



unitherm[®] 38303

Fire protection coating water – based for wood and plastics

1. Product description

System properties:

unitherm[®] 38303 is an intumescent coating which forms a carbon char under the effect of heat, thus insulating the substrate.
Fire protection coating for wood – water based - insulates against heat, checks fire, prevents propagation of fire and diminishes flue-gas density and flue-gas temperature, protects real values and reduce the risk of damage.
unitherm[®] 38303 has been tested on timber and plywood with the certificate “hardly combustible”.

System:

unitherm[®] 38303 fire protection coating
unitherm[®] 38202 top coat

2. Application areas

Application:

for indoor use on soft and hard wood and other timber derivatives, i. e. plywood, chipboard, fibre insulation board, hardboard, also on veneering. Plastics subject to compatibility test prior to application.
Not suitable for surfaces exposed to mechanical stress and exterior application or wet areas.

Tests/Approvals:

BS / DIN / Nordtest

3. Packaging and colours

Packaging:

25 kg. Net weight

Colours:

white

4. Technical data

Mass density:	approx. 1,32 g /cm ³
Weight solid:	approx. 63% (according to EN ISO 3251)
VOC:	approx. 9 g/l (according to EN ISO 11890-1)
Flash point:	not applicable
Self life:	12 months in cool and dry storage conditions, original unopened containers. Protect against frost!
Consumption :	class 1 or 0: min. 300 g/m ² (230 ml/ m ²) unitherm [®] 38303 100 g/m ² (80 ml/ m ²) unitherm [®] 38202

5. Application instructions

Object temperature:	not below + 10° C, to max. 50°C
Relative humidity:	max. 80 %. Application temperature should be at least 3 ° C above the dew point. In case relative humidity exceeds 80% special measures must be taken to prevent the condensation forming while application.
Surface pre-treatment:	Substrate must be dry, free from dust, dirt, grease, wax, etc; timber with a coat of release agent should be carefully rubbed down. Old coatings with poor adhesion have to be completely removed, e. g. with solvent-based paint stripper or to be rubbed down. Surfaces which have been treated with non-acid resistant coatings such as emulsion paints containing lime, chalk or lithopone should be rubbed down completely. Wood substrates with wetting difficulties should be roughened thoroughly with abrasive paper. If necessary an interface - unitherm [®] 38031, 1 x 80 g/m ² (90 ml/ m ²) – is to be used. (see separate data sheet) Plastic surfaces have to be tested on their suitability.
Thinner:	water

Preparation of coating material:

Stir thoroughly, free of lumps.

Airless spraying:

Equipment up to a transmission $\geq 30:1$. Screens and filters must be removed, hose diameter 3/8", hoses must be used only for water based coatings. Whipline 1/4" may be used. Nozzle size 0,41 – 0,56 mm/0,017 – 0,023".

Brushing and rolling:

in supply viscosity

Addition of thinner:

ready for use max. 10% water

Drying:

approx. 12 hours at 20° C and 65% relative humidity
Overcoatable with unitherm[®] 38202 top coat after 8 hours at 20° C and 65% relative humidity.

General remarks:

Clean equipment immediately after using with water.

The employed tests comply with state-of-the-art technology regarding methods and accuracy. The quoted measuring results do not constitute a legal warranty of specific product features or of the products' suitability for a specific purpose. Warning remarks on the labels must be observed. Any existing industrial property rights must be considered. According to our general terms and conditions of domestic and export sale, we warrant that our products are in the condition specified in the contract.

Date of issue: **August 2004**

Our products are continuously improved to meet the latest requirements, therefore our technical data sheets are also regularly updated. Please ensure that the latest version is used.