### GlobalTemp GN045 Intumescent Paint



# TECHNICAL DATA SHEET

## Heat Intumescent Protective Waterbased Coating

#### PRODUCT DESCRIPTION

- ♦ Intumescent Coating Temperature Sensitive after 200°C.
- ♦ GlobalTemp GN045IP is formulated and developed to be applied on steel surfaces exposed to fire, expanding to a heat shield to protect the structure from fire in 3-4 hours.
- ♦ GlobalTemp GN045IP protection starts expanding at 200°C, depending of the coating thickness, protecting the structure from heat for 3-4 hours to thousands of Celsius degrees.

#### **PERFORMANCES**

- Depending on DFT, metal structure will resist to fire high temperatures for 3-4 hours;
- Heat barrier by expanding 10-100 times when exposed to fire;
- Excellent heat resistant;
- •Direct to Metal (DTM) on steel surface prepared;
- Good weathering properties (for interior and exterior;
- Nano materials for higher performances;
- Excellent application properties.

#### **RECOMMENDED USE**

AS FIRE PROTECTIVE INTUMESCENT COATING FOR STEEL STRUCTURES SUCH AS:

- Building steel and wood structure.
- Pipes, Manifolds, Safety doors.
- Engine parts, Boiler casings.
- Pressure storage tanks, heat exchangers, etc..

#### **APPROVALS**

Complies with EU Directive 2010/42/EC: subcategory i (VOC< 140 g/l).

COMPONENT A	
GN045IP	

Na

**COLOURS** 

GN045IPG9010 (Off-white). For other colours, please contact GlobalNavy's office.

## Physical Properties

GLOSS	Mate.
SOLIDS BY VOLUME	50 ± 2 %.
VOC*	< 100 grams/Lt.
FLASH POINT	> 200°C (392°F) Setaflash.

#### **PERFORMANCE**

### Application

#### SURFACE PREPARATION

GlobalTemp GN045IP is developed for application directly to iron/steel surfaces pre-treated by Blast cleaning to Sa 2,5 of the Swedish Standard SIS 055900.

All surfaces must be free of oil, grease, moisture and other foreign matter prior to blasting.

Over coated surfaces be sure of the old coating conditions (no coating defects and corrosion- in "sound conditions") and the compatibility with the GlobalTemp GN045IP. Different old or primer

**ISSUED** 

Edition 03 / Mod.10 - 21/05/2018

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surfaces can have direct effect on the intumescent coating performance of GN045IP. Please contact GlobalNavy office in case of any doubt or for further information.

#### **APPLICATION METHOD**

SPRAY: Use air-less spray. Use an equipment with a compressing of 140-200 bar outlet pressure. A 18" or 25" tip is recommended. Conventional spray equipment only on special application conditions- contact GlobalNavy for more information. CONVENTIONAL METHODS: Brush and roller are suitable for "stripe-coat" and small areas, care should be taken in order to achieve the dft specified.

#### APPLICATION CONDITIONS

The substrate temperature should be minimum  $10^{\circ}$ C ( $50^{\circ}$ F) and at least  $4^{\circ}$ C ( $7^{\circ}$ F) above the dew point of the air, measured in the vicinity of the surface. The moisture should be <80%. Assure a good ventilation with dry air in confined areas.

#### **APPLICATION DATA**

GlobalTemp GN045 Intumescent Paint is a single pack product. Only if necessary, for an application optimization adjustment, the product can be diluted until 10 % (v/v) with water.

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NA

### HARDENER

NA

#### **POT LIFE**

NA

#### **THINNER**

Water.

#### **SOLVENT / CLEANER**

Water.

#### **DRY TIME**

Surface Dry: 1 hour at 23°C (73°F) and 50% relative humidity.

## THEORETICAL COVERAGE 0.35 Sq.m/Kg Dry: 1 mm (40 mils) • Wet: 2 mm (80 mils).

Overcoating: 8 hours at 23°C (73°F).

#### TYPICAL PAINT SYSTEM

• GlobalTemp GN045IP 2 x 1 mm (dft) • GlobalTemp GN458AW 1 x 50μm (dft). This paint system is suitable for intumescent performance for 2-3 hours. Please contact GlobalNavy for other applications.

#### **STORAGE**

1 year (storage on the original tightly closed containers in a dry, cool, well ventilated space, at temperatures between  $5^{\circ}$ C -  $40^{\circ}$ C).

#### **PACKING**

Single pack product, available in 5L and 20L.

#### **FURTHER INFORMATION**

After and between coating application of GlobalTemp GN045IP can not be exposed to rain or condensation because it will decrease very much the intumescent performance of the paint system.

#### **HEALTH SAFETY**

Please take the necessary measures in order to accomplish the national laws and regulations regarding the environmental, health and safety at work. Please observe the safety information displayed on the container. Please refer to the Safety Data Sheet for detailed information on the health, safety hazards and precautions for the use of this product.

The information on this data sheet is given to the best of our knowledge based on laboratory testing and practical experience. This is not a specification and all information is given in good faith. Every values presented as Theoretical were calculated from the product formula, so can have deviation from laboratory measurements using standard methods that may be not applicable. However, since the product can be used under conditions beyond our control, the manner of use is the sole responsibility of the user. The product is intended for professional use only. Manufacturer does not assume any liability in connection with the use of the product relative to coverage, performance or injury. This Technical Data Sheet content can be changed without notice.

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Parque Industrial de Carrascas, Estrada Nacional 252, 2950-402 Palmela PORTUGAL

♦ Tel.:+351 265107979 ♦ www.globalnavy.net ♦ email: sales@globalnavy.net