

Urochem 205 LV

TWO-PART CHEMICALLY RESISTANT FAST CURING POLYSULPHIDE JOINT SEALANT "POTABLE WATER RETAINING STRUCTURES"

DESCRIPTION

Urochem 205 LV is a two-component fast curing sealing compound based on a polysulphide polymer blended with fillers and chemical curing agents, which cures after mixing to form a durable rubber like seal. This sealant is highly elastic and 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 many common chemicals, fuel oils and solvents. Also resistant to ultraviolet light and ozone making it ideally suited to drinking water reservoirs. Suitable for exterior use, and for use where the sealant will be subjected to contact with chemicals, solvents, and oils.

PRODUCT APPLICATION

- To form a long-lasting water and weatherproof seal in horizontal movement joints and joints which are subject to continuous cyclic movement.
- Typical applications include floor expansion joints, in workshops, factories and garage floors, filling station forecourts, and in water retaining structures. (Potable water)
- For runway use where fast cure and Jet blast resistance is a necessity.
- Can be trafficked after 2 hours.

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.

DIRECTIONS

- The recommended minimum joint dimension is 6 x 6mm, but where possible we recommend a 10 x 10mm joint.
- For joints ranging from 6mm to 10mm wide, we recommend a width to depth ratio of 1:1, for anything wider a 2:1 width to depth ratio should be maintained.
- In water retaining structures a 1:1 ratio should be maintained due to Hydrostatic pressure and cyclic movement.
- These ratios provide 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 anticipated movement.
- When placing the sealant, the joint opening should if possible be central to its maximum compression/expansion cycle.

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 should be treated with **Urochem 617**.



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PRIMING

- For porous or friable surfaces or where severe conditions are expected use **Urochem 614** single pack polyurethane primer. Apply the material with a brush to the joint faces ensuring complete coverage. Particular attention should be paid to any voids and hollows. Allow at least 30 min. for the solvent to evaporate before applying the sealant.
- ***Should the primer lose its tack, after approx. 3 hrs, you will need to re-prime.***
- Protect the primed surface from dust and dirt which could interfere with the adhesion of the sealant.

MIXING

- **Urochem 205** is supplied in a two-part kit, base, and activator in separate buckets.
- Transfer the total quantity of activator into the base component and mix thoroughly using a slow speed electric drill fitted with a flat blade stirrer.
- Scrape down the sides of the can and the base and remix until the colour is uniform and free from streaks.
- Thorough mixing is essential and should take 5 to 10 minutes.

APPLICATION

- After thorough mixing, pour directly from the container ensuring a smooth continuous flow of material. Fill the joint from the bottom up and ensure that there is contact between the sealant and joint surfaces.
- To ensure contact of the sealant with the walls of the joint, the sealant can be tooled to a smooth finish using a rounded spatula. A soapy solution may be used to aid the process. Remove any masking tape applied before curing commences.

CLEANING

Clean all tools and equipment with **Urochem 901** before setting of the sealant has taken place.

SAFETY

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



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TYPICAL PROPERTIES – AS PER UROCHEM QC

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

Mixing Ratio	Two component – mix as supplied – Do not part mix
Pot Life	45 Min @ 25°C
Tac free	2 Hours
Full Cure	7 Days
Colour	Grey – Other colours available
Density	1,49 g/cm ³
Hardness	25 Shore A
Theoretical coverage	See Material Estimating Guide below
Chemical resistance	Most mild chemicals, fuel, oils & solvents
Shelf Life	12 Months
Application Temp.	5 to 35°C
Service Temp.	-25 to 90°C
Pack Size	2 Lt Kits
Cleaning	Urochem 901
Storage	Store in a cool dry well ventilated place away from heat & sunlight

CERTIFICATION

Potable Water Certification WAT-25-1825

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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CHEMICAL COMPATIBILITY CHART

Chemical				
Aluminium Sulfate Solution (50%)		Dibutyl Carbotol	Isobutyl Alcohol	Phthalic Anhydride (38 % Slurry)
Ammonium Chloride Solution (50 %)		Diethylene Glycol	Isobutyl Isobutyrate	Potassium Carbonate
Ammonium Perchlorate (15%)		Ethyl Alcohol	Isopropyl Alcohol	Potassium Carbonate
Ammonium Perchlorate (50%)		2-Ethyl Hexyl Acrylate	Isostearic Acid	Potassium Hydroxide (25 %)
Ammonium Polysulfate		Ethylene Glycol	Jet Fuel (See ASTM Fuels)	Potassium Hydroxide (45 %)
Ammonium Sulfate Solution (30 %)		Ferrous Sulfate (10 %)	Kerosene	Potassium Hydroxide (50 %)
Amyl Alcohol		Fluoboric Acid (10 %)	Lacquer Solvents	Propylene Glycol
ASTM Fuel	A	Feul Oil/Diesel Fuel	Linseed Oil	SAE 10 Oil
	B	Petrol	Lubricating Oils	Shell Tellus Oil 46
	C	Gasohol	Magnesium Chloride Solution (20 %)	Skydrol 500B
	D	Heptane	Magnesium Hydroxide Solution (30 %)	Soap Solutions
Barium Hydroxide (10 %)	Herbicides	Marksman	Maleic Anhydride (25 % Slurry)	Sodium Bicarbonate Solution (25 %)
Borax Solution (25 %)		Hormoban APM	Methanol	Sodium Chloride Solution (25 %)
Boric Acid Solution (20 %)		Aatrex 4L	Methyl Tert-Butyl Ether (98 %)	Sodium Hydroxide Solution (50 %)
Borohydride Solution		Prowl 3,3 EC	Mineral Spirits	Sodium Hydroxide Solution (50 % @ 49 °C)
1-4 Butanediol		Tri-4	Motor Oil (10W40)	Sodium Sulfide (25 %)
Butyl Cellosize		Treflan	N-Butyl Acrylate	Stearic Acid (20 %)
Butyl Dioxitol		Serve 24E	N-Butyl Alcohol	Sulfuric Acid (20 %)
Butyl Oxitol		Sonalan E.C.	Naphtha VM & P	Texanol
Calcium Chloride Solution (50 %)		Hexane	Naphthalene Oil	Transmission Fluid
Calcium Hydroxide (20 %)		Hexane Glycol	Oleic Acid	Urea (10 %)
Calcium Hypochlorite (50 %)		Hydrofluoric Acid (5 %)	Oxalic Acid (20%)	Urea Ammonium Nitrate (32 %)
Chlorinated Water	1 ppm	Hydrofluoric Acid (10 %)	Paraffinic Oil	Vinyl Acetate
	10 ppm	Hydrofluoric Acid (23 %)	Pesticides	Arrosolo 3.3E
	100 ppm	Hydrogen Peroxide (3 %)		Eradicane 6.7E
Copper Sulfate Solution (20%)		Hydrogen Peroxide (20 %)	Phenolic Resins	
Cyclohexane		Hydrogen Peroxide (35 %)	Phosphoric Acid (50 %)	

Contact your Urochem representative if any queries arise, other wise RTFM.

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