

Tel: +27 11 955 2555

10 Federal Industrial Park 138 Main Reef Road Manufacta, Roodepoort JHB, South Africa

Reg. No: 2009/183722/23 VAT No: 4100254848

www.federalindustrial.co.za

REF: FL322 ISSUE DATE: 18/02/2024

REV: 02

TECHNICAL DATA SHEET

FEDLINE 322

DESCRIPTION

FedLine 322 is a two component novolac vinyl ester lining system, containing glass flake and silicon carbide, with outstanding resistance to most acids, alkalis and chemicals in medium to high temperature environments, as well as **excellent wear & abrasion resistance**. It is a high build fast curing barrier lining. It can be used in atmospheric and submerged conditions. **FedLine 322** is indicated for steel, s/steel and concrete substrates.

PRINCIPLE USES

FedLine 322 is used in areas subject to severe chemical exposure & very high wear and abrasion such as acid plants, chemical bund areas, battery rooms, loading bays, mineral refineries, chemical plants, water & waste treatment plants, paper & pulp plants, sugar refining, food factories, dairies & breweries. **FedLine 322** is specified for the lining of equipment subject to heavy wear & abrasion, such as slurry lines, feed chutes, hoppers, crushers, settling tanks, cyclones etc.

CHEMICAL RESISTANCE

FedLine 322 resists most acids & alkalis, including 70% Sulphuric Acid, 37% Hydrochloric Acid & all Sodium sulphides. Specific chemical resistance to products can be obtained from Federal Industrial Linings upon request.

PERFORMANCE DATA

Description

| Description | Results |
|--|--|
| Pot Life (Minutes) | 45 min @ 25°C using 1.5% catalyst |
| Service Temperature | -20°C to 170°C Atmospheric / -20°C to +100°C Submerged |
| Barcol Hardness | >45 (fully cured) |
| Touch Dry (Hours) @ 25°C | 4 hrs |
| Hard Dry (Hours) @ 25°C | 8 hrs |
| Full Cure @ 25°C | 3 days |
| Abrasion Resistance | 175mg loss - 1000 cycles @ 1kg load (H18 wheel) |
| Pack Size | 5kg & 20kg kits |
| Volume Solids | 98% (SG = 1.3) |
| Theoretical Coverage (m ²) | 1kg p/m² per coat @750μm DFT (2kg p/m² @ 1500μm DFT) |
| Application Temperature | $10 - 40^{\circ}$ C |
| Shelf Life | 6 months |
| | |

Doculte

ADVANTAGES

- Extremely good chemical resistance to most acids and alkalis
- High temperature resistance
- Excellent wear & abrasion resistance
- Easily applied by trowel (trowel grade) or airless spray (spray grade)
- Can be applied to steel, s/steel and concrete substrates
- Barcol Hardness: >45 fully cured
- Dielectric Strength: 18-20v/mm
- Excellent Corrosion Resistance
- Excellent Erosion Resistance
- Rapid Curing

SURFACE PREPARATION

Mechanical preparation of the substrate is important. The substrate should be structurally sound and free of oil, dust and debris, grease, paint, corrosion deposits, laitance or other surface deposits.

De-Grease with FedGuard 999 prior to grit blasting if required.

FedGuard 999 also acts as a rust inhibitor to prevent flash rust for up to 4 days after grit blasting.

The surface should be prepared by grit blasting or as per standard practice to expose aggregate surface or to achieve necessary cleanness & roughness. On s/steel substrates **FedPrime VE** Primer must be used.

On concrete or cementitious substrates the moisture content must be less than 10%.

Steel & s/steel substrates should be grit blasted to Sa3 (ISO 8501-1) with a surface profile of 125µm prior to application.

MIXING

Add 1.5% of Part B to part A and mix using a mixer with a mixing paddle at medium speed for 2-3 minutes until both components have fully dispersed and is homogenous. Ensure to rotate the mixer inside the container and into the corners of the container. Never use less than 1% catalyst.

APPLICATION

Apply **FedLine 322** at the specified thickness (1.5 to 2mm) in 2 to 3 coats of +-750µm each (at right angles to each other) using trowels (trowel grade) or airless spray (spray grade) to a cleaned and prepared surface. Practical spread rates will vary according to application losses and surface profile. This product is for professional use only. The applicators and operators must be trained, experienced and have the ability and equipment to apply the coatings correctly and according to specification.

CLEANING

Clean hands and skin immediately after use with industrial hand cleaner.

Clean tools and equipment immediately after use with Acetone or MEK.

LIMITATIONS

- Application temperatures between 10 and 40°C (Air & Substrate).
- Will not accommodate excessive movement or cracks in the substrate.
- Avoid excessive application per coat to reduce possibility of sagging.
- Avoid contact with skin.
- Do not release into sewer or surface water.

STORAGE AND STABILITY

Shelf life is **6 months** when stored in unopened containers in a cool & dry place. Failure to do so will result in a reduction of shelf life.

SAFETY AND HANDLING

FedLine 322 contains harmful chemicals. Use only with adequate ventilation. Avoid breathing of vapours and prolonged or repeated skin contact. Protective clothing and gloves should be worn when handling this product. All sources of ignition should be removed. If exposed, eyes should be well flushed with water for 15 minutes and medical attention must be sought immediately.

This product is for professional use only. The applicators and operators must be trained, experienced and have the ability and equipment to apply the coatings correctly and according to specification. Applicators and operators must use the appropriate PPE when using this product. The safety procedures applicable to the handling of chemical materials should be read, understood and rigidly adhered to.

The information contained in this data sheet is, to the best of our knowledge true and accurate, but any recommendations or suggestions which may be made, are without guarantee, since the conditions of use are beyond our control. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use.