

Urochem 500 HP SL

SINGLE COMPONENT HIGH PERFORMANCE SELF-LEVELLING ULTRA LOW MODULUS HYBRID SEALANT

DESCRIPTION

Urochem 500 HP SL is a high-performance, self-levelling, ultralow modulus moisture curing sealant, based on hybrid technology which is both isocyanate and VOC free. It has a good cure rate, excellent moisture resistance, is UV stable, and exhibits excellent adhesion to various substrates, for example, concrete/concrete, concrete/steel, concrete/asphalt, steel/asphalt.

Specifically designed to seal high movement joints that are subject to thermal and/or shear movement due to traffic loading.

It has an extremely low modulus and high elongation and is recommended for use in joints where extreme movement is anticipated. (100% of initial joint width up to 60mm, thereafter 50% of initial joint width)

PRODUCT APPLICATION

- **Urochem 500 HP SL** is primarily intended for use in expansion joints on bridges that vary in width from 25 to 60 mm at the time of sealing.
- **Urochem 500 HP SL** can be used as an expansion joint sealer in both new and remedial applications.
- **Urochem 500 HP SL** can be used for irregular joints and in joints where minor spalling has occurred.
- • It can be used externally in road joints if it is recessed by a minimum of 5mm to avoid tyre wear (Mechanical damage). The wider the joint, the deeper the recess.
- It provides medium chemical, wear and corrosion resistance, while at the same time curing to a <5 Shore A hardness.
- Insert backing rod to the correct depth. Gun the product into prepared joints and smooth with a dry spatula if required. The joint width should be designed to

accommodate the expected movement, the joint ratio for 6 – 10mm wide joints is 1:1 thereafter a ratio of 2:1 should be respected.

Not for use in water retaining structures.

SURFACE PREPARATION

The correct preparation of the joint faces is essential to the satisfactory performance of the sealant. All surfaces should be clean, sound, and dry, and laitance or surface contamination should be removed by thorough wire brushing, grinding or grit blasting. Vacuum or blow with compressed air to ensure thorough removal of dust. Metal surfaces should be free of mill-scale and rust and mild steel should be treated with **Urochem 617**.

APPLICATION

- Place sausage in the barrel gun, cut off the end off sausage and fit the nozzle; trim the tip to suit the joint spacing to be filled.
- **Note a minimum width of 6mm and a maximum of 60mm should be adhered to.** A backing cord/bond breaker should be used depending on application, to prevent three-sided adhesion.

CLEANING

Clean all tools and equipment immediately after use with **Urochem 901**, as the cured material is difficult to remove.

SAFETY

Contains organic solvents which are flammable. Do not use in confined spaces. Ensure adequate ventilation and the absence of any ignition source. Wear protective clothing. In case of eye contact wash well with water and obtain medical advice. Please refer to product MSDS for further information.



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TYPICAL PROPERTIES – AS PER UROCHEM QC

The below properties are based on in-house testing methodologies.

Mixing Ratio	Single component
Skin over time	60 min dependant on RH, temp & thickness
Practical Cure	± 2mm per day dependant on RH & temp
Hardness	< 5 Shore A
Tensile strength	0.3 Mpa
Colour	Grey
Density	1.1 Cured
Movement accommodation	+ 100 % -50% of initial joint width ***
Shelf Life	12 Months, depending on storage conditions
Application Temp.	5 to 35°C (depending on environment and substrate)
Service Temp.	-15°C to +120°C
Pack Size	600 ml sausages, 2,5 Lt bucket, 5 Lt bucket
Cleaning	Urochem 901
Storage	Store in a cool dry well ventilated place away from heat & sunlight

*** Movement accommodation for joints 60mm and wider +50% - 25%

APPROXIMATE COVERAGE

Joint Dimension:	LM per 600ml:
6 x 6mm	16.6
8 x 8mm	9.38
10 x 10mm	6
12 x 6mm	8.3
15 x 8mm	5



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SPECIFICATION REQUIREMENT

Properties	Specification	Result
Tensile stress, 150% elongation, 7 day cure at 25°C ± 2°C and from 45% to 55% Relative Humidity	0.31 Mpa Max	0.30 @ 700%
Flow at ± 2°C with 15 % slope Channel A	Must not flow from channel	Does not flow out channel
Relative density / Specific Gravity	1.01 to 1.15	1.5
Durometer hardness at -18° C, Shore A, cured 7 days at 25° C	10 to 25	11
Tack-free at 25°C ± 2°C and 45% Relative Humidity	Less than 75 minutes	Less than 60 min
Elongation, 7 day cure at 25°C ± 2°C and 45% to 55% Relative Humidity	500 % min.	700%
Set to touch, at 25°C ± 2°C and 45% to 55% Relative Humidity	Less than 75 minutes	Less than 60 min
Shelf life from date of shipment	6 Months minimum	10 Months
Bond to concrete mortar-concrete briquettes, air cured 7 days at 25°C ± 2°C	0.34 Mpa min	Cohesive failure in sealant
Colour	Grey	Grey

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