

Description:	HEMPACORE ONE FD 43601 is a 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. HEMPACORE ONE FD 43601 can be applied up to 1100 micron [43 mils] dry film thickness per coat.
Recommended use:	<ol style="list-style-type: none">1. As intumescent fire protection for structural steel in internal and external conditions, upto C4 conditions (ISO 12944-2). Suitable for open beams, columns and hollow sections.2. As a repair and touch-up coating for damaged areas of freshly applied HEMPACORE ONE 43601.3. As coating during construction phase of a building, HEMPACORE ONE FD 43601 can be left without a topcoat during the construction phase for 12 months in exterior conditions without high humidity.
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 n° CF 5146. Approved for Type X conditions (all conditions) according ETAG 018-2. The product is listed with UL-EU certificate, Certificate No. UL-EU-00832-A1. 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 ± 3
Theoretical spreading rate:	1 m ² /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
Through-dry:	14 hour(s) 20°C/68°F
Dry to handle:	(See separate APPLICATION INSTRUCTIONS)
VOC content:	310 g/l [2.6 lbs/US gallon]
Shelf life:	12 months <i>The physical constants stated are nominal data according to the HEMPEL Group's approved formulas.</i>
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) (See 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. (See separate APPLICATION INSTRUCTIONS)
Overcoat interval, min:	(See separate APPLICATION INSTRUCTIONS)
Overcoat interval, max:	(See 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.

SURFACE PREPARATION: The product should only be applied over steel which has been blasted to Sa 2½ (ISO 8501-1) and primed with an approved primer. Remove oil and grease etc. thoroughly with suitable detergent. Remove salts and other contaminants by high pressure fresh water cleaning. Under restrictions St 3 (ISO 8501-1) prepared steel can be acceptable, consult the application instructions for the requirements. Galvanised steel, Thermal Spray Aluminium/Zinc coated steel 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: A selection of approved topcoats are available. HEMPACORE ONE FD 43601 can be used without topcoat in C1 and C2 environments (ISO 12944-2). 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 exterior conditions with no high humidity and no pooling/standing of water up to 12 months. For longer external exposures a Hempel approved topcoat shall be applied. During the construction phase and during service of intumescent coating systems pooling water must be avoided.

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).

Storage Conditions: Store under dry and clean conditions. Avoid direct sunlight.

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.

Note: **HEMPACORE ONE FD 43601 For professional use only.**

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.

Data, specifications, directions and recommendations given in this data sheet represent only test results or experience obtained under controlled or specially defined circumstances. Their accuracy, completeness or appropriateness under the actual conditions of any intended use of the Products herein must be determined exclusively by the Buyer and/or User.

The Products are supplied and all technical assistance is given subject to HEMPEL's GENERAL TERMS AND CONDITIONS FOR INTUMESCENT PAINTS, unless otherwise expressly agreed in writing. The Manufacturer and Seller disclaim, and Buyer and/or User waive all claims involving, any liability, including but not limited to negligence, except as expressed in said GENERAL TERMS AND CONDITIONS FOR INTUMESCENT PAINTS for all results, injury or direct or consequential losses or damages arising from the use of the Products as recommended above, on the overleaf or otherwise.

Product data are subject to change without notice and become void five years from the date of issue.