will be less, depending on application technique, job conditions and type of surface to be coated

Set - to - touch

30 min. at 20°C , 1 hour at 5°C with relative humidity above 65%

Full cured

12 hours - see additional data

Overcoating interval

minimum : 8 hours
maximum : unlimited, zinc salts must be removed

Shelf life

Pigment unlimited (store pigment moisture free)
Binder : at least 9 months in cool and dry place

Shipping weight

Base	70000907	25 Kg
Binder	70120904	10,7 Kg
Thinner	70100290	25 - 5 lt

Flash point (DIN 53213)

Power	Not applicable
Binder	18° C, Thinner 38° C

Surface preparation and application condition

All surfaces to be coated must be clean dry and free of rust, oils, dust, dirt, old paint, and other contaminants.

Steel surface

Dry abrasive blast cleaning to near-white in accordance with SSPC-SP 10 to a degree of cleanliness in accordance with NACE 2 or ISO Sa 2 1 /2 to obtain blasting profile (Rz) 40 - 60 m. For immersion service, dry abrasive blast cleaning to a White Metal finish in accordance with SSPC-SP 5 to a degree of cleanliness in accordance with NACE 1 or ISO Sa 3 to obtain blasting profile (Rz) 40 - 70 m. Prime surfaces immediately after blast cleaning, and dust or sand removal by means of vacuum cleaning.
Substrate temperature ranging from -5°C up to +50°C during application are acceptable. Above 40°C Verzinc n. 700009076 must be applied by spray, and to avoid dry spray, thinner 70100290 has to be added. Substrate temperature should be at least 3°C above dew point to avoid condensation. Relative air humidity should be above 40%.

Material preparation

Product is supplied in pre measured standard pails so that the right ratio is reached by mixing one pail of base product with one pail of binder . If smaller quantities are required, the ratio by weight is:
Base powder 70 p.
Binder 30 p.
Mix only in the proportions supplied, just before primer application.
Before mixing, shake or stir the binder very thoroughly with a mechanical stirrer such as a compressed-air stirred. Pour the Zinc Dust slowly into the binder, with constant mechanical stirring. Do not mix in reverse order, continue stirring until mixture is free of lumps.
Strain mixture through a 30 - 30 sieve Agitate continuously during application
At an application temperature above 30°C addition of max. 10% volume of thinner 70100290 may be necessary.
Verzinc will skin if left in opened container. Skin has no effect on performance, but should be removed before reusing.

Introduction time

none

Pot Life a 20° C

12 hours - see additional data

Airless spray

Recommended thinner	cod. 70100290; 0 - 5 % .
Nozzle orifice	approx. 0,58 - 0,79 mm (=0,023-0,031 inch)
Nozzle pressure	15 MPa (= approx. 150 at. - 2100 p.s.i.)

Air spray

Recommended thinner	cod. 70100290 ; 0 - 5%
Nozzle orifice	2 mm
Nozzle pressure	0,3 MPa (= approx. 3 at. - 43 p.s.i.)

Brush/Roller

- only for touch up and spot repair
- first coat non to be thinned down, max. dft 35 m
- next coat to be thinned down with thinner 70100290 (10-25% by volume) so that a visible wet coat can be applied, max. dft 25 m

Cleaning Solvent

Thinner cod. 70100290

Additional Data

Spreading rate

Theoretical spreading rate

Grams per square metres	300	400	500
Square metres per kg	3,3	2,5	1,6
Dry film thickness in m	75	100	125

Very highly pigmented zinc silicate primers produce dry film with void spaces in between the particles.
Max. dft without mud cracking and sagging with airless spray : 150m

Overcoating table for > 50%RH

Substrate temperature	-5° C	0° C	10° C	20° C	40° C
Minimum interval	24 h	24 h	16 h	8 h	4 h
Maximum interval	unlimited, on cleaned and dry surface				

- in order to avoid possible solvent popping effects (pinholes) Vermin 70000907 must be sealed with organic coating like ergut,Vinilverepos e Verepos sealer
- Verzinc should have full cure before overcoating
- water will produce a favourable effect on primer curing, beginning 20 to 30 minutes after primer application
- before immersing primed structures into solvents allow not less than 48 hours, when relative humidity is 50% or more
- curing can be accelerated wetting the film surface with water, 4 hours after application

Curing table 50% RH and higher

Substrate temperature	Curing time for non immersion service	Curing time for full resistance
-5° C	24 hours	7 days
0° C	24 hours	4 days
10° C	16 hours	4 days
20° C	12 hours	2 days
30° C	6 hours	2 days
40° C	4 hours	2 days

Pot life (at application viscosity))

0° C	24 hours
10° C	16 hours
20° C	12 hours
30° C	6 hours