Hempafire Pro 315 Fast Dry

Product characteristics

Description
Hempafire Pro 315 Fast Dry is a one component, solvent-borne, physically fast drying intumescent coating for passive fire protection of structural steel against cellulosic fires. It is optimized for R30 & R60 and for in-shop and on-site applications. Fire protection at R90 may be possible depending on the project.

Recommended use
As intumescent fire protection for structural steel in interior and exterior service conditions, up to Type X (EAD350402-00-1106 / EN 16623) and C4 conditions (ISO 12944-2). Suitable for I section beams, H columns, hollow sections and cellular beams.
As a repair and touch up coating for damaged areas of freshly applied Hempafire Pro 315 Fast Dry.

Certificates / Approvals
- CE marked product with European Technical Assessment (ETA) ETA 18/0689. Up to 90 minutes.
- Third party certified by Applus+; Fire Safety Mark
- Tested and assessed according to BS 476-21: Standard for Fire Test on Building Materials and structures; determination of the fire resistance of loadbearing elements of construction.
- Reaction to fire tested (as part of a coating system with approved primer and topcoat) according to EN13501-1

Features
- Very competitive loadings resulting in reduced paint consumption and less coats to apply.
- Fast dry, designed for increased in-shop and on-site application efficiency.
- Faster drying times thanks to lower thicknesses to apply
- One product for most common steel sections to reduce complexity in application and specification.
- It has been approved and 3rd party certified according to EN13381-, BS 476-21 and AS 4100. It has ETA with CE mark, and ApplusFire approval.
- Ease of application and smooth surface contributes to provide excellent cosmetic finish to steel.
- Can be applied up to 1600 micron [63 mils] dry film thickness per coat, thus providing the required protection in less coats.
- 12 months weather resistant without topcoat provided that coating is sufficiently dried, applied according the Application Instructions and not exposed to condensation, running or pooling water.
- Environmental Product Declaration with third-party certification available (Type III EPD, acc. to ISO 14025, EN 15804). Product can contribute to EPD credits for LEED and BREEAM projects.
- Complies with EU Directive 2004/42/EC, The Paints Directive on the limitation of volatile organic compounds: subcategory i.

Product safety

Flash point 4°C [39°F]

VOC content

Legislation	Value
EU	340 g/L [2.84 lb/US gal]
US (coatings)	340 g/L [2.84 lb/US gal]
US (regulatory)	340 g/L [2.84 lb/US gal]
China	340 g/L [2.84 lb/US gal]

According to ASTM D2369. According to specific legislation, see details in the Explanatory Notes available at Hempel website, hempel.com or at your local Hempel website.

Handling
Handle with care. Before and during use, observe safety labels on packaging and paint containers and follow all local and national safety regulations. Always consult Hempel's Safety Data Sheet for this product along with the Product Data Sheet.

For professional use only.

Product data

Product code: 43361

Standard shade / code: White 10000

Gloss: Flat

Volume solids: 75 ± 3%

Specific gravity: 1.3 kg/L [11 lb/US gal]

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Cleanliness
- Remove salts, detergents and other contaminants by high pressure fresh water cleaning.
- Abrasive blasting to min. Sa 2½ (ISO 8501-1) / SP 10 (SSPC) / NACE No.2.
- Zinc coated surfaces: use non-metallic blast media (corundum, garnet, etc.).
- Use approved primer.
- Remove oil, grease and other contaminants by suitable detergent cleaning.
- Remove dust, blast media and loose materials.
- The surface must be dry and clean prior to application.
- For approved substrates other than Carbon Steel, the substrate may require other surface preparations, consult Hempel's application instructions for detailed information.
- Minor areas can be cleaned by power tool to St 3 provided the surface is roughened and not polished.
- Consult Hempel's separate Surface Preparation Guidelines for more details.

Maintenance and Repair
- Minor areas may be hand or power tool cleaned instead of abrasive blasting.

Consult Hempel's separate Surface Preparation Guidelines for more details.

Application

Thinner
Not Recommended

Cleaner
Hempel's Thinner 08080
Hempel's Tool Cleaner 99610

Application method

Tool	Application parameters
Airless spray	Nozzle pressure: 200 bar [2900 psi] Nozzle orifice: 0.017-0.023"

If brush or roller application is used, more coats will be necessary to achieve the specified dry film thickness. In general, thinning is not recommended. Spray data are indicative and subject to adjustment. Pressure is for a material temperature of 20°C [68°F].

Film thickness

The film thickness is dependent on the required fire resistance as well as the massivity factor (Hp/A) of the steel element. Please contact your local Hempel representative. The maximum thickness per coat is 1600 micron [64 mils] Dry Film Thickness equivalent to 2133 micron [85 mils] Wet Film Thickness. Please consult the Application Instruction for more detailed information.

Application conditions
- To avoid condensation, apply on a clean and dry surface with a temperature that is at least 3°C [5°F] above the dew point.

Application remarks
- Stir well before use.

Drying and overcoating

Product compatibility
- Previous coat: According to Hempel’s Specification. Only Hempel approved primer. Consult Hempel representative for information on approved primers.
- Subsequent coat: According to Hempel’s Specification. A selection of approved topcoats is available. Consult Hempel representative for information on approved topcoats.

Overcoating details
- Please consult the specific Drying time and Overcoating details for this product.
- Consult Hempel for specific details
- A topcoat cannot be applied before the specified intumescent thickness has been achieved and the coating is sufficiently dry. Consult Hempel representative for more detailed information.

Other remarks
- The Application Instructions detail recommendation for primer and topcoat considerations for required Service Conditions.

Storage

Shelf life

Ambient temperature	25°C [77°F]
Product	15 months

Shelf life from date of production, when stored in original, unopened containers. Thereafter, the product quality must be re-inspected. Storage at elevated temperatures may reduce shelf life. The shelf life printed on product labels is based on regional climate conditions. For advice, please consult Hempel.

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Storage conditions

- In case shelf life is exceeded, the product must be re-evaluated before use. Please contact a Hempel representative.
- The product must be stored in accordance with Safety Data Sheet, label and local regulations. Keep the containers in a dry, shaded, cool, well-ventilated space and away from sources of heat and ignition. Containers must be kept tightly closed. Handle with care.

Additional documents

Additional information is available at the Knowledge Center: https://www.hempel.com/knowledge-center . The documents below can be found in the Technical Guidelines section: https://www.hempel.com/knowledge-center/technical-guidelines or at the Hempel website.

- Explanatory Notes for Product Data Sheet.
- Application methods.
- Application Instruction for this product.
- Drying time and Overcoating Intervals for this product.
- List of approved primers and topcoats

This Product Data Sheet ("**PDS**") relates to the supplied product ("**Product**") and is subject to updating from time-to-time. Accordingly, the buyer/applicator should have regard to the PDS supplied together with the relevant batch of the Product (and not an earlier version). In addition to the PDS, the buyer/applicator may receive some or all of the following specifications, statements and/or guidelines as listed below or as are available from the Hempel website under 'Products' at www.hempel.com (the "**Additional documents**"):

No.	Document description	Location/comments
1.	Technical Statement	One-off specific advice provided on request for specific projects
2.	Specification	Only issued for specific projects
3.	PDS	This document
4.	Explanatory Notes to the PDS	Available at www.hempel.com and contain relevant information about the Product testing parameters
5.	Application Instruction	Where available, at www.hempel.com
6.	Generic technical guidelines (e.g. on application and surface preparation)	Where available, at www.hempel.com

In the event of a conflict of information between the PDS and the Additional documents, the order of priority of information shall be in the order as set out above. In such event you should also contact your representative at Hempel for clarification. Furthermore, the buyer/applicator must have full regard to the relevant Safety Data Sheet provided with each Product and which can also be downloaded from www.hempel.com.

Hempel shall not be liable for defects where the application of the Product has not been made fully in accordance with the recommendations and requirements set out in the relevant PDS and the Additional Documents. The information and terms of this disclaimer apply to this PDS, the Additional documents and any other documents supplied by Hempel in respect of the Product. In addition, the Product is supplied and all technical assistance is given subject to Hempel's General Conditions of Sale, Delivery and Service, unless otherwise expressly agreed in writing.