

MAGMA FIRESTOP FRA-58

PRODUCT DATA SHEET

Magma Firestop® FRA58, is a borate free, fire retardant powder composition, comprising a mixture of inorganic phosphates, sulphates and other selected fire retardant additives. Readily soluble in water **Magma Firestop® FRA58** can be used for a wide range of industrial applications for materials such as fabrics, paper, board and organic insulation materials. For dry applications, the powder should be incorporated into the base formulation, to ensure that an effective blend is achieved in order to maximize the fire retardant properties of the final product. When used in solution **Magma Firestop® FRA58** can be applied by padding, spraying and dipping and is formulated for the impregnation of natural fibres, paper, cotton, linen etc. It may also be suitable for fibre blends where the fabrics contain more than 30% natural fibres.

Chemical and Physical Characteristics

Composition:	Powder – fine granules
Particle size:	80% (0- 3,5 mm)
Appearance:	White/off white
Odour:	Faint odour
Density (20°C):	1.38 gr./cm ³
pH:	6.0 (20% aqueous solution)
Solubility:	Fully soluble in water
Stability application*:	Stable over the pH range 5.0 to 8.0 and at elevated temperature

Advantages

Magma Firestop® FRA58 provides excellent fire retardant properties to a range of materials, either by dry application/blending or, as a prepared aqueous solution. Examples of dry blending applications are cellulosic based insulation products where the flame retardant properties are governed by national and international specifications & standards. Applications where wet finishing of a range of materials is appropriate, the powder should be prepared as water based solutions. Typical examples may be as follows: curtains, carpets, furnishings and decorative materials. It has a broad range of uses, particularly as a finish to barrier fabrics, where relevant flame retardant standards are specified to meet a particular requirement. It is also suitable for industrial applications, where treating the fabric is by traditional textile finishing lines, either by padding, dipping or spraying. **Magma Firestop® FRA58** may be combined with synthetic resins or binders – check compatibility before use.

Application / Use Levels

For aqueous applications **Magma Firestop® FRA58** should be diluted in (hand)warm water prior to use. A typical solution concentration of 250 gr./ltr for the treatment of natural fibres by padding may be appropriate. For multiple fibre blends, where a combination of natural and synthetic fibres are present, an increase in the concentration may be required, e.g. 300 gr./ltr. Usage of the solution will be dependent on the absorbency of the fabrics to be treated and fibre blend. Where possible the use of a suitable wetting agent should be considered. For textile padding applications a wet pick up of 80% is recommended. Following padding, the treated fabrics should be dried between 100 - 120°C. For fabrics treated by spray application, drying at ambient temperature should be adequate. For dry blending applications **Magma Firestop® FRA58** should be incorporated into the base formulation, to ensure the product becomes intimately blended with all the ingredients. A typical application level of between 6 and 25% would be appropriate, depending on the required flame retardant performance and specification.

Important notes

For wet state applications onto textile fabrics, **Magma Firestop® FRA58** is compatible with a variety of textile auxiliaries, but care must be taken when using certain softeners as this may adversely affect the flame retardant properties of the treated fabric. Wherever possible, compatibility checks should be performed prior to the final application.

Through addition of **Magma Firestop® FRA58**, the reaction-to-fire behavior of many materials can be improved and required fire standards can be reached.

The achieved fire classifications are always a combination of the combustibility of the base material and the percentage of the fire retardant addition.

Packaging / Storage / Transport / Regulatory Approvals

Packaging:	25 kg bags and 1000 kg large bags (WPP/PE)
Shelf Life:	12 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® FRA58**, 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.