

# MEGASEAL PS

## Two Part Flexible Polysulfide Sealant

### Description:

MEGASEAL PS is a high-quality, general purpose construction joint sealant based on liquid polysulphide polymer, which when mixed and applied, cures to form a tough, rubber like seal. MEGASEAL PS is particularly suitable for movement joints and expansion joints internal and external.

MEGASEAL PS - PG flowable pouring grade, self-leveling two component joint sealant, based on liquid polysulphide polymer, recommended for sealing expansion joints and construction joints (stress relieving joints) in floors or other horizontal surfaces.

MEGASEAL PS - GG thixotropic two component vertical grade joint sealant based on liquid polysulphide polymer, particularly recommended for application on civil structures and high rise buildings where access may be difficult for future maintenance. It is suitable for sealing joints in structural concrete, brick work, retaining walls, reservoirs, basements and subways.

### Uses:

- Storage areas and hangers joints.
- Precast panels joints.
- Joints in water retaining structure, such as reservoirs, dams, canals, culvert.
- Expansion joints for carpark, bridge, airport runway, pavement.
- Sealing of construction and moving joints in high rise building, including structural expansion joint.

### Advantages:

- Highly elastic and capable to accommodate continuous cycle movement.
- Chemically resistant to wide range of moderate chemicals.
- Stable colours.
- Durable and low maintenance cost.
- Excellent adhesion to substrate.
- Ease of application, available in two version pouring and gun grade.
- Interior and exterior application.
- Can be applied as a joint between different construction material.

### Instructions for Use:

#### Surface Preparation:

All joints should be sound, clean, dry and free from loose material, laitance, dirt, oil and grease. Ensure that concrete joint is fully cured for at least 28 days.

Prepare the joint by hand mechanical tools to remove any contaminant or deformation. If the joint requires re-profiling, conduct re-profiling with one of MATEX concrete repair products, consult with MATEX technical department

For applications on porous concrete surfaces and stone, brickwork, timber, etc., apply MEGAPRIME-a single component chemically active liquid primer with a brush only to the two sides of the joint and not to the bond breaker, to ensure proper adhesion for sealant. For application on non-porous surfaces such as steel or glass, use MEGAPRIME SP. Always apply the primer in a thin coat and allow to become tack free prior to application.

Apply a masking tape to the sides of the joint before priming, to preserve the joint edges from contamination. Ensure that the expansion joint filler and or backing rod is tightly packed and avoid any gaps or spaces at the base of the sealing slot, prior to positioning of the bond breaker tape. The backer rod shall be of diameter which is at least 20% larger, but not greater than 33% of the joint width to ensure that it remains in compression. The use of a bond breaker tape is not required in expansion joints containing polyethylene foam joint filler. For construction or contraction joints, polyethylene bond breaker tape must be used.

#### Joint Design:

Minimum Joint Width: 6 mm

Maximum Joint Width: 40 mm

Width:Depth ratio for joints with cyclic movements;

Butt Joints: 2:1

Floor, Static Lap Joints: 1:1

The joint width should be designed to suit the movement capability of the sealant

Minimum joint depth recommended:

:6 mm for non-porous surfaces

:8 mm for porous surfaces

:20 mm for trafficked joints and those exposed to hydrostatic pressure

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## Mixing:

Mix the contents of component A (Base) with a low speed mixer for two minutes to homogenize the material in the container. Slowly add the contents of part B (Hardener) to Part A container by spatula, while mixing in progress. Mix the material thoroughly with low-speed mixer (200-300 RPM) for an interval of 3-4 minutes confirming a homogenous, color consistent, lump free mixture is reached.

In Pouring Grade, allow the material to rest for 3 minutes before application to release entrapped air. Knock by wooden spatula on sides of the container to assist in release of air bubbles.

## Application:

Apply the sealant either by caulking gun or pouring depending on product grade to the required quantity to fill the joint. Ensure continuous filling for the joint and do not allow time gaps in the application. Allow the sealant to settle in the case of pouring grade and remove the excess from the sides of the joint. For the gun grade application, apply normal hand pressure with a clean sponge wetted with soapy water to compact the sealant into the joints and to achieve a smooth concave polished surface. Ensure the tapes are removed immediately on completion of tooling works before the sealant cures.

## Standards:

- ASTM C920, Type M, Class 25, grade P & NS
- ASTM D2240, ASTM D412
- B5212-1, BS 6920, EN ISO 11600

TECHNICAL PROPERTIES		
FORM	POURING GRADE	GUN GRADE
Color	Grey	Grey
Consistency	Self Levelling	Non sag thixotropic
Density	1.20 ± 0.03 kg/lit	1.20 ± 0.03 kg/lit
Potlife @ 25°C	130 minutes	90 minutes
Solid Content	100%	100%
Application Temperature	+5°C to +45°C	+5°C to +45°C
Setting Time @ 25°C	16 hours	18 hours
Curing Time @ 25°C	1 week	1 week

Hardness "A" Shore@25°C (ASTM D2240)	15-20	25
Elongation (ASTM D412)	500%	300%
UV Resistance at 300 hours	No deterioration	No deterioration
Service Temperature	-5°C to 80°C	-5°C to 80°C
Movement Accommodation Factor	±25%	±25%
Chemical Resistance	Dilute Acid, dilute alkali, oil, aviation fuel, kerosene, solvent, sea water	Dilute Acid, dilute alkali, oil, aviation fuel, kerosene, solvent, sea water

\*Values indicated may vary depending on the environment and conditions of the material. Figures given are tested according to standard laboratory conditions.

## Consumption:

The approximate linear meter consumption per liter can be determined from the following formula

$$\text{Sealant consumption per linear meter} = \frac{W \times D}{1000}$$

In liters

W: joint width (mm), D: Joint Depth (mm)

## Packaging:

MEGASEAL PS-PG is available in 4 liter two parts metal containers kit.

MEGASEAL PS-GG is available in 2.5 liter two parts metal containers kit.

## Storage Conditions:

MEGASEAL PS is to be stored in original packing in dry conditions away from direct sunlight and high humidity levels. Temperature of storage area not to exceed 35°C.

## Shelf Life:

MEGASEAL PS can be utilized within 12 months of production date if stored in proper conditions in an unopened original packing.

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## Cleaning:

Clean tools with ARMOSOLVENT before material hardens. Hardened material must be removed mechanically.

## Remarks:

- Do not apply on damp or contaminated surfaces.
- Joint movement should not exceed  $\pm 25\%$  of joint width when installed in 2:1 W:D ratio.
- Paint compatibility with sealant should be tested prior to painting.
- Joint depth should not exceed the width.

## Health and Safety:

Avoid contact with eyes and skin. Wear suitable protective clothing such as coveralls, goggles, dust mask and gloves. Use barrier cream. Ensure that there is adequate ventilation. Do not breathe vapour or spray mist.

## FIRST AID:

Eyes:	In the event of accidental splashes, flush with warm water and seek medical advice.
Skin:	Wash skin thoroughly with soap and water
Inhalation:	Remove to fresh air, keep patient rested
Ingestion:	Do not induce vomiting. Seek immediate medical attention.

For further safety information, please refer to MEGASEAL PS Material Safety Data Sheet.

MATEX Rev.08-0223

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