erstotherm

VACUUM BASED **CERAMIC COATING**

TECHNICAL DATA SHEET

Functional surface coating for the reduction of condensation and thermal surface effects

PRODUCT DESCRIPTION

erstotherm is a functional coating based on acrylate and vacuum ceramic technology designed to improve the thermal surface behaviour of building components and technical surfaces.

The coating has been developed for:

- reducing condensation formation
- improving surface temperature behaviour
- minimising thermal weak points
- supporting a more stable indoor and surface climate

erstotherm is not a conventional thermal insulation system in the building-physics sense and does not replace standard-compliant insulation measures.

Its performance is based on the optimisation of thermal surface properties as well as the reflection and control of radiant heat energy.

The coating is suitable for:

- mineral substrates
- metal surfaces
- technical installations
- pipelines
- façades
- interior wall surfaces
- ceiling and junction areas.

PROPERTIES

- Functional coating based on acrylate and vacuum ceramic technology
- Supports the reduction of condensation moisture
- Improves thermal surface properties
- Reflects a high proportion of thermal radiant energy
- Water vapour permeable
- Breathable
- UV- and weather-resistant
- Good biological and chemical resistance
- Elastic and durable surface properties
- Excellent adhesion on various substrates
- Recoatable
- Solvent-free
- Free from silver ions
- Free from nanoparticles
- Suitable for interior and exterior use
- Long-term stable coating technology

FUNCTIONAL PRINCIPLE

erstotherm does not function as conventional insulation, but as a functional surface coating designed to optimise thermal surface properties.

The specialised combination of:

- acrylate matrix
- vacuum ceramic fillers
- and reflective functional components

supports:

- reduction of thermal surface stress
- stabilisation of surface temperatures
- reduction of condensation formation
- and improvement of thermal comfort perception.

The actual performance depends on:

- substrate
- coating thickness
- building component configuration
- humidity
- temperature differentials
- and surrounding environmental conditions.

SURFACE PREPARATION

The substrate must be:

- structurally sound
- clean
- dry or suitably prepared
- free from dust, oil and grease
- and free from adhesion-reducing contaminants.

For exterior applications, contamination, loose particles and microbial growth must be professionally removed.

Suitable preparation methods may include:

- high-pressure cleaning
- softwash cleaning
- sand or granulate blasting
- or comparable suitable cleaning procedures.

The load-bearing capacity of existing coatings must be assessed on a project-specific basis.
Test areas are recommended.

APPLICATION

erstotherm is supplied ready for use.
Stir thoroughly and slowly before application.

Important:

When using mechanical mixing equipment, a mixing speed of 200–300 rpm must not be exceeded.

Application may be carried out by:

- trowel
- brush
- coating brush
- or airless spray equipment.

The use of paint rollers is not recommended due to the material structure.

Depending on the substrate and the required function, the coating may be applied in multiple layers.

Application Temperature

- Substrate and ambient temperature: +5 °C to +30 °C
- Do not apply to frozen substrates
- Do not apply in direct sunlight or rain

NOTES ON COATING THICKNESS

The required coating thickness depends on:

- substrate
- component geometry
- temperature exposure
- moisture conditions
- and the intended functional performance.

For technical applications, pipelines or highly temperature-exposed surfaces, a project-specific specification is recommended.

Preliminary testing or sample applications are strongly advised.

The indicated values for temperature reduction are guideline values obtained under laboratory conditions only and do not constitute guaranteed performance characteristics.

AREAS OF APPLICATION

erstotherm is suitable for:

interior wall surfaces
ceiling areas
window reveals
thermal bridge areas
technical installations
pipelines
façade surfaces
metallic substrates
concrete and rendered surfaces
roofs and technical components.

Typical application areas:

- residential buildings
- commercial properties
- industrial facilities
- technical rooms
- production environments
- renovation projects.

The coating particularly supports:

- reduction of condensation formation
- improvement of thermal surface conditions
- and stabilisation of critical building components.

PROTECTION & SAFETY

erstotherm is a solvent-free functional surface coating.

The product must only be used in accordance with the application instructions. Mixing or unauthorised dilution may affect the system properties.

Permitted exception:

- Mixol tinting concentrates up to a maximum of 5% for pastel shades

Ensure adequate ventilation during application & drying.

Store remaining material tightly sealed in the original container and use within an appropriate period.

Dispose of dried material residues in accordance with local regulations.

Keep out of reach of children.

erstotherm is free from:

- silver ions
- nanoparticles
- solvents.

The information provided reflects the current state of technical knowledge. Due to varying substrates, project conditions and application methods, no liability claims may be derived from this information.

Observe the Technical Data Sheet and Safety Data Sheet.

TECHNICAL DATA

Property	Value
Base	Functional coating based on acrylate and vacuum ceramic technology
Colour	White
Surface finish	Matt
Viscosity	Thixotropic
Solids content	Approx. 50–55%
Liquid density at 20 °C	Approx. 500 kg/m³
Dry density at 20 °C	Approx. 390 kg/m³
pH value	Approx. 7.5–9.5
Drying time	Approx. 24 h at 20 °C
Application temperature	+5 °C to +30 °C
Temperature resistance	Approx. -60 °C to +200 °C (depending on version)
Coverage	Approx. 1–1.5 L/m² at 1 mm coating thickness
Odour	Product-specific
Packaging	Plastic containers
Shelf life	Approx. 12 months, frost-free storage

CLEANING OF EQUIPMENT

Clean tools and equipment immediately after use with water.

CONTACT

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