

JointSeal® Polyurea SL High Strength

INTERIOR & EXTERIOR

SOLVENT FREE

2K

Description:

A two component, solvent free, high strength thermoset spray applied aromatic polyurea elastomer with excellent flexibility, abrasion, impact and moisture resistance. Applied using plural component spray equipment with 1:1 direct impingement at a temperature of 70°C or can be developed with a slower set time, allowing for smoother application finishes and the ability to be applied through cartridge spraying systems or low-pressure machinery at ambient temperatures. Cures within seconds, allows rapid return to service, and is relatively moisture and temperature insensitive allowing extended working seasons. It is not a hybrid polyurea, so there is no compromise on performance.

Intended Uses:

JointSeal® Polyurea SL High Strength is a high-performance joint sealant specifically formulated for heavy-duty applications. It is ideal for industrial flooring system joints requiring exceptional abrasion and impact resistance. Thanks to its rapid curing properties, it is also well-suited for use in parking structures and bridge decks—environments where minimal downtime, exposure to heavy traffic, and extreme weather conditions are to be considered.

In addition, JointSeal® Polyurea SL High Strength is suitable for waterproofing applications, providing a flexible yet durable seal for joints exposed to moisture, movement, and long-term environmental stress.

Features & Benefits:

- Solvent Free – 100% solids, zero VOC, no solvents.
- Pure Polyurea – High performance pure polyurea technology.
- Excellent Adhesion – Effective bond to primed surfaces.
- Chemical & Corrosion Resistance – Provides excellent resistance to chemical exposure and protects surfaces against corrosion.
- High Strength – Offers superior mechanical properties, including excellent tensile strength and tear resistance.
- Rapid Cure – Facilitates quick turnaround times, minimizing downtime during application.
- Excellent Physical Properties – Thermally stable up to 150°C.
- Moisture & Environmental Resistance – Provides a waterproof barrier and has high resistance to harsh environmental conditions.
- Abrasion & Impact Resistance – Maintains integrity under heavy traffic.

Certifications:

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Physical Properties:

Shore A Hardness	92
Shore D Hardness	25
Gel Time (s)	1 min at 25°C
Tack Free Time (s)	5 minutes at 25°C (material temperature)
Temperature Resistance (°C)	150°C
Density Comp. A (isocyanate)	1.15
Density Comp. B	1.00

Technical Data:

Product Physical Form	Liquid	
Binder Type	Pure polyurea	
Colour	Black or grey	
Appearance	Smooth gloss	
Comp. A	Name:	JointSeal® Polyurea SL High Strength (ISO) (Comp. A)
	Density (Kg/ Litre):	1.15 ± 0.05
	Volume Solids:	100%
	Pack Size:	20, 200 Litre or 1.5 Litre cartridge (750ml – ISO)
Comp. B	Name:	JointSeal® Polyurea SL High Strength (POL) (Comp. B)
	Density (Kg / Litre):	1.00 ± 0.05
	Volume Solids:	100%
	Pack Size:	20, 200 Litre or 1.5 Litre cartridge (750ml – POL)
Mixed	Volume Solids:	100%
	Mixing Ratio (Volume):	1 : 1 (Comp. A : Comp. B)
	Pack Size	40 & 400 Litre, or 1.5 Litre Cartridges
Diluent	Supplied ready for use (DO NOT THIN)	
Recommended WFT	0.5 – 5mm (Wet Film Thickness)	
Recommended DFT	0.5 – 5mm (Dry Film Thickness)	
Spreading Rate	1 m ² / Litre per coat @ 1mm	
Number of Coats	1	
Method of Application	Plural component heated spray or cartridge spraying systems/low-pressure machinery	
Processing Temperature	Min 70°C for high pressure plural component spray	
Storage	Store out of direct sunlight in dry conditions between 15°C and 25 °C	
Shelf Life	12 months when stored as recommended in original un-opened containers	

Important Information:

- Always consider a test patch to check suitability & adhesion.
- Always consult with technical department if unsure.
- Technical & application data herein is for the purpose of establishing a general guideline of the coating application procedure.
- Test performance results were obtained in a controlled laboratory environment and Specialized Coating Systems makes no claim that the exhibited published test results, or any other tests, accurately represent results found in all field environments. As application, environmental and design factors can vary, due care should be exercised in the selection & verification of the performance and use of the coating.
- This coating will chalk. fade after exposure to sunlight. This will not affect the performance of the coating.

Surface Preparation:

As with quick cure coatings, the rapid setting of polyurea systems can sometimes limit the wetting and penetration of the substrate surfaces. This in turn can affect the mechanical bonding. For this reason, end users are advised to test the adhesion of sprayed elastomer films on target substrates to assess the coating bond, where necessary, the use of surface primers may be required.

JointSeal® Polyurea spray systems should only be applied to clean, dry, and sound surfaces. Remove grease and loose rust, or any other foreign material to ensure adequate adhesion.

ADHESIVES & SEALANTS: POLYUREA JOINT SEALANTS

Whilst we endeavour to ensure that all advice we give about the product is correct, the information given in this data sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so entirely at his own risk. As conditions of use, method of application and suitability of the substrate prior to painting are beyond our control, no guarantee is implied by the recommendations contained herein. We therefore do not accept any liability whatsoever or howsoever arising from the performance of this product or for any loss or damage arising out of the use of this product. The information contained in this sheet is liable to modification from time to time in the light of experience and ongoing product development programmes. It is the user's responsibility to ensure that this sheet is current prior to using the product

Concrete

The concrete shall be completely cured, minimum 28 days. Laitance, release agents and salts need to be removed by high pressure water jetting or sandblasting. Other substrates cleaning guidelines can be consulted via SSPC-SP13, NACE 6.

2K PU SF Primer, 1K PU Primer or Epoxy SF Primer Fast Cure is needed to achieve adequate adhesion. Recoat windows **MUST BE STRICTLY ADHERED** to.

Metal/Steel

The metal surface needs to be prepared by means of abrasive blast cleaning. The surface profile will ensure adequate mechanical adhesion. Solvent cleaning is needed to remove oil and grease.

If a primer is going to be applied, it should be done within 4-8 hrs after sandblasting to prevent any flash rusting.

Application:

Mixing & Application	Prior to commencing the use of the product, ensure that the two components are stored at a temperature no lower than 20°C, a temperature of around 25°C is preferable and can be achieved by storage in a heated room or electrical jacket heaters. The B Component should be power mixed prior to use. Suitable dispensing equipment is required in order to apply this product. Equipment must be capable of delivering product at between 120 – 320 bar, accurately metering the two components in a fixed 1:1 ratio by volume. The machine should have an output adequate to match the highest projected output from the gun to be used, typically a minimum of around 1 – 4 Litres/minute. It must also be capable of controlling component temperatures independently along the length of the hoses up to the gun coupling block to around 70°C. The spray gun must use high pressure impingement to achieve satisfactory mixing of the components immediately on triggering, consult with Specialized Coating Systems to discuss suitable equipment.		
Mix Ratio	1 : 1 (Comp. A : Comp. B)		
Application Tools	Plural component heated spray or cartridge spraying systems/low-pressure machinery		
Application	Spray Application		
	Spreading Rate	1 m²/ Litre per coat @ 1mm	
	Recommended WFT (per coat)	Min 0.5mm	Max 5mm
	Recommended DFT (per coat)	Min 0.5mm	Max 5mm
	Number of Coats	1	
	Extra Information: -		
Diluent	Supplied ready for use (DO NOT THIN)		
Work Stoppage	Do not allow material to remain on application equipment after use, thoroughly flush and clean all equipment with MEK Thinner . Equipment can then be deep cleaned and flushed with DOP or Messamol.		
Clean Up	Clean all equipment immediately after use with MEK Thinner . It is advisable to periodically flush out spraying equipment during the course of the working day. Frequency of cleaning is dependent upon the amount applied, temperature and elapsed time. Work strictly in accordance with the specified pot life of the material.		

Drying & Overcoating Information:	
Cure Walk On @ 1.5mm	10 minutes @ 20°C
Cure Light Duty @ 1.5mm	4 hours @ 20°C
Cure 80% @ 1.5mm	1 day @ 20°C
Cure 100% @ 1.5mm	4 days @ 20°C
Recoat Time Minimum	4 minutes @ 20°C
Recoat Time Maximum	4 hours with re-activation
Over 4 Hours Recoat	Abrade, de-dust & re-prime with 2K PU SF Primer or 1K PU Primer
Extra Information	-

Systems:

Consult with Specialized Coating System for application specific recommendations.

Safety Information:

- Refer to product SDS for health & safety prior to using products.
- Always wear safety clothing / protection. Respirators, eye protection & skin protection.
- Apply in well-ventilated areas - supply air extraction during curing process.

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