

Technical Data

Barrier 80



Product description

Barrier 80 is a two-pack zinc rich epoxy primer with a high content of zinc that complies with the compositional requirements for SSPC Paint 20 level 2 and ISO 12944. Can also be made to order with ASTM D520 Type II zinc dust.

Recommended use

As a zinc rich primer on blast cleaned steel. Barrier 80 is used in combination with advanced coating systems to further improve protection against corrosion.

Film thickness and spreading rate

	Minimum	Maximum	Typical
Film thickness, dry (μm)	40	90	50
Film thickness, wet (μm)	65	150	80
Theoretical spreading rate (m^2/l)	15,3	6,8	12,2

Comments

In a systems of DFT of max. 90 μm , the drying time will increase. To achieve a uniform, closed film at dry film thickness below 40 microns it will be necessary to thin Barrier 80 with Jotun Thinner No. 17.

Physical properties

Colour	Grey
Solids (vol %)*	61 \pm 2
Flash point	27°C \pm 2 (Setaflash)
VOC	365 gms/ltr UK-PG6/23(97). Appendix 3
Gloss	Flat
Water resistance	Excellent
Abrasion resistance	Very good
Solvent resistance	Very good
Flexibility	Good

*Measured according to ISO 3233:1998 (E)

Surface preparation

All surfaces should be clean, dry and free from contamination. The surface should be assessed and treated in accordance with ISO 8504.

Bare steel

Cleanliness: Blast cleaning to min. Sa 2 ½ (ISO 8501-1:2007) or for maintenance UHPWJ to WJ2 (NACE No.5/SSPC-SP 12). Roughness: using abrasives suitable to achieve minimum grade Fine (ISO 8503-2).

Shopprimed steel

Clean, dry and undamaged approved shopprimer.

Other surfaces

The coating may be used on other substrates. Please contact your local Jotun office for more information.

Condition during application

The temperature of the substrate should be minimum 5°C and at least 3°C above the dew point of the air, temperature and relative humidity measured in the vicinity of the substrate. Good ventilation is required in confined areas to ensure correct drying.

Application methods

Spray	Use airless spray
Brush	Recommended for stripe coating and small areas, care must be taken to achieve the specified dry film thickness.

Application data

Mixing ratio (volume)	3:1
Mixing	Mix 3 part Comp. A (base) thoroughly with 1 part Barrier 80, Comp. B (curing agent).
Induction time	30 minutes.
Pot life (23°C)	12 hours. (Reduced at higher temp.).
Thinner/Cleaner	Jotun Thinner No. 17
Guiding data airless spray	
Pressure at nozzle	15 MPa min (150 kp/cm ² , 2100 psi.).
Nozzle tip	0.38 - 0.53 mm (0.015 - 0.021").
Spray angle	40 - 80°
Filter	Check to ensure that filters are clean.

Drying time

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

Substrate temperature	5°C	10°C	23°C	40°C
Surface dry	50 min	20 min	10 min	4 min
Through dry	3 h	2 h	1,5 h	40 min
Cured	10 d	7 d	5 d	2 d
Dry to recoat, minimum ¹	3 h	2 h	1,5 h	40 min
Dry to recoat, maximum ^{1,2}				

1. Recommended data given for recoating with coatings normally specified on top of zinc epoxy coatings.
1. The surface should be dry and free from any contamination prior to application of the subsequent coat.

The given data must be considered as guidelines only. The actual drying time/times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.
