

Product Data Sheet



STARSEAL PS-PG / PS-GG

Two Component, Polysulfide Based, Elastomeric, Fuel Resistant, Trafficable Joint Sealant

Uses:

- The heavy-duty civil sealant is used for sealing joints in bridges, roadways, concrete ponds, warehouse floors, dams, canals & culvert. Pre-Cast Panel Joints
- Construction and Expansion Joints
- General elastic Adhesive for various materials

Product Description

STARSEAL PS-PG is the two-part elastomeric sealant based on a liquid polysulfide polymer which cures by chemical reaction to form a tough and flexible rubber seal. It has excellent Fuel resistance, adhesion to different substrates like masonry, concrete with higher movement accommodation

Advantages

- Excellent Movement accommodation factor $\pm 30\%$ excellent adhesion.
- No shrinkage & Excellent UC resistance (No cracks or glaze)
- Resists chemical attack by fuel, chloride and sulphate ions present in the ambience
- Excellent adhesion to all common concrete substrates and a variety of building materials
- No sagging (Thixotropic) – No stain
- Withstand permanent Water submersion

Standard Compliance

- ASTM C920
- ASTM C1183
- ASTM C 1193 (Guide for usage of Sealants)

Technical Properties

STARSEAL PS-PG	Typical Values @ Laboratory Conditions
Available colors	Standard: White, Grey, Beige
Skin Time (RH 65% @ 20°C)	8 min
Density	Approx.. 1.16 Kg/ltr
Elongation @ break	Approx.. 200%
Tensile Strength, psi (ASTM D412)	> 50
Application Temperature	5 to 45 °C
Shore A hardness @ 28 days	Approx.. 15 - 30
UV Resistance @ 300 h	Pass
Resistance to mild acids, alkalis, hydrocarbon fuels, Veg. Oils, Sea Water	Good
Continuous Immersion Test (ASTM C 1247 - 09) for Movement Cycles and Extension & Contraction Cycles	No adhesive or cohesive failure

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Application

Surface Preparation

The surface should be clean, dry, sound and free from oil, grease and wax contamination. Cement laitance, loose particles, mold release agent or curing membranes must be removed.

Before positioning a bond breaker, check the expansion joint filler to ensure it is tightly packed with no gaps or voids at the base of the sealing slot.

The use of a bond breaker is not required in expansion joints prepared with cellular polyethylene joint filler, backing rod. For construction or contraction joints, use a bond breaker tape or back-up strip.

Priming

Prime all porous surfaces with **STARBOND EP-300**. The substrates should be dry before applying primer. Prime the sides of the prepared joints with a soft brush. Apply the primer in thin uniform film. Allow becoming tack-free before applying the sealant. To keep the joint edges clean, use masking tape on the joint sides and remove immediately after finish sealant application.

Application

The components are supplied in the correct mixing ratio. Add the entire contents of the hardener component into the base container and mix thoroughly for three minutes.

Ensure any settlement is thoroughly dispersed. Scrape down the sides of the container to ensure that any unmixed components do not remain. Continue mixing for a further 2 minutes.

Pour the mixed sealant directly from the mixing container by compressing the sides to form a pouring lip. Pour into the prepared joint to the required level. Should the joint width prohibit direct pouring from the container, pour the mixed material into a Barrel gun and apply it to the joint.

After a few minutes, it may be necessary to top up the sealant level if it has flowed into joint irregularities. Finally, use a strip of any masking tape. When using gun grade, follow the same application procedure of using a bulk gun. Fill the bulk gun using a follower plate.

Joint Size Suitability:

Joint Width	6mm to 20mm – Single Application
Joint Depth	Maximum 10mm on porous substrate and max 6mm on non-porous substrate
Width : Depth	1 : 1

Curing and protection

STARSEAL PS-PG typically cures within 24 to 48 hours at room temperature and average humidity conditions. However, curing time can vary based on temperature, humidity, and the sealant's depth in the joint.

Cleaning

Remove **STARSEAL PS-PG** from product from tools, equipment, and mixers with STAR Solvent before the initial set. Cured material can only be removed mechanically.

Packing & Coverage

STARSEAL PS-PG is packed in 1 or 4 ltr kits.

Joint Size in mm	Yield in m per 4 ltr Kit
10 x 8	50
15 x 8	33
20 x 10	20
25 x 12	13
30 x 15	9

Stated consumption data are for general guidance. Actual consumption depends on the nature of substrate, method of application, and wastage.

Shelf Life & Storage

The original sealed Box of **STARSEAL PS-PG** has a shelf life of 12 months, provided it is stored clear of ground in a dry, shaded place below 35°C.

Health & Safety

As with all chemicals, caution should always be exercised. Protective clothing such as gloves and goggles should be worn.

For detailed information and advice on the safe handling, storage, and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological, and other safety-related data.

For complete Health and Safety instructions and information, please refer to STAR MSDS.

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Additional Information:

STAR manufactures a wide range of construction chemicals and specialty products for various applications divided into the following product sections:

1. **Waterproofing Products**
2. **Sealants, Grouts, and Joint Fillers**
3. **Adhesives**
4. **HVAC – Adhesives, Coatings & Sealants**
5. **Flooring Products**
6. **Industrial Adhesives (i.e. Paper Industry)**
7. **Accessories**

STAR Technology provides various technical information such as detailed method statements, specification clauses, application manuals and technical support both in contractors and consultant's offices as well as construction sites.

For further information on these products and systems kindly visit our website or contact your local STAR representative