

Technical Data Sheet

MEGASEAL PU2

Two Part Highly Flexible Polyurethane Sealant

Description:

MEGASEAL PU2 is a two part, catalyzed, elastomeric, high performance polyurethane joint sealant. When cures it forms an elastic, joint sealant with high mechanical strength, abrasion resistance, and with high extensibility to withstand long-term abuse and dynamic movement. It is used externally and internally to seal and caulk both moving and non-moving joints and can be applied on variety of surfaces.

MEGASEAL PU2 is produced in two grades self levelling pouring grade for horizontal surfaces and gun grade for vertical applications.

Uses:

MEGASEAL PU2 can be applied on many surfaces such as concrete, masonry, aluminium, granite, marble and used in different applications including:

- Car parking joints, control construction joints, expansion joints, isolation joints in floors and pavements.
- Joints in precast concrete, curtain walls.
- Industrial floors, warehouses and areas suffering with trucks or forklifts movements.
- Pharmaceutical and food processing plants.
- Concrete expansion and control joints.
- Manholes, around swimming pools and water features
- Perimeter caulking around windows and door frames.

Advantages:

- Two component, chemically cured faster than most one-part sealants.
- Self-levelling consistencies for horizontal applications.
- Thixotropic paste for vertical applications.
- Excellent weathering properties.
- Remains flexible at low temperatures.
- Elastomeric sealant absorbs ±25% movement.
- Priming is not required on most substrates.
- High abrasion resistant.
- For external and internal applications.

- May be used as an adhesive between materials having different coefficients of thermal expansion.
- Excellent adhesive properties allow for use in totally submersible applications.
- Offers good resistance to chemical attack.

Instructions for Use:

Surface Preparation:

Proper surface preparation is essential to grant a good bonding between the sealant and the substrate. All the side surfaces of the joint must be dry, smooth, clean, free from dust, laitance or loose materials. To ensure proper cleaning, it is highly recommended to use compressed air or a wire brush in order to remove further dirt, oil stains and other inconsistencies.

Surface defects at edges and corners of the joints should be repaired using appropriate MATEX Repair Products. Allow the repairing product to cure as specified in the data sheet. Ensure that the side surface of the joint is totally dry before applying the primer. On sound, clean, well prepared totally dry joint surfaces, primer is not required. In case that primer is needed, use MEGAPRIME for porous surface and MEGAPRIME SP for non-porous surfaces. Apply the primer to both side of the joint faces prior to installation of backer rod or bond breaking. Apply a thin coat of primer as too much primer may act as bond breaker. Allow the primer to be tack free prior to application of the sealant.

Joint Design:

MEGASEAL PU2 may be applied for joints to accommodate a movement of +_ 25% in a width between 6 and 35 mm. width of joints should be twice as much of depth for joints greater than 13 mm in width. Otherwise, width and depth should be equal. For joints less than 13mm in width. To control joint depth, use MEGASEAL CORD closed backer rod. If joint depth does not allow for backer rod, use polyethylene bond breaker tape to prevent three-sided adhesion.

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Mixing:

MEGASEAL PU2 is a two component system that must be mixed at the time of application. Mix the contents of component A (Base) with a low speed mixer for one minute to homogenize the content of the container. Slowly add the contents of part B (Hardener) to Part A (base) container while mixing in progress. Mix thoroughly the materials with low speed mixer (200-300 rpm) for an interval of 4 minutes confirming a homogenous mixture, color consistent, lump free mixture is reached. Scrape down sides as much as possible during mixing and avoid lifting mixing blade out of material to minimize entrapment of air.

In pouring grade case 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 a masking tape to the sides of the joint before priming, to preserve the joint edges from contamination. Ensure that the expansion joint filler 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 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.

Apply the mixed product by pouring from the pail directly into the joint. Ensure continuous filling for the joint and do not allow gaps during the application. Allow the sealant to settle and remove the excess from the sides of the joint then tool the surface to get a smooth finish. Do not use soapy water or other liquids when tooling. Ensure the masking tape is removed immediately on completion of joint finishing works.

Standards:

MEGASEAL PU2 conforms to:

- ASTM C920, Type M, Grade P & NS.
- Federal Specification TT-S-00227E Type I & II, Class A
- Corps of Engineers CRD-C-506.

Cleaning:

Clean tools immediately after application with ARMOSOLVENT.

Storage Conditions:

Store in original packing in dry conditions away from direct sunlight. Temperature of storage area not to exceed 30°C.

TECHNICAL PROPERTIES

Color	:	Grey, white, beige
Tensile Strength (ASTM D412)	:	1 Mpa.S
Movement Capability	:	25%
Pot Life @ 25°C	:	90 minutes
Elongation (ASTM D412)	:	300% Ultimate
Cure Time	:	2 mm / 24 hrs
Shore A Hardness (ASTM D2240)	:	35
Shrinkage	:	NIL
Compression Set (ASTM D395)	:	3%
Chemical Resistant	:	Good
Service Temp.	:	-5°C to +80°C

Packaging:

MEGASEAL PU2 PG is available in 4 liter two parts metallic containers kit.

MEGASEAL PU2 GG is available in 2.5 liter two parts metallic containers kit.

Consumption:

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

$$\text{Sealant consumption per linear meter} = \frac{1,000}{W \times D}$$

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

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Shelf Life:

MEGASEAL PU2 can be utilized within 12 months of production date if stored in proper conditions in unopened original packing.

Remarks:

Do not allow sealant to come in contact with alcohol, solvents, silicon or polysulfide sealant during cure.

- For application on marble, granite or natural tiles, it is recommended to apply a sealant sample to check the effect of color on tiles.

Health and Safety:

Use goggles and gloves during application. Do not breathe vapor of products. Use only in well ventilated areas. Avoid contact with eyes or skin.

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This technical data sheet is not considered as local building codes. It shall be used as general reference for the product, based on our current knowledge and experience. However the company do not accept any liability arising from the use of its products as it has no direct control on how and where the product is applied.



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