



Smart Epoxy BE4 Finish

SPBE4

4 Litre Base and 1Litre Hardener

Description

SMART EPOXY EA4 FINISH is a two-pack amine-adduct cured epoxy finish for use on steel and cement surfaces where chemical, oil and abrasion resistant coating is required. If it is to be applied over steel, it has to be used in combination with the appropriate primers as recommended below. If it is to be applied over concrete the surface should be acid-treated prior to application.

Usage

For application on heavy structural steelwork & flooring.

Composition

Pigment	:	Lightfast non-lead pigments and mineral extenders
Binder	:	Epoxy resin.
Volume Solid	:	51 +/- 3% by volume, others colours will vary.
Diluent	:	Thinner

Properties

Finishing	:	Gloss finish
Colour	:	Refer to color card.
Theoretical Coverage	:	10.2m ² / Litre (for dry film thickness of 50 microns; actual coverage dependent on substrate condition.)
		6.4m ² / Litre (for dry film thickness of 80 microns; actual coverage dependent on substrate condition.)
Drying Time	:	Dry to touch: 2-3 hours Dry to overcoat: 16 hours Curing time: 6-7 days
Pot Life	:	6-8 hours after mixing
Recoating Interval	:	Minimum 16 hours.

Application Method

Brush	:	For normal use thinning is not usually necessary. Thin with max 5% with thinner.
Roller	:	For normal use thinning is not usually necessary. Thin with max 5% with thinner.
Conventional Air Spray	:	Thin with max 10% by thinner.
Airless Spray	:	Ready for use. Thinning is not usually necessary.

Surface Preparation

Concrete

Surface must be treated with about 5% sulphuric acid solution until effervescence has stopped. It should be washed thoroughly with clean water and allow to dry completely before coating with Smart Epoxy BE4 Finish.

Recommended no. of coats: 1 – 3 coats

Recommended film thickness per coat: 50 – 80 microns for dry film; 100 – 160 microns for wet film

Metal

Surface to be painted must be dry and free from grease, dirt and other contaminants. Steel surfaces should be sanded or wire brushed to remove mill scales and rust. Abrasive blast cleaning to minimum Sa 2 ½ ISO 8501-1:1998 or other equivalent international standard. Surface must be free from any abrasive residues, dirt, oil and grease and other contaminants prior to painting.

Previously Painted

Remove all loose, defective and unstable paint film. Rusted and defective area should be sanded. Sound paint film should also be sanded to provide anchorage for new coating.

Painting Guide

Surface	Primer	Finish (1 - 3 coats)
Concrete (Flooring)	Primer Clear	Smart Epoxy BE4 Finish
Metal	-	Smart Epoxy BE4 Finish

Composition / Information on Ingredients

Component	CAS No	Symbol	%WT	R-Phrases
Epoxy Resin	25068-38-6	F	50.0	R10, R66, R67
Xylene	1330-20-7	Xn		R10, R20/21, R38
Extender			0.0	R10
Colour pigment			20.0	
Additive			2.0	

Hazard Identification

The product is flammable
 Harmful by inhalation.
 The vapors are irritating to the eyes, skin and respiratory tract.

First Aid Measures

General advice	:	When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person.
Inhalation	:	Remove to fresh air. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice.
Skin contact	:	Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser.
Eye contact	:	Remove contact lenses. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Seek medical advice.
Ingestion	:	If accidentally swallowed obtain immediate medical attention. Keep at rest. DO NOT INDUCE VOMITING.

Fire Fighting Measures

Specific Hazards	:	Hazardous combustion products may include carbon monoxide. Will float and can be reignited on surface water. The vapor is heavier than air, spreads along the ground and distant ignition is possible.
Extinguishing Media:		Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable Extinguishing Media	:	Water in a jet.
Protective Equipment	:	Full protective clothing and self-contained breathing apparatus.
Other Information	:	Keep adjacent containers cool by spraying with water.

Accidental Release Measures

Personal precautions	:	Put on adequate protective equipment. Avoid breathe vapours.
Environmental precautions	:	Keep away from drains, surface-water, ground-water and soil.
Methods for cleaning up	:	Collect as much as possible in a clean container for disposal. Cover the remainder with inert absorbent. Disposal according to local.

Handling and storage

Handling	:	Avoid prolonged or repeated contact with skin. Extinguish any naked flames. Remove ignition sources. Avoid sparks. Do not smoke. Do not empty into drains.
Handling Temperatures	:	Ambient.
Storage	:	Keep away from direct sunlight and other sources of heat or ignition. Do not smoke in storage areas. Keep container tightly closed and in a well-ventilated place.
Storage Temperatures	:	Ambient.
Product Transfer	:	Earth all equipment.
Recommended Materials	:	For containers or container linings, use mild steel or stainless steel. For container paints, use zinc silicate.
Unsuitable Materials	:	For containers or container linings, avoid plastics and aluminium. For lines and fittings, avoid natural, neoprene or nitrile rubbers.

Exposure Controls / Personal Protection

Ventilation	:	Use in well ventilated area with local exhaust ventilation. Ventilation required and equipment must be explosion proof. Use away from all ignition sources.
Respiratory Protection	:	Approved respiratory protective equipment must be used when vapor or mist concentrations exceed suggested exposure limits.
Eye Protection	:	Normal industrial eye protection practices should be employed.
Skin Protection	:	Impervious gloves must be worn. If contact is likely oil impervious clothing must be worn.

Physical and Chemical Properties

Appearance	:	liquid
Colour	:	Available in various colour
Odour	:	Aromatic Hydrocarbon
Ph	:	Not applicable
Flash point	:	24 °C closed cup
Auto-ignition temperature	:	370 °C
Relative density	:	1.10 kg/l to 1.50 kg/l
Solubility	:	water solubility immiscible
Viscosity	:	100 ± 10 s/F4/RT
Explosion limit	:	- lower 1 vol. % - upper 10.8 vol. %

Stability/reactivity

Stability	:	Stable under normal use conditions. Reacts with strong oxidizing agents.
Conditions to Avoid	:	Heat, flames and sparks.
Material to Avoid	:	Strong oxidizing agents.
Hazardous Decomposition Products	:	Not applicable.

Toxicological Information

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effect, such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Acute toxicity: No data is available on the product itself.

Local effects: Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

Ecological Information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses. Product does not contain any organic halogens.

Disposal Considerations

Waste Disposal : Recover or recycle if possible. Otherwise incineration.
 Product Disposal : Recover or recycle if possible. Otherwise incineration.
 Container Disposal : Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Send to drum re-coverer or metal reclaimer. Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums.

Transport information

Transport only in accordance with the requirements of the Carriage of Dangerous Goods by Road and Rail (Classification, Packaging and Labeling), ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport.

Land transport

ADR/RID :

Class	:	3
UN-No	:	1263
Description of the goods	:	PAINT
Packing group	:	III
Release of danger		

Sea transport

IMDG:

Class	:	3
UN-No	:	1263
Marine pollutant	:	Marine pollutant
Proper technical name		PAINT
Packing group	:	III
Release of danger	:	

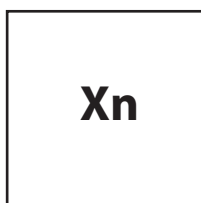
Air transport

ICAO/IATA:

Class : 3
 UN/ID No. : 1263
 Proper technical name : PAINT
 Packing group : III
 Release of danger

Regulatory Information

EU Classification : Harmful, flammable
 Symbol : Xn

**Harmful**

Risk-phrases : R10 Flammable.
 R20/21 Harmful by inhalation and in contact with skin.
 R38 Irritating to skin
 R66 Repeated exposure may cause skin dryness @
 cracking
 R67 Vapours may cause drowsiness and dizziness
 Safety-phrases : S25 Avoid contact with eyes.

Other Information

Our technical advice – whether verbal, in writing or by way of trials – is given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. It does not release you from the obligation to test the products supplied by us as to their suitability for the intended processes and uses. The application, use and processing of the products are beyond our control and, therefore, entirely your own responsibility. Should, in spite of this, liability be established for any damage, it will be limited to the value of the goods delivered by us and used by you. We will, of course provide products of consistent quality within the scope of our General Conditions of Sale and Delivery.

Company Identification

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