MONNELI ELASTOSEAL PS

Two Component Polysulphide Sealant

Product Description

A two part, high performance Polysulphide joint sealant. It is specifically designed for sealing movement joints in buildings and civil engineering structures especially where the service conditions would be harsh for most common sealants.

Produced in two grades – PG (pouring grade) self-leveling for horizontal joints and GG (thixotropic gun grade) for vertical joint applications.

Uses

ELASTOSEAL PS is used as:

- Expansion joints for: Bridges, roadways, warehouse floors, airport runways and apron pavements
- Sealing of moving and construction joints as well as joints between different construction materials in high rise buildings, roof terraces & ceilings, structural expansion joints running through the ceiling
- Sealing of joints in water retaining structures such as reservoirs, dams, canals and culverts
- Vehicular and pedestrian traffic pavements of concrete

Advantage

- Highly resilient with excellent recovery characteristics
- Maintains flexibility over time
- Excellent resistance to fatigue and deterioration due to weathering, UV light and airborne pollutants
- Accommodates continuous and cyclic movements
- Excellent adhesion to most common substrates

Instructions for Use

Surface Preparation

The joint surface must be clean, dry and free from loose and flaky material, efflorescence, laitance, curing compound, dirt, oil, grease, any old coatings.

Surface defects at edges and corners of the joints should be repaired using appropriate Colmef Repair Products and allowed to cure for the specified duration as recommended in the respective technical data sheet.

Priming

Apply SEALPRIME to both the sides of the porous joint faces prior to installation of backer rod or bond breaking tape, by brushing in a thin uniform coat. Avoid applying too much primer as it may act as bond breaker.

For non-porous substrate such as steel or glass, use SEALPRIME NP for optimum adhesion. The primer shall be applied by brush in a thin coat and shall be allowed to become tack-free prior to application of sealant.

The joint edges shall be re-primed if the sealant installation is not carried out within 3 hours of application of the primer.

For obtaining a clean and neat finish, masking tape shall be applied on both edges of the groove before applying the primer.

Mixing

Mix and use one complete unit at a time. ELASTOSEAL PS is supplied as base / hardener combined unit. Pour the hardener (Component B) into the base (Component A) pail and mix thoroughly with a slow speed drill (300-500 rpm) fitted with a flat bladed paddle for 8-10 minutes till a uniform color and consistency is achieved.

Scrape down the sides as much as possible using a pallet knife and avoid lifting the mixing paddle out of material to minimize entrapment of air.

Application

Apply ELASTOSEAL PS immediately after mixing by pouring directly into the joint (in case of pouring Grade) or by using a professional caulking gun with consistent, positive pressure to force the sealant into the joint (in case of Gun grade). Fill the joints from the bottom up to the exterior surface, avoiding bridging which may form air voids. Use the sealant tool soaked in soapy water to compact the sealant into the joints and to achieve a smooth concave polished surface. Any masking tape which has been applied should be removed before the sealant cures.

Joint Design

ELASTOSEAL PS may be applied to joints between 6 and 40 mm wide. Joints expected to experience cyclic movements should have a width depth ratio 2:1 for butt joints and 1:1 for floor, static and lap joints and should be designed such that the total movement does not exceed the 25% MAF. The joints depth shall not exceed the width.

Minimum sealant depth recommended:

- 5 mm for non-porous surfaces
- 6 mm for all porous surfaces
- 20 mm for trafficked joints and those exposed to hydrostatic pressures

To control joint depth, use CORDOFLEX a closed cell polyethylene backer rod. The backer rod shall be of a diameter which is at least 20% larger but not greater than 33% of the joint width to ensure that it remains in compression. If the joint depth does not allow backer rod, use polyethylene bond breaker tape to prevent three sided adhesion. Do not prime or puncture the backer rod.

Cleaning

Clean tool with SOLVENTE 10 promptly before material hardens. Cured material must be mechanically removed.

Recommendations

- Do not apply on damp and contaminated surfaces.
- Sealant joint movement should not exceed ±25% of joint width when installed in a 2:1 width to depth ratio.
- Paint compatibility with sealant should be checked prior to painting.

Technical Data

Properties	Result Pouring Grade	Result Gun Grade
Color	Grey	Grey, white (special colours are available upon request)
Density at 25°C	1.45 kg/L	1.5 kg/L
Consistency	Self levelling	Non sag thixotropic
VOC	5.0 g/L	
Shringkage	Negligible	Negligible
Working time at 25°C	≥120 minutes	≥120 minutes
Movement capability (ASTM C 719)	± 25%	± 25%
Shore “A” hardness (ASTM D 2240)	15 - 20	25
Tack free time (ASTM C 679)	5 hours	5 hours
Elongation % (ASTM D412)	>500	>300
UV resistance at 300 hours	No deterioration	No deterioration
Chemical resistance	Mild acids, alkalis hydrocarbon fuels veg. oil, sea water	Mild acids, alkalis hydrocarbon fuels veg. oil, sea water
Cracking & caulking after heat aging at 70°C	No deterioration	No deterioration
Initial cure at standard conditions/hrs.	24	24
Full cure at standard conditions / day	7	7
Application temperature °C	+5 to +35	+5 to +35
Service temperature °C	-5 to +80	-5 to +80

All values are subject to 5-10 % tolerance

Applicable Standards

- BS 4254
- BS 5212
- WRAS–BS 6920, test on effect of water quality
- ASTM C 920, Type M. Grade P & NS, Class 25, Use T

Consumption

The approximate linear meter sealant consumption per liter can be estimated from the following formula:

$$\text{Sealant Consumption per linear meter (liter)} = \frac{W \times D}{1000}$$

Where: W = Joint Width (mm), D = Joint Depth (mm)

Packaging

ELASTOSEAL PS-PG available in 4 Liter kit

ELASTOSEAL PS-GG available in 2.5 Liter kit

Storage

Store the product in dry closed place with temperature between 10 to 35°C. Storage above this temperature may reduce shelf life. The product maintains its stability for 12 months.

Health & Safety

Avoid contact with skin & eyes. During application, wear appropriate protective clothing, goggles, gloves and respiratory equipment if necessary.

In case of contact with skin, rinse with water and again wash thoroughly with soap and water.

In case of contact with eyes, rinse with plenty of water and seek medical advice accordingly.

If ingested, obtain medical attention immediately. Do not induce vomiting.

DUBAI
ABU DHABI
KSA
ITALY

P.O. Box 123808 Dubai UAE
P.O. Box 127326 Abu Dhabi, UAE
P.O. Box 335896 Code: 11383 - Riyadh KSA
Z.I. Ponte dÁssi 06024 Gubbio (PG)

T. +971 4 8803488 F. +971 4 8803450
T. +971 2 5511949 F. +971 2 5511749
T. +966 1 2654277 F. +966 1 2654335
T. +39 75 9221297 F. +39 75 9221174

colmef@colmef.ae | www.colmef-me.com