



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

Elementum Insulation Paints Technical Data Sheet

Description

Reflect and Protect against elements

For Interior Walls, Exterior Walls and Roofs

What are Elementum Heat Reflect and Protect Paint against elements? It is a water-borne combination of high performance polyurethanes, elastomeric acrylics, aerogel and resin additives which produces a tough yet flexible coating film. Elementum contains aerogel that is a unique product that block sunrays and UV, making it a excellent insulation coating.

It is a revolutionary paint matrix which contains highly reflective and massively durable heat reflective platelets and glass microspheres.

The paint matrix creates a solvent free, water repellent, yet breathable "skin".

Skin? Just like human skin the layer is flexible, water repellent, breathable, anti-soiling and it allows the building to moderate temperature Solvent free composite

Contains microscopic Glass Spheres and Micro reflectors

Highly elastic, approx. 150%

Buildings are like living organisms they breathe, move and are exposed to harsh elements

Elementum keeps the wall and roofs of a building dry, therefore preventing heat loss through thermal conduction and evaporative cooling. The reflective characteristics of the paint significantly reduces heat gain from solar warming in

summertime. Both internal and exterior walls can be coated. Paints are available in any colour

Additional Attributes

This unique technology offers additional benefits....

- Free of allergenic solvents, POP s and plasticisers
- Wet abrasion resistance to DIN- 13300
- High opacity to DIN -13300
- Crack bridging elasticity
- Rejects soiling agents and algae
- Powerful adhesion to a wide range of substrates
- Flame retardant to B1-DIN 4105
- .Extremely high solar light reflection, up to 98%*
- .UV, weather and aging resistant
- .Crack bridging
- .Absorption of all VOC's, CO₂ etc. Act like a tree
- .Excellent bonding to most substrates including metal, easy to apply.

* Level of solar reflection varies depending on the colour of the paint 98%= white base coat

In winter

In winter the main heat gain results from the warmth remaining within the house, linked with the walls being significantly more efficient as an insulating barrier.

Factory roof coating

98% heat reflection on a metal roof massively reduces the internal temperature of the factory.

This results in significant reduction in air conditioning costs.

Coating the roof of a house

Asset protection

Aesthetic enhancement

Keep the building cool [n summer and warmer in winter.

Key Benefits

Highly water repellent Breathable and non breathable variants High elasticity and crack coverage UV and weathering resistant Rejects soiling , fungal and algae growth Abrasion resistant and colour fast Easy to apply with roller or spray (in 27 colours) Suitable for almost all standard building substrates Enhances building insulation in winter . High levels of solar reflection which dramatically reduces AC costs. Fire retardant.

Physical Data

- Solids: By weight 70%/by volume 54% (+/- 2%)
- 30 – 60 min tack free at 21°C.
- Overcoat only after 2 hours at 21°C
- Full Cure 21 days.
- Lead and chromate free.
- Cures by evaporation.
- Shelf life: up to 5 years if unopened under appropriate conditions.
- VOC level: 67, 2 grams/litre.
- Viscosity: 105 – 110 KU.
- pH: 8, 5 to 9, 0.
- 425 microns wet/229 microns dry
- Max application temperature 65°C.
- Min application temperature 5°C.

Safety Precautions

Take all appropriate safety measures. Refer to Safety Data Sheet.

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, therefor 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.