



Dry Tech Aerogels (Pty) Ltd

The right coating for ultimate insulation.

Aerogel Products and Integrated Service Provider Leader in Energy Conservation and Environmental Protection Innovative Technology

Technical Data Sheet

Elementum Rust Protector (Product Code AER018 & Aer019)

Product Description

Elementum Rust Protector is a one coat, one part moisture-cured polyurethane, silica aerogel, coating that absorbs atmospheric moisture to cure. Elementum is loaded with aluminium metallic pigment and aerogels for strength and is also hydrophobic and resistant to chemicals solvents and acid splash. Due to its unique composition it provides an excellent adhesion and flexibility and is highly resistant to abrasion and impact. Elementum Rust protector can be used as a one coat system acting as both primer and top coat. It was made to encapsulate lead based paints, asbestos and rust that offer the special ability to eliminate VOC's, CO2's and other harm full contaminants in our atmosphere. It can be applied over pressure washed, completely dry flash rust and will firmly bond over commercial paints. No surface blasting is required.

Typical uses

- Good acid and very good alkali resistance
- To encapsulate corrosion, asbestos, lead based paints and other hazardous materials.
- As a protective coating for metal, concrete, wood etc. to add strength and prevent deterioration.
- As a one coat system on new or existing bridges, oil platforms, roofs, tanks and other surfaces.
- As a moisture protective membrane to stop moisture penetration, contaminants, mould and mildew.

Application methods

Elementum Rust Protector can also be applied to concrete or masonry substrates. It can be applied by spray, brush or roller.

Note: This product must not be applied on or within 50mm of chlorinated rubber.

Note: Never use mineral spirits to prep surfaces or to thin this product.

Note: Elementum Rust Protector will dry to touch but will not be completely finished gassing off.

Minimum spread rate

Apply Elementum Rust Protector at a minimum of 8 mills wet/4 mills dry over the highest peaks of the surface profile. Allow for absorption into the substrate and filling profile when figuring spread rate.

Test and Certifications

- Tensile strength 6 800 psi after 21 days and when fully cured over 13 000 psi.
- Spread of flame on roofs Class A (non-combustible)
- Penetration over rust, asbestos and lead based paints.
- Approval for salt water. Tested for 15 000 hrs still got a 10/10 rating. Perfect score.
- Mildew resistance
- Chemical resistance (24 Hrs)
- Direct impact resistance
- Weathering (2 000 Hrs)
- Scrub resistance
- Encapsulation test group.

Physical Data

- Solids by wait 62%/by volume 51,4%
- 60 min to tack free at 25°C
- Overcoat window is 3 hours.
- Led and chromate free.
- Cures by absorbing moisture from the air.
- Moisture-cure polyurethane.
- No curing agent required.
- Shelf Life: up to 3 years unopened.
- VOC level 380 grams/litre.
- Resistant to most solvents, chemicals and some acids.
- Minimum surface temp. with applying 10°C
- Maximum surface temp. with applying 65°C
- Maximum temp. after curing 163°C after failure might occur.

Safety precautions

Do not use this product without first taking all appropriate safety measures. (Refer to Safety Data Sheet)

Keep out of reach of children.

Limitation of liability: The information in this data sheet is based upon tests that we believe to be accurate and is intended for guidance only. Dry Tech Aerogels have no control over either quality or condition of the substrate affecting the use of the product, therefore Dry Tech Aerogels does not accept any liability arising from loss, injury or damage resulting from such use for the contents of this data sheet.

