

Magma Firestop[®] Woodprotector IMW-435

Product Information

Magma Firestop[®] IMW-435 is an efficient, fire retardant impregnation liquid based on phosphate and nitrogen containing components dissolved in water. This product is suitable to treat organic materials with moisture absorbent abilities such as (soft) wood and several board materials. Magma Firestop[®] IMW-435 will give a hardly visible, fire retardant protection and will not affect the original properties of the material. When treated material will be exposed to fire, a thin carbon char will be formed which will insulate the material from the fire source and nitrogen will be released which will have an effect on the oxygen supply to the fire.

When treated wood will be used in humid conditions or exterior exposed projects, the material must be finished with a suitable, weather protective coating or oil. In dry interior applications this is not necessary.

Softwood,, treated with Magma Firestop[®] IMW-435 comply with fire class C-s2, d0 according to the European standard EN 13501-1.

Magma Firestop[®] IMW-435 does not contain halogen's like PDBE's, borates or petroleum derivates.

Chemical and physical properties, packaging and transport

Consistency	Clear, colorless water solution
рН	6.5 ± 1.0
Activation temperature	> 145 ° C
Density at 20 ° c	$1.10 \pm 0.02 \text{ g/cm}^3$
Viscosity at 20 ° c	5 s. (DIN53211/4)
Flash Point	No
VOC	5 gr., complies with VOC 2010
Dilution	Ready-to-use
Packaging	10 and 25 kg cans, 200 kg drums, 1000 kg IBC
Shelf Life	A shelf life of at least 24 months in closed packaging
Storage	Cool but free of frost (5 ° C/35 ° C)
Transport	Non-hazardous product, no specific requirements
Safety Rules	Please observe the precautionary notices displayed on the container. The user of this product must adhere to the national laws relating to health, safety and environment; do not eat, drink or smoke during the application. Do not flush unused chemicals but dispose this in accordance with local waste disposal regulations. For more information and the latest actual safety particulars see the attached Material Safety Data Sheet (MSDS).

Application

WOOD

It is recommended to perform a test before the entire surface will be treated. Apply the product on a trial sample of the wood and try to figure out what the uptake and penetration will be and ensure yourself about the optical result after treatment.

Complaints regarding colours or aesthetic appearance are only considered when a test prior to the entire surface application has been set and we are informed about any deficiencies.

- Make sure that the material to be treated is dry and clean and free of grease, dust or other pollution.
- Magma Firestop[®] Woodprotector 435 can only be applied to bare wood, old paint layers need to be removed by sanding or planing.
- Check if the material has been treated earlier with an invisible water/dirt repellent agent, when the material has been treated with such a hydrophobic agent it will loose absorption properties.
- Magma Firestop[®] Woodprotector 435 can be easily applied by spraying methods like airless, HVLP or industrial machine sprayers or by dipping method.
- For use with a dip chamber or any machine application, the excess product should be removed from the surface before drying to avoid stains.
- Consumption depends on the absorbing ability of the type of wood and moisture content of the wood, average consumption guidelines for:
 - sawn wood +/- 100 gr/m2
 - planed wood +/- 80 gr/m2

Above data is only a general guideline as every wood has type specific properties.

Please note! The absorbing ability of hardwood is much lower than softwood due to the density of the material, lots of hardwood species are difficult or even impossible to give a good fire retardant protection because the material does not absorb enough of Magma Firestop[®] Woodprotector 435.

Drying:

Treated material is able to dry on air in a natural way but drying with increased temperatures and good ventilation will speed up the drying process.

Drying time at 20 ° C and 65% r.h.

Dust free after approx. 1 hour, when required, a second layer can be applied 'wet-on-wet' but watch out because it's possible that abundant use might give stains.

Can be painted after 24 hours

Magma Firestop[®] IMW-435 treated wood can only be coated with tested and selected coatings, most common water based stains or lacquers are not suitable to cover fire retardant treated wood. Please contact us or your coating supplier for advice on this matter.

When Magma Firestop[®] IMW-435 treated wood, will be unprotected exposed in damp areas or at exterior projects, the fire retardant quality will be reduced and a retreatment is necessary.

This information is based on our current knowledge and is intended to provide general information about our products and application of our products. This document should not be construed as a warranty on the specific properties of the product or on the suitability for a certain application.