



Triton TT SWELLMASTIC S2

SWELLABLE ADHESIVE / SEALANT

Description

One part polyurethane sealant which swells in contact with water.

Uses

To seal waterproof – structures and fix TT Waterstop.

Sealing:

- Construction joints
- Pipe and steel work penetrations through walls and floor slabs
- Around all types of penetrations and construction joints
- Construction joints in cable ducts, etc.

Fixation:

- TT Waterstop

Characteristics / Advantages

- Easy to apply
- Good adhesion to various substrates
- Optimised expansion rate, therefore no damage to fresh concrete during curing
- Highly economical
- Swells in contact with water
- Permanently water resistant
- Adaptable to fit many different detail tasks

Product Data

Form	
Colour	Oxide Red
Packaging	600ml unipacs (20 unipacs/box, 48 boxes/pallet)
Storage	
Storage Conditions / Shelf-Life	9 months from date of production if stored n unopened, undamaged original packaging in dry conditions at temperatures between +5°C and +25°C
Technical Data	
Chemical Base	1-part polyurethane, moisture curing
Density	1.33 kg/l (+ 23°C)
Skinning Time	2 hours (+ 23°C / 50% r.h.)
Curing Rate	After 1 day: ~2.0mm (+23°C / 50% r.h.) After 10 days: ~10.0mm (+23°C / 50% r.h.)
Sag Flow	< 2mm
Change of Volume	<ul style="list-style-type: none">• 1 day in tap water: < 25%• 7 days in tap water: < 100% Swelling properties in salty water will be reduced and delayed.

Mechanical / Physical Properties	
Shore A Hardness	Swollen (7 days in tap water): > 10 Non-swollen (7 days: +23°C / 50% r.h.): 40-60

System Information

Application Details	
Substrate Quality	The substrate must be sound, clean, dry max. mat moist, free from all surface contaminants
Substrate Preparation	All loose particles, release agents, laitance, paint rust and other poorly adhering materials must be removed by suitable hand or mechanical preparation techniques.
Application Conditions / Limitations	
Substrate Temperature	+5°C min. / +35°C max
Ambient Temperature	+5°C min. / +35°C max
Substrate Humidity	The substrate must be dry, max, mat moist.

Application Instructions

Application Method / Tools

For the fixation of TT Waterstop

Apply **TRITON TT Swellmastic S2** (through triangular nozzle of approx. 5-10mm sections) to prepared substrate. In case of uneven substrates the extruded triangular section of **TRITON TT Swellmastic S2** may need to be adjusted accordingly. **TRITON TT Waterstop** must be pressed well into the fresh **TRITON TT Swellmastic S2**.

Allow **TRITON TT Swellmastic S2** to harden for 2-3 hours before placing concrete.

Please consult the product date sheet of the mentioned product.

As buried sealant for construction joint:

Use a triangular nozzle or cut the nozzle to obtain a regular triangular extrusion section and apply **TRITON TT Swellmastic S2** according to the following table:

Structure Thickness	Size of triangular section	*Theoretical yield of 600ml unipacs	*Theoretical yield of 300ml cartridges
300 mm	15 mm	6.2 m	3.1m
300 – 500 mm	20 mm	3.6 m	1.8 m

*The actual yield can be lower than the theoretical yield depending on job-site conditions (substrate roughness, size of aggregates, etc.)

Place **TRITON TT Swellmastic S2** in the centre of the concrete section.

Minimum cover to sealant on both sides must be 50mm (reinforced concrete) or 150mm (non-reinforced concrete). For pouring heights < 500mm allow sealant to harden for 2-3 hours. If the pouring height is > 500mm, **TRITON TT Swellmastic S2** must harden for at least 2 days.

During concreting, compact well around **TRITON TT Swellmastic S2** to provide a dense concrete without any honeycombs or voids.

Cleaning of Tools

Clean application tools immediately after use.

Hardened / cured material can only be removed mechanically.



Notes on Application / Limitations

TRITON TT Swellmastic S2 expands in contact with water. This does not happen immediately, but slowly after a few hours. Nevertheless it is advisable not to leave TRITON TT Swellmastic S2 any length of time in standing water (max. 24 hours as long as the water can drain away).

Do not use TRITON TT Swellmastic S2 for movement joints.

If the water level suddenly increases the watertightness of joints will be achieved when TRITON TT Swellmastic S2 has swollen.

In a totally dry state TRITON TT Swellmastic S2 shrinks to its original dimensions, but expands again in contact with water.

Although TRITON TT Swellmastic S2 has been tested to water pressures up to 5 bar, it is not recommended for sealing against water pressures higher than 2 bar because of the limited sealing distance. For pressures > 2 bar TRITON TT Swellmastic S2 can be used to fix TRITON TT Waterstop.

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

The information, and, in particular, the recommendations relating to the application and end-use of Triton products, are given in good faith based on Triton's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Triton'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. Triton 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.

For further information please contact:

Triton Chemical Manufacturing Co Ltd T/a Triton Systems

Units 3 – 5 Crayford Commercial Centre, Greyhound Way, Crayford, Kent DA1 4HF

Tel: 01322 318830

Fax: 01322 524017

Email: info@triton-chemicals.com

www.triton-systems.com