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# TECHNICAL DATA SHEET

# **FEDCHEM - NVE**

### **DESCRIPTION**

FedChem-NVE, is a two component novolac vinyl ester coating with outstanding resistance to most acids, alkalis and chemicals in medium to high temperature environments. It is a high build fast curing barrier coating. It can be used as a mid-coat or final coat, in atmospheric and submerged conditions. FedChem-NVE is indicated for steel, s/steel and concrete substrates. It is supplied in White and Off White colours.

#### PRINCIPLE USES

FedChem-NVE is used in areas subject to severe chemical exposure & spillage, 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.

# **CHEMICAL RESISTANCE**

FedChem-NVE 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

<b>Description</b>	Results
Pot Life (Minutes)	45 min (25°C)
Service Temperature	160°C Atmospheric / 110°C Submerged
Touch Dry (Hours) @ 25°C	4 hrs
Over Coating Time (Hours) @ 25°C	6 - 24 hrs
Hard Dry (Hours) @ 25°C	8 hrs
Walk on Dry (Hours) @ 25°C	14 hrs
Full Cure @ 25°C	4 days
Pack Size	6kg kits
Volume Solids	98%
Theoretical Coverage (m²)	1.6m <sup>2</sup> p/kg @500µm DFT per coat (2 to 3 coats recommended)
Application Temperature	$10 - 40^{\circ}$ C
Shelf Life	6 months

## **ADVANTAGES**

- Extremely good chemical resistance to most acids and alkalis
- High temperature resistance
- Good wear & abrasion resistance
- Can be applied by airless spray or brush & roller (stripe coating & small areas only)
- Can be applied to steel, s/steel and concrete substrates

### **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.

The surface should be prepared by grit blasting or as per standard practice to expose aggregate surface or to achieve necessary cleanness & roughness. On steel & s/steel substrates FedPrime VE Primer must be used. On concrete or cementitious substrates FedPrime MC808 Primer must be used. Any porous or absorbed areas still showing after concrete priming applications, should be primed again. Steel substrates should be grit blasted to Sa3 (ISO 8501-1) 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. A maximum of 5% Styrene may be used to thin the product if required. Ensure to rotate the mixer inside the container and into the corners of the container.

### **APPLICATION**

Apply **FedChem-NVE** at the specified thickness using high pressure airless spray equipment, (brushes and rollers may be used for stripe coating and small areas) to a cleaned and prepared surface. Practical spread rates will vary according to spray/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.** Applicators and operators must use the appropriate PPE when using this product.

### **CLEANING**

Clean hands and skin immediately after use with industrial hand cleaner. Clean tools and equipment immediately after use with Acetone or MEK.

### **LIMITATIONS**

- Working temperatures between 10 and 40°C (Air & Substrate).
- Will not accommodate excessive movement or cracks in the substrate.
- Avoid excessive application to reduce possibility of sagging.
- Avoid contact with skin.
- Do not release into sewer or surface water.
- Contact Federal Industrial Linings to stipulate chemical resistance against specific products.

#### 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**

**FedChem-NVE** 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 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 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.