



REF: FLCA98  
ISSUE DATE: 03/09/2024  
REV: 01

## TECHNICAL DATA SHEET

### FedLine CA98 Chemical Resistant Leak-Free Lining System

#### DESCRIPTION

The **FedLine CA98** lining system is based on the FedChem 98 product characteristics, and is a medium-duty lining system that is designed primarily for the protection of concrete in areas that are subjected to severe chemical attack. It is formulated using a high-performance chemical resistant novolac epoxy resin, reinforced with a fibreglass membrane together with a filled base coat.

This lining is designed to provide the substrate with full chemical resistance especially against very aggressive acids like 98% Sulphuric acid etc.

It is particularly suitable for the protection of chemical bund areas, battery rooms and concrete floors exposed to high levels of chemical spillage/fumes.

The use of fibreglass reinforcement helps to modify the expansion and contraction characteristics of the lining to operate at elevated temperatures and under fluctuating temperature conditions. It also reinforces the lining so that it can withstand mild physical abuse as well as wear and impact damage, and minor substrate integrity failures such as hairline cracks in concrete.

#### COMPOSITION OF MEDIUM-DUTY LINING:

| Lining Stages  | Components                                                                                                                                                   | Estimated Quantity per m <sup>2</sup> * | Nominal Thickness |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------|
| Primer         | FedPrime MC808 Hydro-phobic Primer                                                                                                                           | 0.15lt                                  | 100µm             |
| Base Coat      | FSX Filler<br>FedChem 98 Chemical Resistant Epoxy<br>Laminating Resin - Clear                                                                                | 0.4kg<br>0.4kg                          | +/-0.7mm          |
| Reinforce Coat | 1 layer of Fibreglass Scrim (14m x 1.5m roll) = 21m <sup>2</sup><br>FedChem 98 Chemical Resistant Epoxy<br>Laminating Resin – Clear<br>Silica sand aggregate | 0.8kg<br>2kg                            | 1.8mm             |
| Topcoat        | FedChem 98 Chemical Resistant Epoxy<br>Red Oxide colour                                                                                                      | 0.7kg                                   | 0.5mm             |
|                |                                                                                                                                                              | <b>Total DFT</b>                        | +/-3mm            |

\*The above figures are theoretical coverage figures & have not taken wastage into account when estimating quantity per m<sup>2</sup>.

## **SURFACE PREPARATION:**

All surfaces must be clean, mechanically sound and free of oil, dirt & dust. Concrete and cement screeds to preferably have a wood float finish, with a minimum compressive strength of 25mPa. Abrasive blast or acid etch to remove laitance. Moisture content should be below 10%.

### **Additional Notes**

- Allowance must be made for expansion joints with a flexible polyurethane joint sealant.
- Reinstate damaged concrete to a level finish to accept the lining.
- All 90° angles, protrusions & imperfections must be rounded in order to accept the lining system.

### **Condition Specifications:**

- Substrate Temperature: Min 10°C, 3°C above dew point.
- Relative Humidity: Max 85%

## **APPLICATION:**

- 1) Apply FedPrime MC808 Primer @  $\pm 7\text{m}^2$  per litre to clean sound concrete and allow to set. ( $\pm 6$  hrs @ 25°C)  
The temperature of the substrate should be above 20°C.

- 2) Pre-measure and cut the fibreglass scrim 14m x 1,5m (21m<sup>2</sup>)

- 3) Base Coat: (FedChem 98 clear laminating resin)

Thoroughly mix (using a mechanical mixer) the Base Resin and the Activator (26kg), then slowly add 26kgs Fine Filler (FSX). This will yield 32 litres / 52kg

Apply a thin coat ( $\pm 0.5$  litres per m<sup>2</sup>) over an area of  $\pm 21\text{m}^2$ )

Imbed the fibreglass scrim onto the wet base coat, then apply the balance of the mixed resin by roller, ensuring that the fibreglass scrim is completely covered.

- 4) Overlap each length of scrim by 50mm and ensure that the overlap is completely saturated with resin using a flat trowel or suitable aluminium roller.
- 5) While the resin is still wet, broadcast the silica sand aggregate evenly, ensuring that the entire area is completely covered. ( $\pm 2\text{kgs/m}^2$ ) Allow to set overnight then sweep off the excess silica sand which can be re-used.
- 6) Apply 2 coats of FedChem 98 (Red and light Red) at  $\pm 2\text{m}^2$ /litre (500µm) per coat. (over coating time between coats to be 6 hrs @ 25°C)

## **SAFETY AND HANDLING**

Contains epoxy resins. 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.

The safety procedures applicable to the handling of epoxy and chemical materials should be read, understood and rigidly adhered to.

Although the **FedChem 98** Epoxy is relatively non-toxic, it is recommended that the normal precautions in dealing with conventional epoxy resin systems be adhered to.

**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 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.