

SCHEMA TECNICA

VERNIFEN GF

COD. 35630807 grey

Epoxy-phenolic Solvent Free

Glass flake reinforced

Description

Two component, glass flake reinforced, epoxy novolac with amine hardener with excellent resistance to a wide range of chemicals.

Use and principal characteristic

- Designed for application to steel and concrete.
- Suitable for protective coatings and offshore use.
- Excellent for tanklining, very good resistance to various chemicals
- Excellent abrasion and impact resistance.
- Excellent corrosion resistance. - glass flakes give superior chemical and permeation resistance.
- Can be applied by heavy duty, single feed, airless spray equipment (60:1) at dry film thickness between 250 and 400 microns depending on expected performances.
- Excellent resistance to demineralized water, deionized water, crude oil up to 93°C.
- Full cure after 5 days at 30°C to obtain expected performances.

Basic data at 20° (mixed product)

Colour and gloss

Grey , Semi-Gloss

Mass density

1,35 kg/dm³ ±0,02

Solids content by volume

69 % ±2

Recommended dry film thickness

250 ÷ 400 microns

Coverage theoretical

2,3 m²/l at 300 microns dft

VOC

150 g/kg (Directive 1999/13/EC)

Set to touch

4 h at 20°C

Ready for handling

8 h at 20°C

Overcoating

minimum : 8 h at 20°C
maximum : 24 days at 20°C

Shelf life

24 months stored dry and cool (max 30°C)

Temperature resistance

95°C immersion, 210°C air continuous

Flash point	Base	31°C
	Hardener n. 35120188	102°C
	Cleaning solvent n.99100151	6°C

Application method Airless, brush for touch ups for small surfaces

Surface preparation and application condition

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

Dry abrasive blast cleaning to near-white according to ISO 8501-1) Sa 2½ or SSPC-SP10 blasting profile (Rz) 50-100 microns.

Substrate temperature during application and curing should be above 10°C (50°F) and at least 3°C (5°F) above dew point.

Good ventilation is requested during application in confined spaces.

Material preparation

Mixing ratio by weight or volume:

Base Component A n.35630807 100 parts

Hardener Component B n.35120188 25 parts

When mixing, the temperature of the base and hardener should be at least 15°C; at lower temperature, the viscosity will be too high for spray application. No thinner should be added.

Introduction time 20 minutes at 20°C

Pot life 4 hour at 20°C (68°F)

Environmental Conditions

Surface temperature	+10°C ÷ +50°C
Air temperature	+10°C ÷ +40°C
Relative humidity	0 - 80%

Surface temperature below 10°C is not suitable for good curing and could also cause adhesion loss in case of overcoating.

Airless spray

Thinner	No thinner should be added
Nozzle orifice	0,035"- 0,041"
Nozzle pressure	22 MPa (ca 220 at)
Pump ratio	60:1

Brush/Roller For stripe coating or spot repair only, no thinner should be added.

Cleaning solvent Thinner n.9910151

All application equipment must be cleaned immediately after use Paint inside the spraying equipments must be removed before the pot life has been expired.

Additional data

Pot life at application viscosity

Mixed product	Pot life
10°C (50°F)	7 h
20°C (68°F)	3 h
30°C (86°F)	1 h
40°C (104°F)	30 min.

Overcoating with	Interval	10°C(50°F)	20°C(68°F)	20°C(68°F)	40°C(104°F)
35630807	Minimum	24 h	8 h	4 h	2 h
35630807	Maximum	1 month	24 days	10 days	7 days

Note: surface must be dry and free from any contamination

Curing time for DFT up to 300 µm (12 mils)

Surface temperature	Set to touch	Ready for handling	Full cure
10°C (50°F)	12 h	24 h	10 days
20°C (68°F)	4 h	8 h	5 days
30°C (86°F)	2 h	4 h	4 days
40°C (104°F)	1 h	2 h	3 days

Curing time has been measured at humidity below 60%

Set to touch: when a light pressure of the finger does not leave any mark on the surface.

Ready for handling: when the coating can tolerate normal handling without any permanent damage. Minimum overcoating: shortest time when the next coat can be applied.

Maximum overcoating: longest time when the next coat can be applied.

Resistance Temperature

Dry continuous 210°C

Dry non continuous 230°C max 1h peak temp

** The temperature listed relate to retention of protective properties.*

Aesthetic properties could change at these temperatures and when exposed to sun light and weathering.

Packings

Vernifen GF	35630807	kg 20
Hardener	30120188	kg 5
Cleaning thinner	99100151	lt 5

Caution:

1. A fresh air mask should be used during spraying. Ventilation should be provided in confined spaces to maintain good visibility. Keep container closed. Use adequate ventilation. Avoid prolonged and repeated contact with skin and smoking

2 Do not empty into drains. Take precautionary measures against static discharges: for specific information on hazardous ingredients, required ventilation, possible consequences of contact, exposure and safety measures see Safety Data Sheet. This product is intended for use only by professional applicators in industrial situations.

All work involving the application and use of this product should be performed in compliance with all relevant national Health, Safety and Environmental standards, regulations and legislation. Proper ventilation must be provided during application and afterwards during drying (refer to product data sheets for typical drying times) to keep solvent concentrations within safe limits and prevent fires and explosions. Forced extraction will be required in confined spaces. Ventilation and/or respiratory personal protective equipment (airfed hoods or appropriate cartridge masks) must be provided during application and drying. Take precautions to avoid skin and eye contact (overalls, gloves, goggles, masks, barrier cream, etc). Before use, follow the advice given on the Material Safety Data Sheets. In the event that welding or flame cutting is performed on metal coated with this product, dust and fumes will be emitted which will require the use of appropriate personal protective equipment and adequate local exhaust ventilation. The detailed safety measures are dependent on application methods and the work environment