



REF: FL321
ISSUE DATE: 23/07/2024
REV: 01

TECHNICAL DATA SHEET

FEDLINE 321

DESCRIPTION

FedLine 321 Hi-wear Epoxy is an innovative, advanced epoxy resin system containing alumina ceramic beads, especially designed to give long lasting protection to plant equipment subjected to high abrasion. It is a 100% volume solids, high build lining, specially designed to be used in areas with very high wear & abrasion challenges.

FedLine 321 can be applied to all types of metal or concrete substrates.

PRINCIPLE USES

FedLine 321 is intended as a protective lining for areas where physical strength linings are required. It is endorsed as an industrial strength wear & abrasion lining in the Agricultural, Mining, Petro-Chemical, Food, Marine, Waste-Water, Military, Construction, Paper & Pulp, Power Generation industries, and is specified for the lining of equipment subject to heavy abrasion, such as Slurry lines, Feed chutes, Hoppers, Crushers, Settling tanks, Cyclones etc.

PERFORMANCE DATA

Description

Results

Pot Life (Minutes)	55 min (25°C)
Mix Ratio	2 : 1 (by volume)
Specific Gravity (kg/ltr)	2.4
Touch Dry (Hours) @ 25°C	4 hrs
Hard Dry (Hours) @ 25°C	12 hrs
Full Cure @ 25°C	7 days
Application Method	Trowel / Hand
Compressive Strength	90mPa @ 20°C - (MOH Hardness: 9)
Kit Size	3kg & 15kg
Volume Solids	100%
Theoretical Coverage (m²)	2.4 kg p/m² per mm (12kg p/m² @ 5mm DFT)
Indicated DFT	4mm – 6mm
Service Temperature	Atmospheric -20°C to + 60°C
Shelf Life	12 months

ADVANTAGES

- Compressive Strength: 90mPa @20°C
- Tensile Strength: 35mPa @ 20°C
- MOH Hardness: 9
- Excellent Abrasion Resistance
- Excellent Erosion Resistance
- Excellent Corrosion Resistance
- Good Adhesion
- Water Smooth-able
- Good physical strength lining.
- No primer required on metal substrates if grit blasted to 125µm & Sa 2½ (ISO 8501-1)
- Resistant to most dilute acids & alkalis, petroleum products & salt water.

SURFACE PREPARATION

Mechanical preparation of the substrate is important before application.

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.

Metal surfaces should be prepared by grit blasting to Sa 2½ (ISO 8501-1) with a surface profile of +-120µm.

On concrete surfaces **FedPrime MC808 Primer** must be used. The surface should be prepared by grit blasting or as per standard practice (mechanical grinding or acid etching) to expose aggregate surface or to achieve the necessary cleanliness & roughness prior to the application of **FedPrime MC808 Primer**.

MIXING

Add all of Part B to part A and mix using a mechanical mixer at slow 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. Only mix full packs.

APPLICATION

Apply **FedLine 321** to the recommended thickness (4 to 6mm) using a steel trowel (or gloved hand) to a cleaned and prepared surface. Smooth the lining afterward by trowel or hand with water or epoxy thinners to achieve a smooth texture if required. Practical spread rates will vary according to application losses and surface profile.

CLEANING

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

Clean tools and equipment immediately after use with **FedThin Epoxy Thinners**.

LIMITATIONS

- Application temperatures between 10°C and 40°C.
- Max service temperature is 60°C.
- Avoid excessive application.
- Avoid contact with skin.
- Do not release into sewer or surface water.

STORAGE AND STABILITY

Both **FedLine 321** Part A and Part B have a shelf life of 12 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 321 contains 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 instantly.

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 bulletin 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.