



# PHOENIX 370-60

Product Data Sheet

[www.phoenixasia.com.hk](http://www.phoenixasia.com.hk)

## DESCRIPTION

Phoenix 370-60 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 90 minutes fire resistance for structural steel I-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 and assessed in accordance with BS 476: Part 20 & 21: 1987 and the Criteria of Acceptability given in the ASFP/ BCF “Industry Guidance Document”.
- Highly competitive loadings.
- Easy application properties.

## PHYSICAL DATA

Specific Gravity	: 1.38 kg/litre.
% Solids by Volume	: 69 ± 3 % (ASTM-D2697-91).
Color	: White.
VOC	: 35 g/ litre calculated from formulation to satisfy EC Solvent Emission Directive; 25 g/ kg content by weight from formulation to satisfy EC Solvent Emission Directive.
Recommended Application Method	: Airless Spray & Brush.
Recommended Thinner	: Water (Thinning will have an adverse effect on sag tolerance).
Recommended Thickness	: Refer to loading tables of Phoenix 370-60.
Pack Size	: 20-litre units
Shelf Life	: 9 months from date of manufacture or ‘Use By’ date where specified; Protect from frost.

## PRACTICAL APPLICATION RATES (MICRONS PER COAT)

	Airless Spray	Brush
Dry	690*	300
Wet	1000	440

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

## AVERAGE DRYING TIMES

	Temperature @ 15 °C	Temperature @ 23 °C
To Touch	3 Hours	1.5 Hours
To Recoat	6 Hours	4 Hours
To Handle	Depending on the total thickness of Phoenix 370-60 to be applied	

No more than two coats by airless spray should be applied within any 24-hour period. The above figures are given as guide only. Factors such as air movement and humidity must also be considered.

## RECOMMENDED PRIMERS

A range of primers have been fire tested and approved for use under Phoenix 370-60. Consult Phoenix Fire Protection for detail information.

**Phoenix 370-60 must not be applied directly to galvanized steel and zinc rich primers.** 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 370-60 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 21 thou depending on application requirements.  
Operating Pressure : 175 kg/ cm<sup>2</sup> (2500 psi)

### Petrol Unit

Nozzle size : 17 to 21 thou depending on application requirements.  
Operating Pressure : 175 kg/ cm<sup>2</sup> (2500 psi)

**APPLICATION EQUIPMENT (CONTINUED)**

The airless spray details given above are intended as a guide only. Details such as fluid hose length and diameter, paint 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 Protection.

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 370-90 is also suitable for brush 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 370-60 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 80% to ensure proper film formation.**

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

Occasionally impaired film formation such as cracking may occur on edges of flanges and external or internal angles of structural steel, depending on geometry, over-application and ambient conditions. This does not detrimentally affect the fire performance properties of the product.

If it is desired to overcoat outside the times stated on the data sheet, seek advice from Phoenix Fire Protection.

**ADDITIONAL NOTES**

In common with other water based coatings, the drying of Phoenix 370-60 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.



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### HEALTH AND SAFETY

Refer to Material Safety Data Sheet for information on safe storage, handling and application of Phoenix 370-60.

### WARRANTY

Any person or company using the product without first making further enquiries as to the suitability of the product for the intended purpose does so at their own risk, and Phoenix Fire Protection can accept no liability for the performance of the product, or for any loss or damage arising out of such use.

The information detailed in this data sheet is liable to modification from time to time in the light of experience and of normal product development, and before using, customers are advised to check with Phoenix Fire Protection, quoting the reference number, to ensure that they possess the latest issue.