



Technical Data Sheet

PES-CHEM 553 FR Membrane

PES-Chem 553 FR Membrane is a single pack water based fire retardant acrylic coating. The product has been designed to encapsulate thermal insulation materials against damage, loss of insulation performance and prevent under insulation corrosion.

Typical applications

Protection and encapsulation of foam, calcium silicate, glass fibre and mineral wool surfaces.

Surface Preparation

All surfaces to be treated should be free of contamination and any loose material removed by vacuuming. Damaged insulation should be made good. Powdery and porous substrates should be dampened with clean water prior to application of PES-Chem 553 FR Membrane.

Steel or other non-porous substrates should be conditioned with PES-Chem 506 Aluprime before coating. Apply a single coat at 4 mil (100 microns) dry film thickness. Leave for a minimum of 6 hours at 86°F (30°C) before over-coating.

Mixing and Application

PES-Chem 553 FR Membrane is supplied ready for use but on friable substrates a conditioning coat should first be applied where the material has been diluted with an equal volume of clean water. At 68° F (20°C) **over-**coating can be carried out between 2 hour and 3 days.

PES-Chem 553 FR Membrane can be applied by brush, roller or spray. Apply the first coat at 16mil (400 microns) to give a dry film thickness of 10mil (250 microns) and the second coat a10mil (250 microns) to give a dry film thickness of 6mil (150 microns). At 68°F (20°C) allow 12 hours between coats.

Typical coverage rates for different insulating materials are as follows.

Substrate	First Layer per Litre	Second Layer per Litre
New Calcium Silicate	24.5sq ft. (2.3 sq. metres)	43sq ft. (4.0 sq. metres)
Old Calcium Silicate	21.5sq ft. (2.0 sq. metres)	43sq ft. (4.0 sq. metres)
New Glass fibre/mineral wool	17.25sq ft. (1.6 sq. metres)	36.75sq ft. (3.4 sq. metres)
Old Glass fibre/mineral wool	12sq ft. (1.1 sq. metres)	34.5sq ft. (3.2 sq. metres)
New foam sections	23.75sq ft. (2.2 sq. metres)	43sq ft. (4.0 sq. metres)
Old foam sections	20.5sq ft. (1.9 sq. metres)	43sq ft. (4.0 sq. metres)

Where physical strength is required the use of an open mesh glass fibre sheet in the first layer is recommended.

The material can also be applied by airless spray using a tip pressure of 2000psi and a spray tip size of 0.018-0.020inch.

Cure Times

The drying time of the material will be dependent on temperature, humidity and air movement. Where chemical contact is envisaged, however, this should be avoided for 7 days.

Storage Life

A minimum of 36 months if unopened and stored in normal dry conditions 60°F-86°F (15-30°C)



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Health and Safety

Please ensure good practice is observed at all times during the mixing and application of this product. Protective gloves and other recommended personal protective equipment must be worn during the mixing and application of this product. Before mixing and applying the material please ensure you have read and fully understood the detailed Material Safety Data Sheet.

Legal Notice

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