

SEALING SYSTEMS

TECSEL[®] INTUMESCENT MASTIC external use

EI 120 - EI 180 - EI 240



DESCRIPTION

One part, neutral curing, silicone rubber based sealant with fire resistant.

PROPERTIES

One component room temperature vulcanising (RVT), easy application system. It does not slump in joints. Solvent free, low contract while curing. It does not attack to concrete and ferrous metals. Excellent adhesion without primer to a wide range of substrates. Unaffected by water, sun, and in general, by the weather.

APPLICATIONS

• Sealing all kind of joints with maximum requirements for constructions.

- Dilatation joints in firewalls and slabs.
- Sealing of connexions, pipes, cable leadthroughs, etc., where a fire protection is required.
- Sealing of firewall doors.
- Sealing PVC elements.
- Automotive, aviation and boat industry.

In general, where is necessary a sealant with resistance to the flame. Use mineral wood as backing.

CERTIFICATIONS

CE Mark: EN 15651-1 F EXT-INT

SPECIFICATIONS

Up to 4 hours of fire resistance (RF/EI), test according to UNE EN-1366-4 and classification according to EN-13501-2 Fire resistance: UNE 23-093-81 (LGAI nº 3012831). Smoke classification NF F 16101 (F1), Report 25192 cidemco. UNE 85232. Sealant E. DIN 18545. Part 2. Type E. TT-S-001543 A. Class A: Products resisting up to 50% of the joint's maximum movement. ISO 11600 F25 LM, ISO 11600 G 25 LM.

NFP 85305 25 E.

CHEMICAL RESISTANCES

Water, soapy water, brine	Excellent
Inorganic diluted acids and alkalis	Very good
Mineral oils and grease	Very good
Oil, fuel, hydrocarbons	Very good
Other products	Consult



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TECHNICAL FEATURES

Uncured product

Appearance	Homogeneous creamy paste
Slump resistance (ISO 7390)	0 mm
Skin over time (BS 5889 AP.A)	35 minutes
Curing rate at 23 °C and 55% H.R.	2 mm/day
Volume loss (ISO 10563)	5%
Application temperature	+5 to +50°C

Cured product (4 weeks at 23°C and 55% H.R.)

Appearance	Similar to rubber
Shore a hardness (ISO 868)	22
Elastic recovery (ISO 7389)	90%
Elastic modulus 100%	(ISO 37): 0,36 MPa (ISO 8339): 0,34 MPa
Tensile strength	(ISO 37): 1,1 MPa (ISO 8339): 0,60 MPa
Elongation at break	(ISO 37): 600% (ISO 8339): 300%
Movement accommodation factor	25%
Temperature in service	-50 to +150 °C

FIRE RESISTANCE TEST

According to UNE EN 1366-4, classification according to EN-13501-2 test n° 264455 CIDEMCO)

Width (mm)	Depth (mm)	Joint type	Backing	Integrity (mínutes)	Heat insulating (mínutes)	Classification
10	10	1	PE	241	129	EI 120 / E 240
10	10	2	PE	241	210	EI 180 / E 240
20	10	2	PE	241	241	EI 240 / E 240
30	15	2	PE	241	241	EI 240 / E 240
10	10	1	MW	241	241	EI 240 / E 240
20	10	2	MW	241	241	EI 240 / E 240

Simple joint.
Double joint.
PE: PE foam strip.
MW: Mineral wool (density 100 kg/m³).
(1): penetration size.

INSTRUCTIONS

Dimensioning of joints:

Their width must be at least 4 times greater than the maximum foreseen movement.

Depth of sealant is chosen on the basis of the joint's width, according to the following table (in mm):

WIDTH	5/6	7/9	10/12	12/15
DEPTH	5	6	7	8

For joint widths greater than 16 mm. depth must be one half of width.

Formation of joints:

A filler should be used in order to avoid adhesion of **Tecsel® Intumescent Mastic external use** to the bottom of the joint, this would exercise unnecessary tension on the sealant. Meanwhile, regulation of its depth is achieved as well as greater yield. The material to be used must be inert, mechanically stable, homogeneous, corrosion-resistant, and must not adhere to either the sealant or contiguous materials.

A particularly recommendable product is closed-cell polyethylene foam, extruded in regular-section strips. In order to obtain the best results of fire resistance, it is necessary to use mineral wool (density 100 kg/m³.



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Treatment of joints:

The surfaces to be sealed must be clean and dry. If necessary, in addition to mechanical means, cleaning with non-grease solvent such as acetone is recommended. For joints to be subjected to major stress, we suggest the use of an appropriate primer for each type of substrate:

For porous materials and general construction use.

(See technical Data)

Any material not known by the user in terms of adhesiveness must first be tested by or consulted with our Technical Department.

Procedure:

Cut off cap from adapter nipple, screw the nozzle on the cartridge, clip the tip of the nozzle to required opening and insert into caulking gun. Fill in the appropriately treated joint with **Tecsel® Intumescent Mastic external use**. In order to avoid messing the edge, they may be protected with masking tape. For a better finish, the seal may be smoothed with a spatula.

Yield:

The following formula is an approximate guideline i order to calculate foreeseen yield for a standard cartridge of **Tecsel® Intumescent Mastic external use :**

Where:
$$L = \frac{300}{A \times D}$$

L= Lenght of sealant in metres obtained per cartridge. A= Width of the joint in mm.

D = Depth of the joint in mm.

Further treatment:

Tecsel® Intumescent Mastic external use may not be painted or varnished.

STORAGE

Keep in a cool and dry place.

Lifetime: 18 months in original sealed container.

PRESENTATION

300 cc. Plastic cartridges.

COLOURS

White.

Grey.

CLEANING

Fresh product is easily removed with an organic solvent. When cured it can be removed by mechanical mean only.

HEALTH & SAFETY

While curing **Tecsel® Intumescent Mastic external use** splits off ketoxime. These vapours must not be inhaled for prolonged periods of time in high levels of concentration. Therefore, the working area should be well ventilated.

Due to possible irritation, all contact of the product with eyes or mucous areas must be avoided. If this should occur, rinse the affected area, thoroughly with plenty of water and, if need be, see a doctor. Rubber resulting after curing may be handled without risk.

Primers used with **Tecsel® Intumescent Mastic external use** contains flammable solvents at room temperature. Do not smoke or use unprotected flame near the working area. If eyes are splashed, rinse thoroughly with plenty of water, otherwise, see a doctor.

Use gloves, and in case of splashing, wash with industrial detergent when the product is still fresh.

DO NOT WASH HANDS WITH SOLVENTS.

For more information request Safety Data Sheet.