

PRODUCT DATA SHEET

Magma Firestop® SBP-1 is a water soluble, fire retardant powder based on phosphorous and nitrogen synergy. This product has been especially formulated for vacuum pressure treatment of wood and wood based materials. The Magma Firestop® SBP-1 treatment will improve the performance of timber and wood based products when exposed to fire. The pressure treatment process for impregnating the chemicals is essentially the same as for preservative treatments. The purpose of timber pressure treatment is to force chemicals deep into the cellular structure the treated product.

Chemical and Physical Characteristics

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|--------------------------------|---|
| Composition: | Powder – fine granules |
| Particle size: | 80% (0- 3,5 mm) |
| Appearance: | White/off white |
| Odour: | Faint odour |
| Density (20°C): | 1.57 ±0,05 kg/dm ³ |
| pH: | 6,5 ±0,5 (13% solution in water) |
| Solubility: | Fully soluble in water |
| Stability application*: | Stable over the pH range 5.0 to 8.0 and at elevated temperature |

Application

Magma Firestop® SBP-1 needs to be dissolved into water to a concentration of 12-15% by weight. The powder must be mixed by stirring, to obtain a colourless, clear liquid. Warm water (max. 60° C) will accelerate the solubility time.

In a typical pressure treatment process, timber or wood based material is placed in a horizontal, sealed cylinder or chamber. The chamber is flooded with the chemical solution, followed by a cycle of vacuum, pressure and vacuum. Processing temperature is 10 – 35 °C

- Initial vacuum of 15 minutes at 0,7 bar
- Filling chamber with the Magma Firestop® SBP-1 solution
- Pressure increase to 9 bar to required retention or for at least 2 hours
- Magma Firestop® SBP-1 solution is drained from the chamber
- Initial vacuum of 15 minutes at 0,7 bar

Drying of timber

Immediately or within maximum 5 days after the pressure impregnation treatment. Kiln dry timber to 18 percent and plywood to 15 percent or less moisture content after treatment. Moisture content measurements can only be carried out by oven drying method. Do not use a conventional moisture meter, the electrical conduction will be disturbed by the fire retardant product.

Fire classification

15 solid wood species, 5 different brands of thermal modified wood and 5 different plywood types have been tested according the European standard for building materials EN 13501-1 and all comply with classification B-s1/2, d0. Material treated with this product complies also with ASTM E-84 (cl. 1)

Packaging / Storage / Transport / Regulatory Approvals

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|------------------------|---|
| Packaging: | 25 kg bags (WPP/PE) |
| Shelf Life: | 24 months when stored in closed packaging. Limited when packaging has been opened |
| Availability: | Ex stock in 25 kg bags |
| Storage: | Store in the original packaging in roof covered, dry warehouses and protect from extremes of humidity and temperatures. |
| Transportation: | Classified as non hazardous for transport & storage |

Safety / Labelling / Toxicology

For detailed information on the safety and handling of **Magma Firestop® SBP-1**, please refer to the separate Material Safety Data Sheet. It is important and recommended to take notice of general safety & hygiene precautions also for safe, environmental friendly chemicals.

Do not eat, drink or smoke during application. Do not flush unused chemicals but dispose this in accordance with local waste disposal regulations.

This information is based on our present state of knowledge and is intended to provide general notes on our products and their uses. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.