Jufusheng Energy Technology FZC

Technical Data Sheet: **JFS-SOL PE IP**

Product Description

JFS-SOL PE IP is a single component UV cured glass reinforced sheet laminate that contains high grade polyester fillers and chopped strand glass, and has been specifically designed to be used as a non-metallic cladding to protect a wide range of insulation materials, in addition to mitigate corrosion under insulation.

Corrosion Under Insulation

Corrosion under insulation costs industry $ billions annually. Although used for many applications, **JFS-SOL PE IP** with its ease of application, seamless finish and low vapour permeability and class 1 fire rating make it ideal to mitigate problems associated with CUI. It has a proven track record spanning many years as a cost effective alternative and is recognised by such organisations as CINI and RINA.

Technical Data

JFS-SOL PE IP is supplied in standard rolls 10 metre in length and 920 mm width. Prior to exposure to UV radiation the material is malleable and application friendly. Once cured **JFS-SOL PE IP** will display the following typical properties:

Product Features

- Low vapour permeability
- Single component
- Ease of application
- High temperature chemical resistance
- Excellent adhesion to a wide range of substrates
- High impact resistance
- Class 1 Fire Rating
- UV stable, no top coat required
- Low maintenance

Chemical resistance

For details on chemical resistance please refer to the JFS-SOL Chemical Resistance Chart.

Application Precautions

- Avoid exposure to direct sunlight during application
- Always apply material 3°C above dew point
- On porous surfaces a second coat of **JFS-SOL Primecoat** may be required
- When applying material onto hot substrates ensure it is exposed to UV light and allowed to cure immediately

Product Data	Typical Values	Test Method
Material Thickness	1.7 - 1.9 mm	
Tensile Strength	54 M Pa	ASTM D638
Coeff. of Thermal Expansion	2.3 x 10^{-5}°C^{-1}	ASTM D696
Impact Resistance	62 kJ/m^2	ISO 179-1:2010
Hardness	>60 Barcol	
Compression Strength	>200 M Pa	ASTM D695-2002a
Temprature of Use	0-90°C	
Elongation at Break	3%	ASTM D638-14
Flash Point	34°C	ASTM D93
Heat Resistance @100°C	No deformation observed	ASTM D2485
Weight	2.8 kg/m^2	
Flexural Strength	130 N/mm^2	ASTM D790-10
Heat Distortion Temperature	>100°C	ASTM D648
Flexural Modulus	9214 N/mm^2	ASTM D790-10
Water Vapour Permeance (WVP)	0.001 gms/m^2/h/mm of mercury	ASTM E96
Water Vapour Transmission (WVT)	0.023 gms/m^2/h/mm	ASTM E96
Flame Spread Index	20	ASTM E84-20

* All test data has been obtained through independent test laboratories to exacting test standards. These are average readings a small tolerance must be made between product batches, application conditions and UV source.

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Directions for Application

For detailed method statement or to obtain the JFS-SOL PE IP Insulation Handbook, please consult your local JFS-SOL technical representative.

For thermal application the **JFS-SOL PE IP** is generally applied directly onto the insulation.

For cryogenic applications it is recommended that a suitable vapour barrier is applied to the insulation material prior to application of **JFS-SOL PE IP.** This both aids application and provides extra protection against moisture permeation.

JFS-SOL PE IP laminate can be cut to size and then contoured to fit any surface. Once cut to size apply one **JFS-SOL PE IP** sheet laminate wrap to primed surface. First start to remove the blue inner plastic film and apply the **JFS-SOL PE IP** to the substrate. Next take a small stiff roller and lightly roll this over the sheet laminate. Continue this process until you have removed all of the film and overlapped back onto itself by minimum 50 mm. Allow to cure leaving the outer clear plastic film onto the sheet until fully cured before removing.

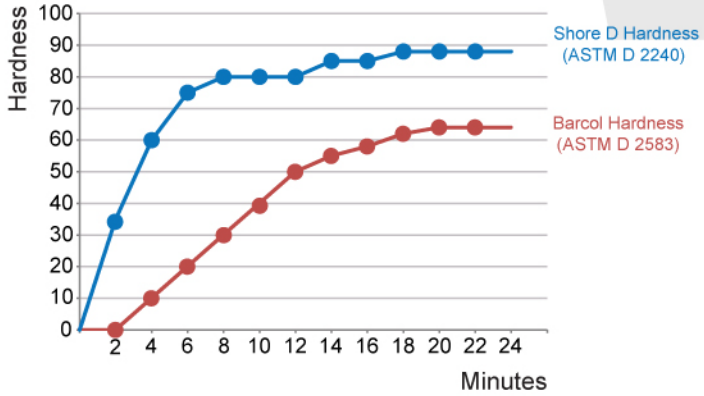
Where there are metal protrusions the **JFS-SOL PE IP** requires termination onto these to prevent moisture entry:

- First prepare the metal substrate by grit blasting or mechanical grinding to Swedish Standard S.A. 2.5 with a 75 microns profile
- Apply a single coat of **JFS-SOL Primecoat** onto the prepared surface and allow to cure exposing to a suitable UV source
- **JFS-SOL PE IP** can then be applied directly onto the **JFS-SOL Primecoat**

Application of further layers of **JFS-SOL PE IP** can be done as above within a 36 hours period. After this it is necessary to lightly abraid and brush clean the material. Use acetone, or solvent approved by local authorities, to degrease and prepare the existing surface before applying **JFS-SOL Primecoat** and another layer of laminate.The use of clear tape applied onto the laminate ensures very smooth finish.

Curing Time

Curing properties: hardness development against UV exposure



The curing time will vary with the intensity of UV source and the prevailing conditions. To determine that **JFS-SOL PE IP** has cured sufficiently a simple hardness test is recommended using a handheld shore hardness durometer tester.
The durometer only provides accurate readings on a flat surface. It is recommended that for testing purposes a 4" x 4" flat piece of laminate is cut and cured flat under the same conditions as the application onto insulation. This can be tested, labeled and kept within the application QA/QC documents as record.

Inspection

JFS-SOL PE IP can be inspected for pinholes and holidays using high voltage spark tester. Before use the material should be washed down with clear water to remove any contamination on the surface and allowed to dry. Typical voltage for testing should be 4kV. Please refer to the equipment manufacturers recommendations as voltages may vary with equipment type.

Technical Support

Corrotech Construction Chemicals offer complete technical support and asistance from discussing application requirements to training approved local contractors. For further information please contact a JFS-SOL representative or your nearest dealer.

Health & Safety

Please refer to the product material safety data sheet for detailed information on handling, storage, shipping and disposal.

Packaging and Storage

The material will have a minimum shelf life of **18 months** when stored below 26°C in a cool dry place and when kept in its original unopened packaging at the recommended storage conditions. Always store material in its original packaging in horizontal position, rotating boxes every 30 days by 180°. Protect material from sunlight or UV light at all times prior to installation.

Warranty

Corrotech Construction Chemicals guarantees this product will meet the performance claims stated herein when material is stored and used as instructed. Corrotech Construction Chemicals further guarantees that all its products are carefully manufactured to ensure the highest quality possible and tested strictly in accordance with universally recognized standards (ASTM, ANSI, BS, DIN, etc.). Since Corrotech Construction Chemicals has no control over the use of the products described herein, no warranty for the application can be given.

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