FIRE PROTECTION · INTUMESCENT

Thermocoat 4022

Decorative intumescent topcoat for structural steel

COLOUR
RAL colours
eggshell finish · custom on request

½ – 2 h	1.20 g/cm³	54.3 %	2–4 h	5 m²/kg
Fire resistance	Mass density	Solids (by volume)	Touch dry	at 100 µm DFT

Product description

THERMOCOAT 4022 is a decorative intumescent paint system that provides fire resistance to structural steel and cast iron. Its hard, high-quality, weather-resistant finishes enhance the architectural, industrial or historic features of a building.

How it works

- Heat in a fire triggers a catalytic reaction
- An insulating char layer expands up to 50 times the paint film thickness
- The steel stays below its critical temperature – structural stability is maintained

Advantages

- Self-priming
- Cures down to +10 °C
- Resists splashes of mild chemicals
- Good adhesion to concrete, steel, galvanised steel and aluminium
- Good water, salt-water and corrosion resistance
- Easy to clean

Position in the system

Intumescent coat — THERMOCOAT 4022 · ½ – 2 h fire resistance — THIS PRODUCT

Priming (concrete) — 1–2 coats of diluted THERMOCOAT 4022

Substrate — Structural steel Sa 2½ / St 3 · cast iron · concrete

Passive fire protection

Intumescent system for steel structures

½ h · 1 h with 1 coat · 1½ h with 2 coats
Fire resistance of the coating system

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Technical data (at +20 °C)

Colour	**RAL colours**	Full cure	**7 days**
Mass density (mixed, 20 °C)	**approx. 1.20 g/cm³**	Spreading rate	**5 m²/kg at 100 µm DFT**
Solids (by volume)	**approx. 54.3 %**	Fire resistance – 1 coat	**½ h and 1 h**
VOC	**350 g/l**	Fire resistance – 2 coats	**1½ h**
Touch dry	**2–4 h**	Thinner	**Aromatic solvent (xylene)**
Overcoating interval	**min. 24 h – max. 48 h**	Shelf life	**min. 12 months**

Application procedure

01

Surface preparation

Clean, sound surface. Steel: Sa 2½ for immersion, Sa 2½ or St 3 for atmospheric exposure; clean galvanised steel of grease and salts. Previous coats must be dry and clean.

02

Concrete priming

On concrete walls and ceilings apply 1–2 coats of diluted **THERMOCOAT 4022** as primer. The surface must be perfectly dry.

03

Mixing

Mix the can well until smooth. If needed, thin with aromatic solvent (xylene).

04

Application

Apply by roller, brush or airless spray. 1 coat: ½ h and 1 h; 2 coats: 1½ h fire resistance.

Application conditions
above +5 °C
Surface temperature at least 3 °C above dew point.

Spreading rate
5 m²/kg
At 100 µm DFT – depending on surface permeability and porosity.

Fire resistance
up to 2 h
½ h and 1 h with 1 coat · 1½ h with 2 coats.

Important: the product contains flammable materials – forbid flames, smoking and welding in the work area; use explosion-proof lighting and non-sparking tools.

Points to consider

- Work must be done by trained or experienced contractors.
- Maintain adequate ventilation; wear gloves and face masks.
- Avoid breathing vapour and contact with skin or eyes.
- On skin or eye contact wash thoroughly with water and seek medical attention.

Packaging

- 5 kg or 20 kg tin cans

Storage

- Store in a cool, dry place.
- Shelf life: at least 12 months.

Safety

- Contains flammable materials.
- See the Safety Data Sheet.

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