

MEGASEAL EPP

High Performance Heavy Duty Epoxy **Polyurethane Sealant**

Description:

MEGASEAL EPP is a two part, limited flexibility, resilient, self levelling polyurethane based sealant modified with special epoxy resins. Once mixed it comes flowable product that can be easily poured into horizontal joints. The cured sealant presents high resistance to chemicals, abrasion resistance and recommended to be applied in heavy duty application.

MEGASEAL EPP can be used externally and internally to seal and caulk both moving and non-moving joints and cracks, when a high performance sealant is required. It can accommodate small amount of movement in expansion and contraction but can take high compressive stresses.

Applications:

- Car parking joints, warehouses, compression joints parking decks.
- Loading bays and marina work areas.
- Sealing internal floor joints of heavy wheeled, traffic areas and places subjected to heavy industrial use.
- Harsh environments subject to sea water splashes.
- Pharmaceutical and food processing plants.
- Poured concrete expansion and control joints.
- Sewage water treatment facilities.
- Swimming pools and water features.

Advantages:

- Two component, chemically cured faster than most one-part sealants.
- Self-levelling grade for horizontal applications.
- Remains flexible at low temperatures.
- High abrasion and chemical resistant. Compatible with chemical factories and WWTP.
- Excellent adhesion to concrete and asphaltic substrates.
- Permanent and uniform water tight seal.
- Suitable for use in wide joints.
- Good mechanical properties for heavy duty, limited movement applications.
- Load bearing for support under heavy wheel load.
- Suitable of extreme weather conditions.

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 EPP may be applied for joints to accommodate a movement of $\pm 10\%$ in a width between 6 and 40 mm. Width of joints should be twice as much of depth for joints greater than 13 mm in width. Otherwise, for less than 13 mm width and depth should be equal. 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.

Mixing:

MEGASEAL EPP 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 contents 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,

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color consistent, lump free mixture is reached. Scrape down sides of container as much as possible during mixing and avoid lifting mixing blade out of material to minimize entrapment of air. As it is a pouring grade product 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 packing 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.

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 EPP conforms to:

- BS 5212: Part 1
- ASTM C 920, Type M, Grade P Class 12

Coverage:

MEGASEAL EPP coverage is dependent on joint dimensions, it is calculated in volume as:

Consumption of sealant (ml) per linear meter = joint width (mm) x joint depth (mm) x 1 LM

1 liter = 1000 ml

TECHNICAL PROPERTIES	
Appearance	: Free flowing paste
Tensile Strength (ASTM D412)	: 1.0 N / mm ²
Movement Capability	: ±10%
Density	: 1.25 kg./lt.
Elongation (ASTM D412)	: 150%
Shore A Hardness (ASTM D2240)	: 70 ±5
Shrinkage	: NIL
Viscosity	: Free flowing
Pot Life	: 60 minutes
Compressive Strength	: 17 N/mm ² @ 7 days
Initial Cure at Standard Condition	: 24 hours
Full Cure at Standard Condition	: 7 days
Application Temperature	: +5°C to +35°C
Service Temperature	: -5°C to +80°C

Storage:

Store in original packing in dry conditions away from direct sunlight, temperature of storage area not to exceed 25°C.

Shelf Life:

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

Cleaning:

Clean the used tools with MATEX SOLVENT immediately after completing the job and before the product dries.

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.
- Avoid direct contact with flames and fire.

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.

