

TECHNICAL DATA SHEET

Tradeseal Polyurethane Fire Rated Construction Grade Sealant is a one-component, medium-modulus polyurethane sealant that cures on exposure to atmospheric humidity and is capable of enduring direct flames to certain degrees.

Key Performance Properties:

- More than 4 hours of fire resistance in certain conditions without using backfilling materials
- 25% movement capability
- No surface tackiness after fully cured
- Does not pick up dirt
- No shrinkage
- Cures bubble-free
- Enhanced storage stability
- No sagging – Thixotropic
- Can be applied with a handgun and tooled easily
- Paintable

Delay the
Spread of
Fire
Efficiently

Technical Data:

BEFORE CURING	
Basis:	Polyurethane
Consistency:	Thixotropic
Curing Mechanism:	Moisture Curing
Density:	1.20-1,25g/ml
Tack Free Time:	30-60 min. (23°C and 50% R.H)
Curing Rate:	Min. 2,5 mm/day (23°C and 50% R.H)
Sagging:	0 mm (EN ISO 7390)
Temperature Resistance:	-40°C to +90°C
Application Temperature:	+5°C to +40°C

AFTER CURING		
Hardness Shore A:	35 – 40	After 28 days (ASTM C661)
Paintability:	Yes*	
Elastic Recovery:	≥ 70%	(ISO 7389)

GLASS - GLASS		
Elongation at Break:	≥ 200%	(ISO8339)
E100 Modulus (23 °C):	0.35-0.40 N/mm2	(ISO8339)
E100 Modulus (-20 °C):	≤ 0,60 N/mm2	(ISO8339)

DUMBLE TEST		
Elongation at Break:	≥%600	(ASTM D412)
Tensile Strength:	1.5-2.0 N/mm2	(ASTM D412)



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Recommended Uses:

- Fire rated sealing and bonding application between many different construction materials
- Fire seal of movement and connection joints in floors
- Joints between prefabricated construction materials
- Fire stop sealing and bonding of ventilation ducts, gutters and spouts
- For expansion joints between pre-cast concrete panels

Surface Preparation:

- Before application, be sure that joint surfaces are clean, dry, and free of all contamination
- Apply sealant evenly, if necessary, use masking tape and remove the tape while the sealant is still soft
- Joint width/depth ratio should be 2:1 (Table 1)
- If necessary, use backup material to adjust joint depth
- Sealants should adhere to only two surfaces of the joint. Use backer rods and bond breakers to facilitate.

Coverage (approx.)

Joint width	15 mm	20 mm	25 mm	30 mm	35 mm
Joint Depth	8 mm	10 mm	12 mm	15 mm	15 mm
Joint length / 600 ml	5 meters	3 meters	2 meters	1,3 meters	1,1 meters

Following cleaning procedure and materials are recommended:

Glass	Degrease with alcohol or MEK
Aluminum, light alloys and stainless steel	Degrease with alcohol or MEK
Other metals	Lightly abrade then degrease as above
Wood	Lightly abrade surface then remove dust
Plastics	Degrease using an agent recommended by plastics manufacturer
Concrete and other alkaline surfaces	Brush and remove dust



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Product Application:

- Carefully cut the tip of the sausage and then trim the nozzle to the required diameter, ideally at an angle between 45° to 60°.
- Insert sausage into caulking gun.
- Apply the sealant in a single bead using a caulking gun.
- For a smooth finish, shape the bead of the sealant with a clean, dry tool while it's still workable and before skin forms.
- If applicable, remove masking tape immediately after tooling is complete.
- Wet sealants can be cleaned up with acetone or mineral spirits.
- Cured sealant can be removed by trimming with a sharp blade.

Standards:

Meets or exceeds the requirements of the following specifications:

- The requirements of VOC content specifications in LEED credit EQc4.1 “Low-emitting products” of SCAQMD rule 1168.
- The French VOC requirements for class A+
- More than 4 hours of fire resistance according to EN 1366-4 in certain conditions without using backfilling materials.
- In compliance with AS 1530.4:2014 providing more than 4 hours of fire resistance in certain conditions.
- M2 Fire Rating according to NF P 92-501 radiation test.

Product Limitations:

- It must not be used in totally confined spaces where sealant cannot cure due to lack of atmospheric moisture.
- Do not use in applications where continuous water immersion is possible.
- Do not apply on frozen or wet surfaces or through standing water.
- Prolonged exposure to direct sunlight can cause discoloring,
- Avoid application below 5 °C and above 40 °C.

Health and Safety:

- 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.



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Packaging:

Product Type	Volume	Package
Light Grey (sausage)	600ml	12
Mid Grey (sausage)	600ml	12
Limestone (sausage)	600ml	12

Shelf Life / Storage:

- Store out of direct sunlight and heat.
- Store below + 10°C ad + 25°C.
- Shelf life is 12 months if stored in its original package



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