MAGMA FIRESTOP APL-100

Product Information

Magma Firestop® APL-100 is an efficient, fire retardant liquid, suitable for a range of applications. This product can be used for topical spray applications of a wide range of different textiles, including synthetic material but also on wood, paper and cardboard.
Magma Firestop® APL is environmentally friendly, has a faint odour during application but does not smell when dry. The product does not cause marked levels of stiffening or discoloration of the fabrics as and where application instructions are followed.
The product is designed to "fire retard" NOT to "fire proof" materials.

Chemical and Physical Characteristics

Composition:	Phosphorous nitrogen based fire retardant liquid
Appearance:	Colourless
Density (20°C):	1.11 g/cm3
pH:	6,5
Viscosity:	10 s. (DIN #4)
VOC content:	Solvent free
Toxicity:	Magma Firestop® APL is non-toxic, and does not contain halogens or borates.

Application(s)

Topical spray applications:

Typical applications: Magma Firestop® APL-100 can be used on natural fiber fabrics, polyester(blend) fabrics, timber, insulation materials and on furniture, paper and many decorative materials.
On certain type of textiles, this product could be used in combination with a binder, as a back-coating finish. Product can be used safely indoors.

Dilution: Do not dilute, this is a ready-to-use solution.

Application temp.: min. 5°C / max. 40°C. RH max. 80%

Preparation: Material needs to be clean(ed), dry and free from dirt, dust or oil before Magma Firestop® APL-100 will be applied.

Spray: Textile:
Appy by mist spraying/coating a fabric as part of the manufacturing process or as an aftermarket (DIY) application.
Due to the wide variant of fabric treatments at the point of manufacture all fabrics should be laundered prior to application of the product. The fabric being treated should be made evenly damp on both sides (do not drench saturate or stiffening and surface marking may occur) and allowed to dry completely.

Cardboard:
Corrugated “un-sealed” cardboard is best treated with a fine atomized spray on both sides. Do not soak material in any one spot, as this may tend to warp the cardboard and cause it to lose shape. The product will not work if the cardboard is sealed, coated or moisture proofed.

Paper and decorative materials:
Un-sealed paper should be mist sprayed. The water-soluble properties of Magma Firestop® APL-100 may limit applications. Addition of a sealant is required to protect the chemical from leaching if exposed to direct contact with water.

Soft furnishings – floor coverings
Always clean all such fabrics / floor coverings thoroughly prior to application.
Do not apply to fabrications that have had a stain guard treatment as the product will not be adopted into the fabrication

Coverage:

Coverage is totally dependent on the material that needs to be treated. Fabrics are available in many different qualities with different absorption properties which are the main guideline for coverage rates. Wood species have different densities which are the most important details for coverage rating.
As such it is not really possible to provide exact application rates on a per square meter basis. Calculations should be done on a case by case basis but in general we advise to use 1 liter (ready-to-use)liquid per 10-16 m^2.
Whenever possible treat fabrics so that the solution is evenly distributed across the entire surface and does not flow or drip to the extremes (do not over saturate).
For the best effect, fabrics should be dried on a horizontal drying rack at a moderate temperature (between 20° and 50° C.)

Cleaning:

Spoiled or over sprayed product should be removed directly after treatment, with warm water before drying otherwise it’s possible that stains will appear.

Durability:

This product is semi-durable meaning that the product will not leach immediately in humid conditions. The treatment lasts for the useful life of the article or material treated. Re-treatment is recommended if the treated fabric or article gets completely wet in any way.

Fire standards:

Magma Firestop® APL-100 has passed BS5852: 1990 for both natural and synthetics such as polyester and draylon. Magma Firestop® APL-100 passes BS 5867: part 2: 1980 on both natural and synthetic fibres. Natural fabrics include cotton; wool and cotton backed draylon. Synthetics include nylon and mixed fibres such as cotton/polyester.
Magma Firestop® APL-100 passed also some tests according the Maritime standard
IMO 2010 part 7 / Cotton, linen, viscose and polyester/cotton blend
IMO2010 part 8/ Wool, silk, polyester/cotton blend
IMO 2010 part 5/ Silk, cotton, nylon carpet

Remarks:

Before treatment, spray a small sample of the material, to ensure yourself of the result. New fabrics are frequently introduced into the market place therefore we recommend to test always a small sample or inconspicuous area of the fabric before a full treatment is applied. Check absorption and adhesion, not every polymeric material is suitable to coat with this product. Magma Firestop® APL-100 spray will not treat waxed cardboard, plastics, waterproofed fabrics and painted or varnished services. However a range of products are available which may be able to solve the problem so please contact us for advice.

Packaging / Storage / Transport / Regulatory Approvals

Packaging:	10 kg, 25 kg, 60 kg, 200 kg containers/drums or 1000 kg IBC's containers
Shelf Life:	18 months from production date when stored at normal temperatures, protect from frost!
Storage:	Store in the original containers and protect from extremes of temperature, especially frost and direct sunlight.
General:	It's important and recommended to take notice of general safety & hygiene precautions, also for safe and waterborne chemicals. Do not eat, drink or smoke during application. Do not flush, unused product but dispose this in accordance with local waste disposal regulations.

Safety / Labelling / Toxicology

For detailed information on the safety and handling of Magma Firestop® APL-100**,** please refer to the separate Material Safety Data Sheet.

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.