



TECPINT AIRDEPUR ECO-TERMIC

ECOLOGICAL MINERAL SILICATE THERMAL, PHOTOCATALYTIC AND ANTI-CONDENSATION PAINT

DESCRIPTION

Ecological mineral paint based on sol-silicate, photocatalytic (cleans and purifies the air), with thermal insulation properties, anti-mould and anti-condensation. Biocide-free. For interior and exterior use.

Complies with DIN 18363 standard.

PERFORMANCE

- Photocatalytic: Cleans and purifies the air. Ideal for homes, nurseries, care homes, hospitals, properties in polluted areas or for people sensitive to chemicals and odours. Activated by light energy (natural or artificial) to eliminate odours, pollutants or harmful compounds that may accumulate indoors or outdoors.
- Thermal (insulation): The formula contains glass and ceramic microspheres creating micro-chambers in each layer, providing thermal insulation against both cold and heat.
- Energy saving: Maintains heat or coolness longer indoors, reducing heating/air conditioning needs and lowering energy consumption.
- Reduces health issues.
- Anti-mould and anti-condensation: Unfavourable to fungal and algal growth due to optimal moisture management and its high pH.
- Ecological: Due to its mineral sol-silicate base composition and natural formulation.
- Breathable: Ideal for damp substrates, anti-damp renders or historic buildings. Beyond breathability, its photocatalytic action prevents damp odours.
- Odourless: Odourless during and after application; occupancy possible the same day.
- Tintable: Tintable with inorganic water-based colourants such as our ECOPIGMENT.
- Substrates: Interior/exterior on all render types, stone, porous substrates, plastic or acrylic paints, lime paints, plasters, plasterboard, wood or iron. Important: consult cases requiring prior priming in the "Application" section.

PROPERTIES

- Binder: combination of silica sol and potassium silicate.
- Easy application.
- High durability interior/exterior, weather resistant.
- UV and acid stable, anti-static.
- Lightfast pigments (non-yellowing, colourfast).
- Matt mineral appearance. Washable.
- Breathable, non-film forming, microporous.
- Highly hydrophobic.
- Zero VOCs (no solvents added).
- No plasticisers.
- Solar Reflectance Index (SRI) = 105 [ASTM E1980-1].
- Sound absorption (α): attenuates reverberation noise.
- Photocatalytic: Under natural or artificial light, continuously purifies air from pollutants and bad odours. (A 4,000 m² surface painted with TECPINT AIRDEPUR ECO-TERMIC eliminates 1 tonne/year of CO₂ and NO_x.)
- Thermal insulating: Thermal conductivity = 0.046 W/m·K; Thermal resistance = 0.059 m²·K/W [EN 12667:2001].
- Energy saving: Reflects up to 84% of heat, maintaining indoor comfort and reducing energy consumption [ASTM E1980-11].
- Coverage: 3–4 m²/L in 2 coats (sufficient for photocatalytic effectiveness). For greater thermal performance, apply 3 coats (coverage: 2.5–3 m²/L).

TECHNICAL CHARACTERISTICS

According to UNE-EN 15824:

- Fire reaction: Class A2-s1,d0 according to EN 13501-1 (test certificate).
- Organic content: < 5%.
- pH: ≈ 11.
- Specific weight: 1.05–1.08 g/cm³.

According to DIN EN 1062-1:

- Water vapour diffusion resistance: sd ≤ 0.01 m (dry film thickness ≈ 237 μm).
- Class 1 (DIN EN ISO 7783-2).
- Water vapour permeability: V ≤ 2,000 g/(m²·d).
- Liquid water permeability (24 h): W < 0.1 kg/(m²·h^{0.5}) (dry film thickness ≈ 340 μm).
- Class III (< 0.1) according to DIN EN ISO 1062-3.

APPLICATION

The substrate must be sound, dry, clean and dust-free. On highly absorbent surfaces or substrates repaired after previous paint failure, apply TECPINT SILICATE CONSOLIDANT beforehand. On new plaster or plasterboard, apply TECPINT PRIMER beforehand. TECPINT AIRDEPUR ECO-TERMIC can be applied by roller or airless spray.

On wood or iron: apply universal primer first (varnished wood: sand beforehand; rusty iron: sand, treat rusted areas with TECPINT RUST INHIBITOR, let dry and apply universal primer before painting).

Preparation: Stir with electric mixer at low speed or manually to homogenise.

First coat: Apply undiluted or diluted up to 5%. Subsequent coats undiluted. Drying time between coats: 10 h.

Temperature: +5 °C to +35 °C (ambient and substrate). Do not apply in direct sunlight or on sun-heated substrates.

In summer, protect surfaces from direct sun, wind and rain during and after application. Clean tools with water immediately after use.

ADDITIONAL INFORMATION

Waste management: Follow local regulations. Do not pour residues down drains; dispose at recycling centre. Calculate required quantity to avoid waste.

Storage: Store leftover product in original tightly closed container in a cool, dry place. Reusing paint minimises environmental impact. Shelf life: 12 months.

Pack sizes: 4 L, 7.5 L and 15 L.

