

STEEL SHIELD 1000

Glass Flake Epoxy

PRODUCT DESCRIPTION

A high solids and high build epoxy coating incorporating glass flakes and inert pigments.

- Excellent Corrosion resistance.
- Excellent resistance against fresh and sea water.
- Excellent abrasion resistance.
- Good resistance against mild chemicals.

DESIGNED USE

- Steel and concrete structures in splash / tidal zone. Undersides of Tank and Buried structures which require very high abrasion resistance.
- As a general maintenance coating for on-shore and off-shore installations.
- Can be used in conjunction with CP.
- Suitable as topcoat for upto C5 Environment as per ISO12944 Part 2

PHYSICAL DATA

VOLUME SOLIDS (Based on ASTM D2697)	82 % \pm 2 %
TYPICAL DRY FILM THICKNESS	500 microns
WET FILM THICKNESS	610 microns
THEORETICAL COVERAGE	1.64 m ² /liter @ 500 microns DFT
VOC "As Supplied" (Based on ASTM D3960)	160 gms / Ltr
COLOUR	Black and Red Oxide
FINISH	Low Sheen

APPLICATION DETAILS

METHOD OF APPLICATION :

AIRLESS SPRAY

This is the recommended method of application:
 0 - 5% Thinner may be added depend up on easiness
 Tip Size: 0.63 – 0.83 mm (0.025 - 0.033 in)
 Pressure: 206 - 241 kg/cm² (3000 – 3500 psi)

BRUSH OR ROLLER

May be used for difficult shapes or touch-up.
 However, additional coats may be required to achieve the recommended film thickness.

DRYING TIME:

Surface Temperature	Touch Dry	Hard Dry	Re coating Interval		Pot Life
			Minimum	Maximum	
25°C	6 Hrs	12 Hrs	20 Hrs	14 Days	1½ Hrs
35°C	4 Hrs	8 Hrs	14 Hrs	7 Days	45 minutes
45°C	2 Hrs	6 Hrs	8 Hrs	5 Days	< 30 minutes

Above mentioned pot-life was measured under controlled condition. However for a 5 liter/ 10 liter mix, the heat developed by exothermic reaction between base & hardener is intense and it will shorten the practical pot-life substantially.

NO. OF COMPONENTS

Two

Mixing Ratio

6 parts Base to 1 part Hardener (by volume)

Application Conditions

Do not apply this product if the Relative Humidity exceeds 85% or if the substrate temperature is within 3°C of the dew point

ADDITIONAL INFORMATION

Thinner / Cleaning solvent	Solvalux 7-45
Storage Instruction	Store in a cool shaded dry area
Flash Point	Mixed 36°C
Packaging	5 Liters
Shelf Life	12 months from the date of manufacture.

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SURFACE PREPARATION

This product should be applied over a suitable primer (e.g. EPILUX 610 / 78).

- Remove all wax, oil and grease by solvent cleaning in accordance with the guidelines given by SSPC-SPI.
- Where necessary remove weld spatter and round off all rough weld seams and sharp edges to a smooth surface.
- Abrasive blast clean to a minimum standard of Sa 2½ Swedish Standard SIS 05 59 00 or ISO 8501-1 : 1988.
- Any surface defects revealed by blast cleaning should be ground, filled or treated in a suitable manner.
- After blasting, remove dust from the surface.
- The surface to be applied must be clean, dry and free from soluble salts. If required, fresh water wash should follow to remove soluble salts.

SPLASH/ TIDAL ZONE INSTALLATION

- Ensure substrate is suitably prepared as described above. Substrate must be dry and above fresh/ sea water level during application of this product. The coating should be allowed to cure for a minimum of 24 hrs before getting to contact with sea water.

PRODUCT USE RESTRICTIONS

- This product has to be applied over a dry surface
- Consult Berger if product is to be applied in non-tropical climate.
- Pot life short, hence mix base and hardener only when ready to use.
- Recommended to use cold bath tub to place before & after mixed material to extend the pot life
- As common with all Epoxy products, this product also will tend to discolour and chalk on exposure to direct sunlight, elevated temperatures or chemicals.
- May also be applied between 250 and 500 Microns DFT.
- Contact Berger Representative for suggesting suitable paint system

SAFETY PRECAUTIONS

- Avoid contact with the skin and eyes. Wear suitable protective clothing such as overalls, goggles, dust masks and gloves. Use a barrier cream.
- Ensure that there is adequate ventilation in the area where the product is being applied. Do not breathe vapor or spray.
- This product is flammable. Keep away from sources of ignition. Do not smoke. Take precautionary measures against static discharge. In case of fire – blanket flames with foam, carbon dioxide or dry chemicals
- Refer to MSDS for further information.

FIRST AID

- Eyes: In the event of accidental splashes, flush eyes with water immediately and obtain medical advice
- Skin: Wash skin thoroughly with soap and water or approved industrial cleaner.
- DO NOT USE solvent or thinners.
- Inhalation: Remove to fresh air, loosen collar and keep patient rested.
- Ingestion: In case of accidental ingestion, DO NOT INDUCE VOMITING. Obtain immediate medical attention

DISCLAIMER

The information provided on this data sheet is not intended to be complete and is provided as general advice only. It is the responsibility of the user to ensure that the product is suitable for the purpose for which he wishes to use it. As we have no control over the treatment of the product, the standard of surface preparation of the substrate, or other factors affecting the use of this product, we are not responsible for its performance nor would we accept any liability whatsoever or howsoever arising from the use of this product unless specifically agreed to in writing by us. The information contained in this data sheet may be modified by us from time to time, and without notice, in the light of our experience and continuous product development.