# Urochem 299 LV POLYURETHANE SEALANT

### DESCRIPTION

Urochem 299 LV is a two-component low viscosity, semi self-levelling sealing compound based on a polyether polyurethane. It is blended with fillers and a chemical curing agent, which reacts after mixing to form a durable rubber like seal. This sealant is highly elastic and is able to withstand continuous extension and recovery. It may be used with most common building materials such as concrete, plaster, brick, and stone. It exhibits superior resistance to abrasion, ultraviolet light and ozone making it suitable for exterior use. Due to its excellent water resistance and adhesion and resistance to biodegradation, it forms the ideal material for use in sewage treatment plants. Urochem 299 LV cannot be used on vertical surfaces due to its low viscosity.

# **PRODUCT APPLICATION**

- To form a long-lasting water and weatherproof seal in horizontal movement joints which are subject to continuous cyclic movement.
- Typical applications include horizontal expansion joints in floors, drainage channels and sewage treatment plants.

### **SURFACE PREPARATION**

The correct preparation of the joint faces is absolutely 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 treated with a suitable anticorrosive primer.

## JOINT DESIGN

- The minimum joint dimension is 6 x 6 mm, but we recommend that where possible, 12mm x 12mm. Note that the depth of the joint should never exceed its width, except in the case of water retaining structures and where shear movement is anticipated, where a width to depth ratio of 2 :1 should if possible be maintained. This ratio provides the optimum geometry to allow movement to occur within the joint without placing excessive force on the joint faces.
- Joint faces should be parallel, and the joint width should be at least four times the maximum anticipated movement. When placing the sealant, the joint opening should be central to its maximum compression/expansion cycle.



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#### **BOND BREAKER**

To ensure proper movement of the joint a bond breaker must be used at the base of the joint. Where a backing material such as polyethylene foam rod is used to ensure the correct joint geometry, a bond breaking tape is not required. For water retaining structures care must be taken to comply with the design requirements as set by the project engineer.

#### PRIMING

- **Urochem 102 Silane Primer** should be used on glass, ceramics and sound masonry and brick surfaces not subjected to water immersion.
- For water retaining structures, porous or friable surfaces or where severe conditions are expected use Urochem 101 or Urochem 106 Epoxy Primer. Refer to relevant data sheet.

#### MIXING

Urochem 299LV is supplied in a 2 Lt kit.

Transfer the total quantity of activator into the base component and mix thoroughly using a low-speed electric drill fitted with a flat blade stirrer. Scrape down the sides of the mixing container whilst mixing and continue mixing until a uniform, streak free colour is achieved.

# APPLICATION

Pour into primed joint's using a suitable container and level surface using a scraper.

## CLEANING

Clean all tools and equipment with **Urochem 901** before curing of the sealant has occurred.

### SAFETY

Contact with skin should be avoided by wearing gloves and protective clothing. The activator is slightly caustic. In case of eye contact wash well and obtain medical advice.



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## TYPICAL PROPERTIES

Mixing Ratio	Twin pack - Do NOT split kits					
Pot Life	1 Hour @ 25° C					
Tack Free	3 Days					
Full Cure	7 Days					
Colour	Grey - Other colours available on order					
Hardness	+ 15 Shore A					
Movement accommodation	+ 25%					
Chemical resistance	Most dilute chemicals - Not aggressive chlorinated water					
Density	1,45 g/cm³					
Theoretical coverage	See Material Usage Guide below					
Shelf Life	6 Months					
Application Temp.	5 - 35°C					
Service Temp.	-10 - 90°C					
Pack Size	2 Lt Kits					
Cleaning	Urochem 901					
Storage	Store in a cool dry place					

# MATERIAL USAGE ESTIMATING GUIDE

(No allowance made for wastage)

		Joint width in mm												
		6	8	10	12	15	20	25	30	35	40			
Joint depth in mm	6	27	20,8	16,6	13,8									
	8		15,6	12,5	10,42	8,3								
	10			10	8,3	6,6	5							
	12				6,9	5,5	4,2	3,3						
	15					4,4	3,3	2,6	2,2					
	20						2,5	2	1,6	1,4	1,2			
	25							1,6	1,3	1,1	1			
	30								1,1	0,9	0,8			
	35									0,8	0,7			
	40										0,6			
Lm per Litre, excluding wastage														

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