PHOENIX 370-120H

Product Data Sheet

www.phoenixasia.com.hk

DESCRIPTION

Phoenix 370-120H Water-based Intumescent Coating is a single component water based TCEP free thin film intumescent coating for fire protection of structural steelwork.

PRODUCT FEATURES AND RECOMMENDED USES

- Designed for application by airless spray to provide up to 120 minutes fire resistance for structural steel hollow sections.
- For use in internal dry controlled environments without topcoat (C1 according to BS EN ISO12944-2:2017) and external urban or uncontrolled internal environments with topcoat (as defined in BS EN ISO12944-2:2017).
- Tested in accordance with EN13381-8 (2015) and assessed in accordance with the Variable Lambda Method.
- IFC certification number IFCC 1268A
- Highly competitive loadings.
- Easy application properties.

PHYSICAL DATA

Specific Gravity	: 1.40 kg/litre.
% Solids by Volume	: 75 ± 3 % (ASTM-D2697-91).
Color	: White.
VOC	: 0.19 g/ litre calculated from formulation to satisfy EC Solvent Emission Directive; 0.13 g/ kg content by weight from formulation to satisfy EC Solvent Emission Directive.
Recommended Application Method	: Airless Spray, Brush & Roller.
Recommended Thinner	: Water (See additional notes).
Recommended Thickness	: Refer to loading tables of Phoenix 370-120H.
Pack Size	: 20-litre units.
Shelf Life	: 9 months.

PRACTICAL APPLICATION RATES (MICRONS PER COAT)

	Airless Spray	Brush/ Roller
Dry	**1050***	**325**
Wet	**1400**	**435**

* Maximum sag tolerance typically 1500 µm wet by airless spray.

AVERAGE DRYING TIMES

Drying times will depend on the total thickness of Phoenix 370-120H to be applied. No more than two coats by airless spray should be applied within any 24-hour period. Factors such as air movement and humidity must also be considered.

RECOMMENDED PRIMERS

A range of primers have been approved for use under Phoenix 370-120H. Consult Phoenix Fire Protection for detail information.

Phoenix 370-120H is not recommended to be applied directly on to galvanized steel and zinc rich primers without proper surface preparation. Consult Phoenix Fire Protection for more information and technical advices.

RECOMMENDED TOPCOAT

If it can be guaranteed that application and subsequent in-service conditions of Phoenix 370-120H will be in a C1 environment as defined in ISO 12944-2: 2017, then no topcoat is required.

For categories higher than C1, Acrolon 7300 is recommended. Alternative topcoats have been approved and can be used. Consult Phoenix Fire Protection for technical advice and topcoat compatibilities.

SURAFCE PREPARARTION

Ensure surfaces to be coated are clean, dry and free from surface contaminants.

APPLICATION EQUIPMENT

Airless Spray

Nozzle size : 17 to 23 thou depending on application requirements.
Operating Pressure : 175 kg/ cm² (2500 psi)

Petrol Unit

Nozzle size : 17 to 23 thou depending on application requirements.
Operating Pressure : 175 kg/ cm² (2500 psi)

The airless spray details given above are intended as a guide only. Details such as fluid hose length and diameter, coating temperature and job shape and size all have an effect on the spray tip and operating pressure chosen.

However, the operating pressure should be the lowest possible consistent with satisfactory atomization. As conditions will vary from job to job, it is the applicator's responsibility to ensure that the equipment in use has been set up to give the best results. If in doubt, consult Phoenix Fire

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APPLICATION EQUIPMENT (CONTINUED)

Use 3/8' ID fluid line where lengths in excess of 10 feet are required. In-line gun or pump filters should not normally be used.

Phoenix 370-120H is also suitable for brush/ roller application, but due to the nature of the material, a ribbed appearance will result. Application of more than one coat may be necessary to give equivalent dry film thickness to a single applied coat by airless spray.

APPLICATION CONDITIONS AND OVERCOATING

Phoenix 370-120H must be applied in a dry internal environment. It must not be exposed to condensation, damp or wet conditions during or after application.

In conditions of high relative humidity good ventilation conditions are essential. Substrate temperature should be at least 3°C above the dew point and always above 0°C.

At application temperatures below 10°C, drying and curing times will be significantly extended, and spraying characteristics may be impaired.

A minimum ambient air temperature of 5°C is required to ensure proper film formation.

Relative humidity should not exceed 85% to ensure proper film formation.

Extended overcoating times may be required at low temperatures and/ or high film thicknesses.

ADDITIONAL NOTES

In common with other water based coatings, the drying of Phoenix 370-120H is retarded by high humidity conditions. Lack of air movement also slows down the drying process, and under such conditions it is advisable to introduce some method of circulating air over the coated surface in order to speed up the drying. A ventilated air speed of 2 meters per second is recommended.

Numerical values quoted for physical data may vary slightly from batch to batch. Excessive thinning will have adverse effect on sag resistance.

HEALTH AND SAFETY

Refer to Material Safety Data Sheet for information on safe storage, handling and application of Phoenix 370-120H.