TECHNICAL DATA SHEET

If you like it... Crown it!

Crown WB Fire Shield (Intumescent Paint)

PRODUCT DESCRIPTION

Type: Crown WB Fire Shield (Intumescent Paint) is a low VOC water based one component paint designed for fire protection for concrete, structural steel work in buildings, wood, and gypsum board. During direct fire, the coating expands to many times of its original thickness. It creates an insulation layer that retard the heating of applied surface.

Uses: Crown WB Fire Shield (Intumescent Paint) can be used to protect a variety of building materials, including concrete, steel, timber, gypsum board surfaces. It is used on walls, concrete beams and columns to provide passive fire protection of structural steel. It is suitable for interior and exterior use including industrial buildings, hospitals, schools etc.

Conditions during application; The temperature of the substrate should be minimum 10°C and at least 3°C above the dew point of the air, measured near the substrate. Good ventilation is required in confined areas to ensure proper drying. The coating should not be exposed to oil, chemicals or mechanical stress until fully cured.

PRODUCT DATA:

Colour: White.

Pack Sizes: 4L and 20L plastic bucket

Finish: Smooth/Matt

Volume Solids: 52 – 54%

Thinner & equipment cleaner: Clean Water

Dilution Ratio: Depends on method of application and per coat thickness required. Use up to 15% thinning with water.

Shelf Life @ 25°C: 6 months, in an original sealed container, under proper storage conditions.

Recommended WFT: 377 - 566 µm per coat.

Recommended DFT: 200 – 300 µm per coat.

VOC Content: <5%

APPLICATION DATA:

The product can be applied by: Brush, Roller or Airless Spray.

Airless Spray requirements: Pressure: 120 – 150 Bar (1700 – 2125 psi).
Nozzle size: 0.018" – 0.021"
Conventional Spray: Possible

Drying Times @25°C: Surface dry <2hrs & Hard dry <24hrs. (Re-coating interval 24 hours minimum).

Temperature, humidity, air movement, film thickness and number of coats all affect the drying time.

The Technical Data Sheet (TDS) is recommended to be read in conjunction with the Material Safety Data Sheet (MSDS) for this product. Please visit our website at www.crownpaints.co.ke

This Technical Data Sheet supersedes all those previously issued.

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Spreading Capacity per coat: 2.7 m²/L (@ 377 µm WFT) – 1.8 m²/L (@ 566 µm WFT)
(Depends on film thickness applied, method of application, surface porosity, imperfections, temperature & wastage during painting).

DIRECTIONS FOR USE
Surface preparation & Paint System:

Surface	Preparation & Paint system
Masonry surfaces	Moisture content should be < 10%. Application surfaces should be clean off the rust, dirt and moisture. Old painted surfaces should be sanded and cleaned. Surface cracks must be filled with suitable filler. Crown WB Fire Shield Intumescent paint can be used as primer after diluting 1:1 ratio by volume with water. Apply 1 – 3 coats Crown Fire Shield depending on the required fire resistance. (Provide proper recoating interval between the coats)
Steel structures	Remove oil or grease by cleaning with Crown White Spirit. Prepare to the specified standard (e.g. Sa2½ (ISO 8501-1:2007) or SSPC-SP6, Abrasive Blasting, or SSPC-SP11, Power Tool Cleaning) and apply one coat of an appropriate Crown anti-corrosive primer and allow to dry. Then apply 1 – 3 coats Crown WB Fire Shield depending on the required fire resistance. (Provide proper recoating interval between the coats). Crown Fire Shield can also be applied over approved epoxy metallic zinc primers, if these have been over coated with an approved tie coat first.

Suitable water-based top coating is possible, for the colors.

Precautions
1. Stir paint thoroughly before use and intermittently during use to avoid settling.
2. Do not pour back the diluted material to the original material.

Advantages: Acts as a thermal barrier between the fire and the substrate. Passive fire protection of structural steel. Single component chlorine free system, faster drying time, higher build capacity, environmentally friendly, easy to apply and safer to use. Provides fire protection on concrete up to 2 hours.

Availability: From Crown Depots in Nairobi, Kisumu, Mombasa, Meru, Nyeri, Eldoret, Arusha, Mwanza, Dar es Salaam, Kigali and through Crown Stockists.

Storage Conditions: Store in dry and cool place (5 °C – 40 °C). Protect from heat, freezing and direct sunlight.

Disclaimer: The recommendations contained herein are given in good faith and meant to guide the user in accordance with good painting practices. They are gained from our tests and experiences and are believed to be accurate and reliable. No warranty/guarantee is implied by the recommendations contained herein since the conditions of use; application method, substrate and cleanliness of the substrate are beyond Crown Paints Kenya PLC control.
Technology may change with time, necessitating changes to this Technical Data Sheet (TDS). Crown Paints Kenya PLC reserves the right to amend the TDS without any further notice.
It is the responsibility of the user to ensure that the latest TDS is being used for reference.

For additional health & safety information, please refer to our Material Safety Data Sheet (MSDS)

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