



FEDERAL INDUSTRIAL LININGS

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TECHNICAL DATA SHEET

FEDCHEM - IPE

DESCRIPTION

FedChem-IPE, is a Highly Chemical Resistant Sprayable Polyethylene Lining system indicated for industrial acid proofing applications that are subject to severe mechanical and chemical exposure. Applied at a DFT of 0.5 – 1.5 mm **FedChem-IPE** is resistant to almost all chemicals – (Chemical Resistance Chart available upon request). It can be applied to metal substrates as well as concrete substrates and over expansion joints.

PRINCIPLE USES

FedChem-IPE 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-IPE resists most chemicals (acids & alkalis), fuels, oils & solvents - Specific chemical resistance to products can be obtained from Federal Industrial Linings upon request.

FedChem-IPE also has excellent resistance to wear & abrasion, making it ideal for heavy duty applications.

PERFORMANCE DATA

Description

Results

Specific Gravity	0.94g/cm ³
Final Appearance	Finely textured slip resistant surface
Touch Dry (Hours) @ 25°C	0.3 hrs
Walk on Dry (Hours) @ 25°C	2 hrs
Hard Dry (Hours) @ 25°C	12 hrs
Max Service Temperature	75°C
Elongation	800% - ISO527
Tensile strength	14 Mpa – ISO527
Hardness	96 Shore A / 50 Shore D
Theoretical Coverage (m ²)	+40m ² per 20kg kit @ 500µm / +-20m ² per 20kg kit @ 1mm
Application Temperature	0 – 50°C

ADVANTAGES

- Extremely good chemical resistance to most chemicals, acids and alkalis
- Excellent resistance to organic and inorganic acids
- Available in different colours
- Flexible lining system – can be applied over expansion joints and over concrete cracks
- Fast curing times
- Slip resistant surface
- Easy to clean
- Resistant to extreme atmospheric temperatures

SURFACE PREPARATION

Mechanical preparation of the substrate is important before application of **FedChem-IPE**. The substrate should be structurally sound and free of oil, dust and debris, grease, paint, corrosion deposits, laitance or other surface deposits. **Metal surfaces** should be prepared by grit blasting to Sa 2½ (ISO 8501-1) and pre-heated prior to application.

On concrete surfaces **FedPrime MC808 Primer** must be used. The structurally sound 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 cleanness & roughness prior to the application of FedPrime MC808 Primer. After application of the epoxy primer the concrete substrate should be pre-lined with **FedLine-PHC** by heated spray application.

APPLICATION

Spray apply **FedChem-IPE** at the specified thickness (0.5 – 1.5mm) with specialised heated spray application equipment available from Federal Industrial Linings. Application speed is +/- 10 - 12m² per hour.

STORAGE AND STABILITY

Store in unopened packs in a shaded cool & dry place.
Failure to do so will result in a reduction of product efficiency.

SAFETY AND HANDLING

FedChem-IPE contains PE chemical powders.

Use only with adequate ventilation. Protective clothing should be worn when handling this product.

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 product 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 polyethylene materials should be read, understood and 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.