

# SMARTCARE UNYVERSEAL POLYSULPHIDE

## SEALANTS & JOINT FILLERS

Two component polysulphide sealant.

### PRODUCT DESCRIPTION

Smartcare UnyverSeal Polysulphide is a two-part Polysulphide sealant available in self-levelling (pouring grade) and gun-grade consistencies. It is a polysulfide sealant which effectively seals all joints subject to structural movement, as well as non-moving joints against ingress of water and dirt.

### KEY FEATURES

- Two-Part Formulation with Multiple Consistencies:** Smartcare UnyverSeal Polysulphide is a two part Polysulphide sealant available in self-levelling (pouring grade) and gun grade consistencies.
- Effective Joint Sealing and Protection:** It is a Polysulphide sealant which effectively seals all joints subject to structural movement as well as nonmoving joints against ingress of water and dirt.
- Broad Civil Engineering and Structural Utility:** The product is used for sealing movement joints in building and civil engineering structures, including superstructures, floors, basements, subways, flashing and metal setting.
- Rapid Curing for Specific Applications:** It is suitable for all joint seal applications where a short curing period is required, such as expansion and contraction joints in sidewalks.
- Potable Water and Sewage Compatibility:** This sealant can be used in the portable water tanks and in sewage treatment plants to effectively prevent water from entering sealed joints.
- Soil Erosion and Slab Protection:** It helps eliminate erosion of the soil underneath slabs and protects areas watered frequently, such as swimming pool decks and around planters.

- Structural Integrity in Clay Soil Areas:** In clay soil areas, it prevents unsealed joints from causing swelling of the soil and subsequent bucking and cracking of the concrete slab.
- Prolonged Low Modulus Maintenance:** UnyverSeal Polysulphide maintains a low modulus of extension even after prolonged exposure to the weathering elements.
- Resistance to Adhesive and Cohesive Failure:** The product's formulation prevents adhesive and cohesive failures which often occur when a caulking compound hardens excessively with ageing.

### PRODUCT BENEFITS



Total Ingress Protection



Short Curing Period



Safe for Potable Water



Weather-Resilient Flexibility

### PACKAGING

4 Ltr, 2.5 Ltr for PG & GG

### TECHNICAL PROPERTIES

Properties	Value
Colour	Grey
Volume solids	100%
Pot life @77°F (25°C)	1 hr approx.
Tack free time @77°F (25°C, 50%RH) (ASTM C 920)	72 hrs approx.
Cure time @77°F (25°C, 50%RH)	7 days

Properties	Value
Tensile strength (ASTM D 412)	0.53 – 0.65N/mm <sup>2</sup>
Elongation at break (ASTM D 412)	450%
Peel strength on concrete, PSI (ASTM D 794)	10 – 20 cohesive failure
Hardness (Shore A) (ASTM D 2240)	20 – 22
Service temperature	-40°C to +79°C

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control and different test methods.

Width of Joints (mm)	6	9	12	15	18	22	25
Depth of Joints (mm)							
6		28	19	14	11	9	8
9			12	9	7	6	5
12				7	6	5	4
15					4.4	3.7	3
18						3.5	2.5
22							2.1
25							

Unit: Linear meters per liter

## APPLICATION AREAS

- Sealing movement joints in building and civil engineering structures, including superstructures, floors, basements, subways, flashing and metal setting. Also, for all joint seal applications where a short curing period is required, such as expansion and contraction joints in sidewalks.

- It can be used in portable water tanks and in sewage treatment plants. It will effectively prevent water from entering the sealed joints and thereby eliminate erosion of the soil underneath the slabs. Particularly, areas which are watered frequently, such as swimming pool decks and around planters, must be protected.
- All coping joints and deck joints should be sealed. In clay soil areas, where unsealed joints may cause swelling of the soil and subsequent buckling and cracking of the concrete slab.
- UnyverSeal Polysulphide maintains a low modulus of extension even after prolonged exposure to the weathering elements. This prevents adhesive and cohesive failures, which often occur when a caulking compound hardens excessively with ageing.
- Contraction joints in sidewalks
- Sealing curtain wall panels
- Window glazing
- Swimming pool deck

## INSTALLATION

### Joint design

Suitable for all properly designed joints following accepted engineering practice. Joint width must be a minimum of 4 times the anticipated movement. Unyverseal Polysulphide has a minimum movement accommodation factor of 25%.

## APPLICATION METHOD

### 1. Substrate Quality and Preparation:

All joints must be absolutely clean. For concrete, sand-blasting is recommended. All curing compounds, old caulks, grease, waterproofing compounds, etc., must be removed. For non-porous surfaces such as glass, metal, etc., cleaning with MEK or Toluene is recommended. Polyethylene rod or polyurethane foam is recommended as a joint filler and back-up material.

## 2. Mixing / Curing time/ Conditions:

Unyverseal Polysulphide is a two-part product and requires mixing. Pour all of the hardener supplied into the bulk Polysulphide base and slowly mix with a low-speed mechanical mixer and prop for 3-5 minutes. Make sure that the sides of the can are scraped to ensure that all of the base and hardener are thoroughly mixed.

## 3. Application Method/ Tools:

- Apply by caulking gun, hand or pour from container. Bulk sealant can be applied by pumping equipment. Press firmly into the joint using a trowel or putty knife to ensure good contact.
- The porous surface has to be primed with Apcoflor HFP 120 primer clear. Maintenance: if UNYVERSEAL POLYSULPHIDE is damaged, and the joint has not been contaminated, it can be repaired by cutting out that part and resealing it with UnyverSeal Polysulphide.

## PRODUCT LIMITATIONS

- Do not apply during rains or extreme temperatures.

## STORAGE CONDITIONS

SmartCare UnyverSeal Polysulphide must be stored in a cool and dry environment. It is essential to keep the product protected from direct sunlight and any sources of heat. The storage temperature should be strictly maintained between +10°C and +25°C to preserve the integrity of the two-part formulation.

## SHELF LIFE

The product has a shelf life of 9 months from the date of manufacturing. This validity is dependent on the sealant being stored in its original, unopened container under dry conditions and within the specified temperature range.

## SAFETY PRECAUTIONS

- Always wear protective gloves, goggles, and clothing during mixing and application to prevent skin or eye irritation.
- Avoid direct contact with skin or eyes; in case of contact, wash the affected area with plenty of clean water.
- If inhaled, move the affected person to fresh air immediately and seek medical advice if discomfort persists.
- Ensure proper ventilation at the site of application to avoid inhalation of fumes.

## CERTIFICATIONS

SmartCare Unyverseal Polysulphide complies with ASTM C 920, ASTM D 412, ASTM D 794 and ASTM D 2240.

## DISCLAIMER

The information provided in this Technical Data Sheet is based on laboratory tests, industry practices, and practical application experience. However, actual site conditions may vary and are beyond the manufacturer's control. Asian Paints makes no warranties, expressed or implied, and shall not be liable for any loss or damage resulting from improper usage, handling, or non-compliance with the recommended guidelines. Users are advised to test the product for suitability before full-scale application.