

J-SEAL® PU1-800 (PG)

ONE-PART POLYURETHANE SELF-LEVELLING
TRAFFICABLE, OIL & FUEL RESISTANT JOINT SEALANT



PRODUCT DESCRIPTION

J-Seal® PU1-800 (PG) is a one-component, polyurethane, concrete pavement self-levelling sealant. It cures under the influence of atmospheric moisture to form a permanently elastic sealant with excellent adhesive properties and resistance to ageing and weathering.

J-Seal® PU1-800 (PG) is developed to avoid bubbling which can be present in traditional one-part PU Sealants and combines the best properties of traditional polyurethane sealants and providing very low emissions.

J-Seal® PU1-800 (PG) has been specifically developed to be used as a pourable joint sealant in rigid pavements in airfields, roads and in concrete floors where high adhesion, abrasion-resistance and high chemical resistance to fuels, oils and hydrocarbons is required.

Compliant to:

EN 14188 System S Type SL Class D (Test Fuel II)

EN 15651/4 TYPE PW INT/EXT

Potable water certified to AS/NZS4020 by The Australian Water Quality Centre (AWQC)



ADVANTAGES

- One part - no mixing on site. Self-levelling consistency
- Bubble-free curing
- Resistant to hydrocarbons, oils, fuels and pitch-free
- Very good adhesion on all typical construction materials
- Primerless adhesion on green concrete
- Permanently elastic over a wide range of temperatures; accommodates joint movement of $\pm 25\%$
- Non-staining



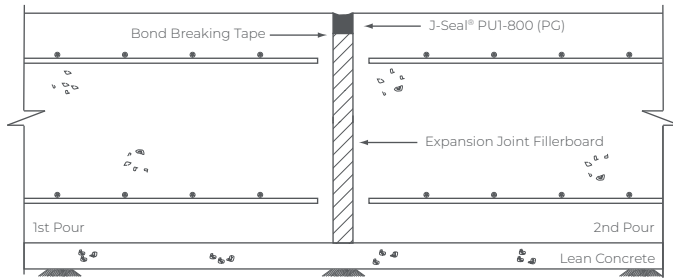
AREAS OF APPLICATION

- Joints in rigid pavements of airports and concrete roads
- Joints in concrete floors
- Indoor and outdoor applications for pedestrian and traffic areas (petrol stations, decks, car parks)
- Floor joints in warehouses and production areas
- Joints in waste water treatment plants (please consult with CJSA)
- Floor joints in tunnel construction

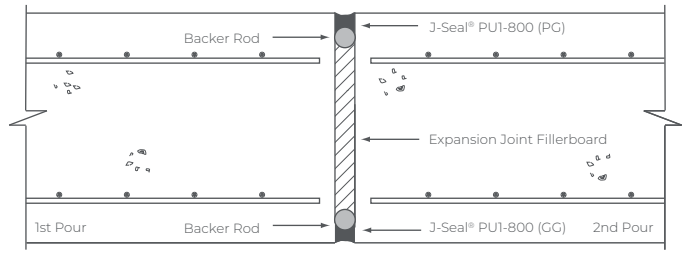
Note : *The product's design and performance, its intended use, installation and final confirmation and approval for use, must be provided by the project's Design Engineer and Project Manager.*



TYPICAL APPLICATIONS



SLAB ON GROUND APPLICATION



WALL APPLICATION



PHYSICAL PROPERTIES

PROPERTY	RESULT																														
Appearance	Semi-liquid																														
Colour	Grey																														
Chemical nature	Polyurethane																														
Curing Mechanism	Moisture-curing																														
Specific weight	1.48 g/l																														
Tack-free time (at 23°C and 50% relative humidity)	85 minutes																														
Curing (at 23°C and 50% relative humidity)	Available upon request																														
Shore A (at 23°C and 50% relative humidity; DIN 53505)	28																														
Elongation at break (ISO 37 DIN 53504)	700%																														
Elastic modulus at 100% (ISO 37 DIN 53504)	0.6 N/mm ²																														
Elastic recovery (DIN 52458)	Not available																														
Admissible joint movement	Not available																														
Chemical resistance to spillage	Diesel (UNI EN 14187-4) Gasoline (UNI EN 14187-6) <table border="1" data-bbox="826 1352 1422 1926"> <thead> <tr> <th>N</th> <th>CHEMICAL GROUP</th> <th>TEST LIQUID</th> </tr> </thead> <tbody> <tr> <td>LC-4</td> <td>All hydrocarbons (including LC-2, LC-3)</td> <td>60% toluene 30% xylene 10% methyl-naphthalene</td> </tr> <tr> <td>LC-5</td> <td>Mono and multifunctional alcohols (max. 48% methanol), glycol ethers (including LC-5b)</td> <td>48% Methanol 48% Isopropanol 4% Water</td> </tr> <tr> <td>LC-6</td> <td>Chlorinated hydrocarbons > C2</td> <td>Trichloroethylene</td> </tr> <tr> <td>LC-7</td> <td>All organic esters and ketones</td> <td>50% Ethyl acetate</td> </tr> <tr> <td>LC-9</td> <td>Aqueous solutions of organic acids up to 10% and their salts</td> <td>Aqueous Acetic Acid (10%)</td> </tr> <tr> <td>LC-11</td> <td>Anorganic bases as well as anorganic salts in water (pH>8) except ammonia and oxidizing solution of salts</td> <td>Sodium hydroxide (20%)</td> </tr> <tr> <td>LC-13</td> <td>Amines and their salts in aqueous solutions</td> <td>35% Triethanolamine 30% n-Butylamine 35% N,N-Dimethylamine</td> </tr> <tr> <td></td> <td>Oxidant solutions</td> <td>Oxygen Peroxide</td> </tr> <tr> <td></td> <td>Aliphatic Hydrocarbons</td> <td>Methylcyclohexane / cyclopentane</td> </tr> </tbody> </table>	N	CHEMICAL GROUP	TEST LIQUID	LC-4	All hydrocarbons (including LC-2, LC-3)	60% toluene 30% xylene 10% methyl-naphthalene	LC-5	Mono and multifunctional alcohols (max. 48% methanol), glycol ethers (including LC-5b)	48% Methanol 48% Isopropanol 4% Water	LC-6	Chlorinated hydrocarbons > C2	Trichloroethylene	LC-7	All organic esters and ketones	50% Ethyl acetate	LC-9	Aqueous solutions of organic acids up to 10% and their salts	Aqueous Acetic Acid (10%)	LC-11	Anorganic bases as well as anorganic salts in water (pH>8) except ammonia and oxidizing solution of salts	Sodium hydroxide (20%)	LC-13	Amines and their salts in aqueous solutions	35% Triethanolamine 30% n-Butylamine 35% N,N-Dimethylamine		Oxidant solutions	Oxygen Peroxide		Aliphatic Hydrocarbons	Methylcyclohexane / cyclopentane
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Tensile strength (ISO 37 DIN 53504)	1.8 N/mm ²																														
Application temperature	+5°C to +40°C																														
Temperature Resistance	-40°C/+90°C (for a short period up to +120°C)																														





PACKAGING AND SUPPLY

- 600ml sausage (20 sausages per box)
- 200ltr drum (290kg)



INSTALLATION PROCEDURES

SURFACE PREPARATION

Surfaces must be clean, dry, free of water, oil, grease or rust and of sound quality. Remove all loose particles or residues with a jet of compressed air, sandpaper or hard brush. Glass, metal and other non-porous surfaces must be free of any coatings and wiped clean with solvent. Pre-cast panels using form-release agents other than polyethylene film must be sandblasted or mechanically abraded and dust free. Porous substrates: concrete, cement-based renders, mortars, brick, etc. have to be primed with J-Seal® N-49 primer by using a brush. Before sealing, allow primer to become touch dry before applying the sealant.

SEALING

Recommended application temperatures: 5°- 35°C. For easier use or cold weather applications, we recommend the material is stored at approximately 25°C prior to use. In order to guarantee free movement of sealant in joints, it is imperative that the sealant does not adhere to the bottom of the joint, therefore a closed-cell polyethylene bead (joint backing rod) is to be placed at the proper depth or a bond-breaker tape applied. Apply J-Seal® N49 Primer to the sides of the joint and allow to become touch dry before applying sealant. For best performance, sealant should be gunned into joint when the joint width is at mid-point of its designed expansion and contraction position. Firmly extrude sealant into the joint making sure that it is in full contact with the sides of the joint and with the backing rod or a bond-breaker tape at the bottom.

Keep the nozzle inserted in the sealant and continue on with a steady flow of sealant preceding the nozzle and avoid overlapping of sealant to eliminate entrapment of air. All joints must be properly designed and dimensioned by the designer and the main contractor in accordance with the relevant standards, materials and technical values. The recessed joint design protects the sealant against mechanical loads. Fill the joint with **J-Seal® PU1-800 (PG)** to 2.0 mm below the surface of the joint sides.

FINISHING INDICATIONS AND LIMITATIONS

As sealant is self-levelling, it does not require tooling. Masking tape does not need to be used, avoid that the product is not applied excessively in regards to the joint volume capacity. **J-Seal® PU1-800 (PG)** is resistant to chemical spillage by: dilute acids, dilute alkalis, aviation fuels, diesel fuels, lubricant oils, petrol, kerosene, cleansing agents, seawater and limewater. Avoid exposure to high levels of chlorine (avoid sealing joints in chlorinated swimming pools). Avoid contact with alcohol and other solvent cleaners during cure. Do not apply when moisture or vapour transmission conditions exist from the substrate, as this can cause bubbling within the sealant. The ultimate performance of **J-Seal® PU1-800 (PG)** depends on good joint geometry design and proper application with joint surfaces that have been prepared properly and in accordance to application requirements. Do not cure in the presence of curing silicone sealants.



CLEANING

Clean tools with acetone or alcohol immediately after use. Cured material can be only removed mechanically.





WRITTEN SPECIFICATION

Where shown in the drawings, the joint sealant shall be **J-Seal® PU1-800 (PG)** polyurethane joint sealant as supplied by **CJSA**. The application/installation of the product must be in accordance with the manufacturer's recommendations and J-Seal® N49 Primer must be used in conjunction with the application of the joint sealant.



HEALTH AND SAFETY INFORMATION

For further information or advice on health and safety precautions, safe handling, storage and correct disposal of products, please refer to the most recent product Safety Data Sheet (SDS), which is available upon request. In confined spaces or in still air conditions, the use of a ventilation fan or suitable respirator should be used, and the advice and approval of the Site Safety Supervisor is essential.



DISCLAIMER

The information and the recommendations relating to the application and end use of this product are given in good faith and are based on the information provided by the manufacturer of the product and/or the Company's current knowledge and experience in connection with the product when properly stored, handled and applied under normal conditions and no liability of final function at the job site is assumed. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability of, or fitness for, particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written and/or oral recommendations, or from any other advice offered by the Company. The Company also has no express or implied knowledge of any particular purpose for which the product is required and any such information given will not be taken into account in the supply of this product. No responsibility or liability by the Company will be accepted for misuse, misreading or derivation from recommended guidelines in respect of this product and the user shall determine the suitability of the product for his intended use and assume all risks and liability in connection therewith. The information contained in our brochure may change at any time without notice. Any use of this product, **J-Seal® PU1-800 (PG)**, in any application should be approved as suitable for use/application by the Design Engineer and Project Manager.

Effective Date: 03 FEBRUARY 2020

CJSA

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