

## **HEMPACORE ONE FD 43601**

**Description:** HEMPACORE ONE FD 43601 is a fast drying one component, solvent-borne, physically drying

intumescent coating for passive fire protection of structural steel against cellulosic fires. It is suitable

for in-shop and on-site applications.

Recommended use: 1. As intumescent fire protection for internal and external structural steel. Suitable for open beams and

columns and hollow sections.

2. As a repair and touch-up coating for damaged areas of freshly applied HEMPACORE ONE 43601.

3. As in-shop applied intumescent for increased application efficiency.

4. Applied in up to 1100 micron [43 mils] dry film thickness per coat (equivalent to 1466 micron [58

mils] wet film thickness).

**Certificates/Approvals:** Tested and approved according to EN13381-8 and BS476-21 for up to 120 minutes fire protection.

Fire protection up to 4 hours can be achieved for a limited range of massivity (Hp/A) sections at

various critical temperatures.

CE marked product with European Technical Approval ETA 12/0581 according to ETAG018 Part 2.

Approved with Certifire certificate no CF 5146.

Complies with EU Directive 2004/42/EC: subcategory i.

Availability: Part of Group Assortment. Local availability subject to confirmation.

**PHYSICAL CONSTANTS:** 

Shade nos/Colours: 10000/ White. Finish: Flat Volume solids, %:  $75 \pm 3$ 

Theoretical spreading rate: 1 m²/l [40.1 sq.ft./US gallon] - 750 micron/30 mils

See remarks on film thickness overleaf.

Flash point: 5 °C [41 °F]

Specific gravity: 1.3 kg/litre [11.1 lbs/US gallon]

Surface dry: 15 minute(s) , 20°C/68°F and 750 micron/30 mils
Dry to touch: 20 minute(s) , 20°C/68°F and 750 micron/30 mils
Dry to handle: 16 hour(s) 20°C/68°F and 750 micron/30 mils

VOC content: 310 g/l [2.6 lbs/US gallon]

Shelf life: 12 months

The physical constants stated are nominal data according to the HEMPEL Group's approved formulas.

**APPLICATION DETAILS:** 

Application method: Airless spray / Brush Thinner (max.vol.): Not recommended. Nozzle orifice: 0.017 - 0.023 " Nozzle pressure: 200 bar [2900 psi]

(Airless spray data are indicative and subject to adjustment) (Consult the separate APPLICATION INSTRUCTIONS)

Cleaning of tools: HEMPEL'S THINNER 08080 or HEMPEL'S TOOL CLEANER 99610

Indicated film thickness, dry:

The Dry Film Thickness (DFT) is dependent on the required fire resistance as well as the massivity

factor (Hp/A) of the steel element. Consult your local Hempel representative for more information.

Overcoat interval, min: (Consult the separate APPLICATION INSTRUCTIONS)

Overcoat interval, max: (Consult the separate APPLICATION INSTRUCTIONS)

Safety: Handle with care. Before and during use, observe all safety labels on packaging and paint containers,

consult HEMPEL Safety Data Sheets and follow all local or national safety regulations.

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## **HEMPACORE ONE FD 43601**

SURFACE PREPARATION: The product should only be applied over steel which has been blasted to Sa 21/2 (ISO 8501-1) and

suitably primed. Remove oil and grease etc. thoroughly with suitable detergent. Remove salts and other contaminants by high pressure fresh water cleaning. The steel must be coated with a Hempel approved primer. The steel must be coated with a Hempel approved primer. Under restrictions ST3 prepared steel can be acceptable, consult the application instructions for the requirements. Galvanised, Thermal Spray Aluminium coated and stainless steel substrates may require other

surface preparations, consult the application instructions for detailed information.

APPLICATION CONDITIONS: At temperatures ranging: 5°C/41°F - 30°C/86°F. In confined spaces provide adequate ventilation

during application and drying.

PRECEDING COAT: According to specification and only Hempel approved primer. Consult your Hempel technical

representative for information on approved primers.

SUBSEQUENT COAT: Consult your Hempel technical representative for detailed working specification.

REMARKS:

VOC - EU Directive 2004/42/EC:	Product	As supplied	0 vol. % thinning	Limit phase II, 2010
	4360110000	310 g/l	310 g/l	500 g/l

For VOC of other shades, please refer to Safety Data Sheet.

Colours/Colour stability: The product is only available in white, but can be top coated with an approved topcoat in any colour.

The product is thermoplastic, prolonged mechanical exposure at temperatures above 40°C/104°F may cause film indentation. When temperature drops below, mechanical strength is recovered. Tinting is

not allowed.

Weathering/service temperatures: The product can be exposed to mild exterior conditions up to 6 months. For longer external exposures

a Hempel approved topcoat shall be applied. During the construction phase and during service of

intumescent coating systems care must be taken to avoid pooling water.

Film thicknesses/thinning: The DFT is dependent on the required fire resistance as well as the massivity factor (Hp/A) of the steel

element. Consult your local Hempel representative for more information.

In order to achieve the specified fire resistance it is important that the required DFT is obtained as a minimum on all coated areas. Furthermore, the specified DFT should not be exceeded by far. Please

consult the Application Instructions for more detailed information.

The max DFT that can be applied per coat is 1100 micron [43 mils] (equivalent to 1450 micron [58 mils]

wet film thickness).

Overcoating intervals: For multi-coat application minimum overcoating interval is influenced by the actual film thickness and

number of coats applied. Reference is made to the drying times in the application instructions. It is important that the specified intumescent thickness has been achieved before any top coat is applied. The product can be overcoated provided that the underlying coating surface is in good condition, clean,

dry and free from contamination.

HEMPACORE ONE FD 43601 For professional use only. Note:

ISSUED BY: HEMPEL A/S 4360110000

This Product Data Sheet supersedes those previously issued. For explanations, definitions and scope, see "Explanatory Notes" at www.hempel.com.

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