

MAGMA FIRESTOP PEF

Product Information

Magma Firestop[®] PEF is a very efficient cyclic phosphonate based fire retardant liquid for textile applications. This product can be used for the wash permanent finish of PES and PA fabrics. Magma Firestop[®] PEF is also very suitable and effective in (back)coating applications.

Chemical and Physical Characteristics

Composition:	Organic cyclic phosphonate
Appearance:	Clear solution
Density (20°C):	1.27
pH:	2 (10% solution)
Dry solid content:	93%
CAS no's	41203-81-0; 42595-45-9
EINECS no	255-263-6

Application(s)

On PES and PA fabrics, Magma Firestop[®] PEF can be applied as a durable flame retardant finish. Magma Firestop[®] PEF can be used in combination with fluorocarbons but for any application, prior lab trials should be carried out.

Pretreatment

Before the padding, one has to be sure that the fabric is clean from starch and other sizes and that the fabric is absorbent. For this a prewash is recommended.

Padding

On PES and PA fabrics with a liquid pick up of approximately 80-100%, the average concentration Magma Firestop[®] PEF is around 100-150 g/l. Because of the low pH of Magma Firestop[®] PEF and the relative high temperatures which are needed for the thermo fixation, discoloration of the fabric could occur. To prevent this discoloration, it is recommended to buffer the Magma Firestop[®] PEF padding solution to pH 6. This can be done with disodium phosphate or ammonia.

Thermo-fixation

After the padding process, PES fabrics have to be fixated at a temperature of approx. 180-210°C and PA fabrics at a temperature of approx. 160-180°. This thermo-fixation is done during 20 to 60 seconds depending on the fabric weight and thermo-fixation temperature. Before the thermo-fixation the fabric can be dried at normal drying temperatures.

After Treatment

Fabrics treated with Magma Firestop[®] PEF by the thermo-fixation process, should be washed/rinsed with water afterwards to remove the non fixated product.

Coating application

Magma Firestop[®] PEF is very well suited in combination with binder systems such as SBR latex, acrylates, EVA and EAA. Prior stability tests should be carried out on lab scale. Combinations of Magma Firestop[®] PEF and binders may be applied by padding, dipping, spraying, foam coating, lick roll and other coating techniques.

Packaging / Storage / Transport / Regulatory Approvals

Packaging:	25 kg, 150 kg, 250 kg containers or 1250 kg IBC's containers
Shelf Life:	12 months from production date when stored at approximately 20°C
Storage:	Store in the original containers and protect from extremes of temperature, especially heat and direct sunlight.

Safety / Labelling / Toxicology

For detailed information on the safety and handling of Magma Firestop[®] PEF, 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.