

Sika® Unitherm® madera

Intumescent coating, water dispersed, for wood

Product Description

Sika® Unitherm® madera is a water dispersed thin film fire protection coating for interior use. It forms a carbon char under the effects of heat and delays the inflammation of wood.

Uses

- Intumescent coating for interior use
- Reduction of ignitability of soft and hard wood, as well as other wood derivatives, i.e. plywood, chipboard, fibre insulation board ...
- Prevents propagation of fire and diminishes flue-gas density and flue-gas temperature
- Not for surfaces exposed to mechanical stress

Characteristics / Advantages

- Water based coating system
- Low material consumption
- Reduction of smoke emission and flammability
- Easy to apply
- Does not increase static load
- Only for interior use

Product Data

Form

Appearance / Colour

White

Packaging

25.0 kg containers, net weight.

Storage

Storage Conditions / Shelf-Life

12 months from date of production if stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between +5°C and +30°C. Protect from frost.

Technical Data

Density

Resin liquid: ~ 1.33 kg/l

Solid Content

~ 70% (by weight) according: EN ISO 3251

Resistance

Fire Resistance

Inflammable for a certain time.



System Information

System Structure	Intumescent layer: Top coat (mandatory):	1-2 x Sika® Unitherm® madera 1 x Sika® Unitherm® -38202
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Application Details

Consumption / Dosage	Intumescent layer: Sika® Unitherm® Madera	1 x 400g/m ² or 2 x 200 g/m ²
	Top coat Sika® Unitherm® 38202	~ 150 g/m ²

Substrate Quality	<p>Prior to application of Sika® Unitherm® madera the surface must be clean, dry and free of all contaminants such as dirt, oil, grease, wax, coatings and surface treatments, etc. Surfaces that have been treated with non-acid resistant coatings such as emulsion paint containing lime, chalk or lithopone should be rubbed down completely.</p> <p>If in doubt apply a test area first.</p>
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Application Conditions / Limitations

Substrate Temperature	+10°C min. / +40°C max.
Ambient Temperature	+10°C min. / +40°C max.
Relative Air Humidity	80% r.h. max.
Dew Point	<p>Beware of condensation!</p> <p>The substrate and uncured coating must be at least 3°C above dew point to reduce the risk of condensation or blooming on the wall finish.</p>

Application Instructions

Mixing / Stiring	One pack product, stir thoroughly, free of lumps.
Stiring Tools	Sika® Unitherm® madera must be mechanically stirred thoroughly, free of lumps, using an electric stirrer (300 - 400 rpm) or other suitable equipment.

Application Method / Tools	<p><i>Airless spraying:</i></p> <ul style="list-style-type: none">- Material shall be applied undiluted- Airless spray equipment with transmission > 23 : 1- Hose diameter not below 3/8"- Whip_line 1/4" may be used 3/4 - 0.66 mm or 0.017" - 0.027"- Remove all filters- Hoses must be used only for water based products <p><i>Brush and roller:</i></p> <ul style="list-style-type: none">- More than one coat may be necessary to achieve the equivalent DFT of a single spray coat. Waiting time between each layer must be at least 8 hours.- Material shall be applied in supply viscosity
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Cleaning of Tools	Clean all tools and application equipment with water immediately after use. Hardened and/or cured material can only be removed mechanically.
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Potlife	Not applicable (see shelf life).
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Waiting Time / Overcoating	Before applying Sika® Unitherm® mader - on Sika® Unitherm® mader - allow:		
	Substrate temperature	Minimum	Maximum
	+10°C	8 - 10 hours	-
	+20°C	4 - 6 hours	-
	+30°C	4 - 6 hours	-
	Before applying Sika® Unitherm® -38202 - on Sika® Unitherm® mader - allow:		
	Substrate temperature	Minimum	Maximum
	+10°C	8 - 10 hours	-
	+20°C	6 - 8 hours	-
	+30°C	6 - 8 hours	-
Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.			
Notes on Application / Limitations	<p>With relative air humidity of $\geq 80\%$ the waiting time / overcoat is increased by 24 hours.</p> <p>Always ensure good ventilation when using Sika® Unitherm® mader in a confined space, to ensure drying.</p> <p>Applied Sika® Unitherm® mader should be protected from rain, condensation, water and weathering.</p> <p>If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO₂ and H₂O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.</p>		
Value Base	All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.		
Local Restrictions	Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.		
Health and Safety Information	For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.		
Legal Notes	<p>The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.</p>		
EU Regulation 2004/42 VOC - Decopaint Directive	<p>According to the EU-Directive 2004/42, the maximum allowed content of VOC (Product category IIA / I, type Wb) is 140 g/l (limit 2010) for the ready to use product.</p> <p>The maximum content of Sika® Unithermv mader is < 140 g/l VOC for the ready to use product.</p>		

