

TECHNICAL DATA SHEET

PAS-TDS-SLT-008

MULTISEAL 1915 - Chemical Resistant Polyurethane Sealant

Description

MULTISEAL 1915 a solvent free flexible polyurethane sealant specifically designed for use where high chemical resistance is required, it provides a flexible seal against high concentrations of acids and alkali.

NB • Refer to Chemical Resistance Properties Data Sheet in the Epoxy section of our catalogue.

Typical Applications

Containment tanks, treatment plants, laboratories, battery rooms, etc.

Advantages

- * May be applied as a normal polyurethane sealant
- * Very good low temperature flexibility (-50°C).
- * Very good water resistance
- * Resistant to intermittent contact with: 73% caustic soda - 73% sulphuric acid 50% nitric acid - 80% phosphoric acid 25% hydrochloric acid

Composition

A two component sealing compound based on a unique long chain polymer cured with a isocyanate to yield a tough flexible seal.

Available in low and high viscosity grades

Typical Properties

Specific Gravity: 1.35

Service Temperature: -50°C to +80 °C

Application Temperature: 5L to 4°C

Volume Solids: 99% to 1%

Mixed Ratio: Use as supplied

Pot Life: 1 hour

Hardness Shore "A" 25°C: 25-30

Cure: Full cure -.7days

Movement

Accommodation: Thinners: 20% joint width

Thinners: MULTITHINNERS 1600

Storage Life: 6 months stored at +5 °C to +35 °C

Tensile Strength: 2.45 Mpa

Elongation:

Tear Resistance: 9.1 N/mm (DIE C)

Compression set

(24 hours) 3%

Join Design

Horizontal Joints: The joint should, wherever possible, be designed to a minimum depth of 12mm and to a maximum of 25 mm

Width mm	Depth mm	Litres /Linear metre
12	12	0,144
15	15	0,225
20	20	0,400
25	20	0,500
25	25	0,625
30	20	0,600
40	20	0,800

Vertical Joints: Minimum depth - 6 mm. Maximum depth - 25 mm. Apart from the 6mm wide by 6mm deep joint, it is an advantage to maintain a width / depth ratio of 2:1. This will ensure that the movement, when it occurs, will be taken up in the sealing compound itself and no undue stress will be set up on the joint faces with the possibility of impairing adhesion. Note: depth must not exceed the width.

Width mm	Depth mm	Litres / Linear metre
6	6	0.036
12	6	0.072
20	10	0.200
25	12	0.300
30	15	0.450
40	20	0.800

Where resistance to hydrostatic pressure is required the depth of sealant may be increased where joints have been constructed using compressed fibre filler boards, these should be raked out down to the required depth as per joint design criteria.

Where fully removable forms have been used to construct the joints, the correct depth, as per joint design criteria, should be established by installing a non-adhering polyethylene support strip into the joint prior to sealing. Strips should be slightly oversize to enable them to be placed under compression. Care should be taken not to twist or deform the support strip as this will result in an erratic joint depth. When designing joints, care must be taken to ensure that the floor has sufficient fall to facilitate rapid run-off of chemicals and that pools do not form over joints.

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Movement Accommodation: Moving joints - 20.% of the original joint width. Deformed joints - 40% of the original joint width. During installation, care should be taken that the joint be within 10% in either extension or compression.

Note: A bond breaker should be inserted into all joints preventing the sealing compound from adhering to the underside of the joint, thus restricting the extension and recovery capabilities of MULTISEAL 1915.

Directions for Use

Priming: All surfaces should be clean, dry and sound, free of dust contamination or any weak cement laitance.

Surfaces should be parallel and of the correct dimensions. MULTIPRIME 1100 should be used on all glass, ceramic or masonry surfaces and the sealant applied within one hour. Porous or weak surfaces should be treated with MULTIPRIME 1308 and sealed within 3 hours after application of primer. Metals should be primed with MULTIPRIME 1164.

Mixing: Transfer the contents of the activator container into the base tin and mix thoroughly. Mixing is best achieved using a flat bladed stirrer coupled to a slow speed electric drill. Mix for 4-8 minutes paying particular attention to the sides of the container. When thoroughly mixed both components should be completely inter-dispersed and the material be of uniform colour. Mixing by hand will require more time and is not recommended for gun grade sealant.

Installation.

Pour Grade: when thoroughly mixed, this material is of a suitable consistency to pour directly from the container into the prepared and suitably-masked and backing cord filled joint.

Gun Grade: A closed barrel gun should be used and the material be applied ensuring that there is complete contact between the sealant head and the wall of the joint.

Finishing: To displace air bubbles as an aid to good adhesion and to ensure correct surface profile, the gun grade sealant should be finished with a slightly concave profile. Use a rounded spatula or similar object to tool the sealant immediately after application.

Cleaning: Immediately after use, clean all equipment with **MULTITHINNERS 1600**.

Watchpoints

For water retaining structures, use MLLT1PR1ME 1308 Epoxy Primer. Curing agent contains isocyanate. Wear §protective gloves and clothing, protect eyes from splashes while mixing. Mix only the amount that can be used immediately. Not resistant to strong solvents, or brake fluid.

Packaging

Supplied in 2 litre kits.

Quality Assurance

MULT1 CONSTRUCTION CHEMICALS (PTY) LTD'S production and testing programmes comply with local and International testing standards.

Updates

This data sheet supersedes all previous issues prior to this date: 31/05/97.