

**TEKNOSAFE 2002-00**
Intumescent Paint

PAINT TYPE TEKNOSAFE 2002-00 is a water-borne, halogen-free intumescent paint which by action of heat forms an isolating foam layer.

USAGE Used in dry interior spaces to improve the fire resistance of structural steelwork.

SPECIAL PROPERTIES The Finnish Constructional Steelworks Association has issued for TEKNOSAFE 2002-00 intumescent paint the product specification TRY-94-2005 (pipe and I profiles, hat profile beams). The instructions in this specification must be followed.

TECHNICAL DATA

Solids 60 ±2% by volume

Theoretical spreading rate	amount of wet paint to be applied	wet film thickness	dry film thickness	theoretical spreading rate
	1440 g/m ²	1000 µm	600 µm	1,0 m ² /l
	1080 g/m ²	750 µm	450 µm	1,3 m ² /l
	720 g/m ²	500 µm	300 µm	2,0 m ² /l

Total mass of solids abt. 1010 g/l

Volatile organic compound (VOC) abt. 3 g/l

Drying time, +23°C / 50 % RH
(high relative air humidity and inadequate ventilation slow down the drying considerably)

- dust free after 2 h
- through dry after 24 h

Overcoatable

	by itself			by top coat	
	wet film	+10°C	+23°C	+10°C	+23°C
min.	500 µm	after 12 h	after 6 h	after 48 h	after 24 h
min	1000 µm	after 24 h	after 12 h	after 48 h	after 24 h
max.	-	-	-	-	-

Increase in film thickness and rise in the relative humidity of the air in the drying space usually slow down the drying process.

Thinner, clean up Water (thinning max. 3.0% by weight)

Colours White. To facilitate application the colour can be tinted by adding about 0.5% by weight of dark TEKNOMIX Tinting Paste.

DIRECTION FOR USE**Priming**

Suitable primers are e.g. epoxy primers TEKNOPOX AQUA PRIMER 3, TEKNOPLAST PRIMER 3 and TEKNOPLAST PRIMER 5, alkyd primers TEKNOSYNT PRIMER 3 and the TEKNOLAC PRIMER 0168 series, and also water-borne acrylic primers TEKNOCRYL AQUA PRIMER 7 and TEKNOCRYL AQUA COMBI 2780.

The suitability of surfaces painted with other paint types must be evaluated separately.

Fire retardant coating, application methods

The coat thickness to be achieved is determined by the structure to be coated, the so-called critical temperature and the fire endurance time required (cf. separate calculating instructions). The maximum recommended amount to be applied in one application is 1000 µm wet film thickness.

Application by airless spray is recommended to achieve the specified film thickness. Use airless spray nozzle 0.015" or larger. Brush or roller application can also be used.

Application conditions

The surface to be painted must be dry. During the application and drying period the temperature of the ambient air, the surface and the paint shall be above +10°C and the relative air humidity below 70%. Additionally the temperature of the surface to be painted and the paint must be at least 3°C above the dew point of the ambient air.

Good ventilation, increased temperature and lower relative humidity will speed up the drying process.

Top coating

Application on a test patch is recommended in order to define the application technique and dilution that gives the best possible top coating result. The possible porosity of the intumescent paint coat is to be considered when overcoating an intumescent paint. The best result is surest achieved by using the so-called mist coating technique, where the undiluted or diluted top coating is sprayed in many thin layers.

Surfaces painted with intumescent paint must be coated with a top coat before they are exposed to the temporary weathering caused during transport and assembling. Suitable top coats for application in paint shop are TEKNOCRYL 1295-05 Acrylic Top Coat and TEKNOLAC 50 Alkyd Top Coat.

On ready installed structures in dry interior spaces (corrosivity category C1) also dispersion top coats intended for indoor use can be used as top coats. Such paints are e.g. TIMANTTI 20 Dispersion Paint and TREND 20 Redecorating Paint.

Objects coated with intumescent paint are susceptible to moisture and must therefore always be protected by appropriate methods from moisture during storage outdoors and transport, e.g. with tarpaulins. Objects painted with intumescent paint must be packed carefully and handled with care to avoid mechanical damages. Damaged areas must immediately be protected with top coat to avoid damages caused by moisture.

ADDITIONAL INFORMATION

The storage stability is shown on the label. Store in a cool place and in a tightly closed can.

MUST NOT FREEZE.

The information of this data sheet is normative and based on laboratory tests and practical experience. Teknos guarantees that the product quality conforms to our quality system. Teknos accepts, however, no liability for the actual application work, as this is to a great extent dependent on the conditions during handling and application. Teknos accepts no liability for any damage resulting from misapplication of the product. This product is intended for professional use only. This implies that the user possesses sufficient knowledge for using the product correctly with regard to technical and working safety aspects. The latest versions of Teknos data sheets, material safety data sheets and system sheets are on our home pages www.teknos.com.
