

# MEGASEAL TPU

## Elastomeric Pitch Polyurethane Joint Sealant

### Description:

MEGASEAL TPU is a two component pitch extended, polyurethane based joint sealant that cures to provide elastomeric, durable watertight resilient sealant, with excellent recovery properties and superior resistance to climate conditions, most general chemicals.

It is produced as black sealant in pouring grade to suit horizontal applications.

### Advantages:

- Extremely resistant to chemicals and high grade hydrocarbon fuel
- Permanent water tight sealant
- Load bearing for support under heavy wheel load
- Resists to degradation in sewage treatment
- Suitable of extreme weather conditions
- Has a long-lasting characteristic
- Excellent flexibility and movement tolerance

### Uses:

- Sealing floor joints of heavy wheeled, traffic flicked areas and places subjected to heavy industrial use such as factories, food processing areas, warehouses, maintenance facilities, airplanes hangers and air fields.
- Sealing movement joints in building, subways, retaining walls, sewage treatment plants, sea water and coastal projects.
- Suitable for areas subject to fuel and chemicals spillage.
- Suitable for joints in long strip flooring and other large internal areas like car parking decks, warehouses, etc.

### Surface Preparation:

#### Joint 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, and 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 TPU may be applied for joints to accommodate a movement of  $\pm 25\%$  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.

### Instructions for Use:

MEGASEAL TPU 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.

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Note that the mixing process is exothermic (heat generating).

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 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.

Apply the mixed product by pouring from the pail directly into the joint. Initially fill 2/3 of the highest and tool properly to fill the irregular areas inside the joint and to allow the entrapped air to escape. Then Apply extra material higher than the edge of 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 TPU complies with the following standards

- ISO 9047
- US Federal specification TT-S-00227E, Type Class B

## Packaging:

Available in 4 Ltrs. two parts kit

## TECHNICAL PROPERTIES:

Appearance	:	Black Paste
Specific Gravity	:	1.38
MAF (%)	:	25
Shore A' Hardness	:	35
Tensile Strength (MPa)	:	102
Tear Strength (MPa)	:	2.8
Elongation (%)	:	>250
Chemical Resistance	:	Resistance to fuels, lubricants, hydraulic fluids, dilute acids, alkalis
Application Temperature	:	+5°C to 40°C
Service Temperature	:	-5°C to +80°C
Pot life	:	60 minutes at 25°C
Tack Free Time	:	24 hours at 30°C

## Storage:

Keep the product in dry and covered shed. Exposure to extreme temperature and humidity results in the deterioration of the product's efficiency and reduces its shelf life.

## Cleaning:

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

## Recommendation:

- Do not apply on damp and contaminated surfaces.
- Sealant joint movement should not exceed  $\pm 25\%$  of joint width when installed in a 2:1 width to depth ratio
- Substrate temperature should not be less than 5 C degree
- For existence of specific chemical compound, contact Matex for technical advice
- Where hydrostatic pressure exists, do not use foamed back up strips. Bond breaking tapes must be used instead.

## Health and Safety:

Avoid contact with skin or eyes. Wear gloves and goggles during application. Provide adequate ventilation. In case of eye contact, flush thoroughly with plenty of water and seek medical treatment.

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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.

