AES TECH

Nanocomposite semi-liquid thermal insulation

for industrial applications on metals, plastics, membranes and wood

FEATURES

Packaging: 16 lt

Coverage: 1 lt /1 sq.m / 0,75 mm approx.

Thickness: 1.0 - 4.0 mm approx.

Thermal conductivity: λ_d = (HotBox Test) 0,0010 W/mK

Thermal reflectance (SR %) (ASTM C1549): 84,3

Thermal emissivity (IE %) (EN 15976): 87,4

Thermal reflectance index (SRI %) (ASTM E1980): 105,0

Ph: 8,5 (± 0,5)

VOC content: < 0.003 µg/lt (UNI EN ISO 16000-9:2024, 160000-6:2021, 16000-3:2022)

Finish/color: White (can be colored with pastel colors)

Density: 370 kg/m^3 approx.

Reaction to fire: Euro Class A - fireproof

Liquid water permeability: 0,08 kg/m^{2}h$^{1/2}$ (EN 1062-3)

Pull-off test: >2 N/mm^2 to substrate; 0.55 ± 0.10 N/mm^2 between layers (ASTM D4541).

Drying time of each coat: 8 h

Composition	Patented product containing ceramic nanoparticles for thermal insulation
General information	This protective, waterproofing thermal coating is water based, free of solvents, and similar to paint. It consists of a thin, stable layer containing hollow ceramic microspheres. It significantly reduces the thermal load, mainly due to its heat-reflecting capacity. It has waterproofing properties. It adheres perfectly to various surfaces and moderates thermal bridges, thereby reducing the formation of mould and spores. It is an environmentally friendly product and does not generate hazardous waste.
Use	Thermal protective coating for industrial applications (pipes, containers, silos, metal equipment, tanks, cold storage rooms etc.). The product guarantees an effective and long-lasting thermal insulation without maintenance. Maximum service temperature: 240°C
Application	The product should ideally be applied (in multiple coats) using a Graco Airless piston sprayer Mark VII HD, following the instructions in the Installation Manual. For limited areas, a brush or roller may also be used. Avoid application at temperatures below +5°C or humidity above 80%, and protect from rain for the first 48 hours. The product is applied directly onto the substrate after cleaning and, where necessary, surface preparation. On most substrates, no primer is required. Please refer to the installation manual.
Special remarks	Adhesion test: no loss of adhesion, no visible signs of separation, swelling or peeling. Complete polymerization occurs within 30 days

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