**PRODUCT DESCRIPTION**

Polyseal PS is a two component, low modulus, chemically curing polysulphide joint sealant, developed specifically for dynamic joints. Polyseal PS is based on a liquid polysulphide polymer which when mixed with the hardener, cures to form a tough rubber like seal. Polyseal PS exhibits excellent adhesion to most surfaces and has good resistance to many chemicals and weather conditions.

Polyseal PS is available in both gun grade and pouring grades. The gun grade is suitable for vertical or horizontal applications and is available in a ready to mix, two and a half litre tin containing the base and curing agent in correct proportions. The pouring grade is suitable for horizontal applications and is available in a four litre pack with base and curing agent in separate tins.

**ADVANTAGES**

- Highly resilient with excellent recovery characteristics.
- Provides a permanent and uniform water tight seal.
- Stays flexible - won’t become brittle or crack due to ultraviolet exposure
- Helps prevent uncontrolled cracking by allowing expansion and contraction of the joint during temperature changes
- Excellent adhesion to most common substrates
- Not harmful to human environment
- Non Staining
- Can be recycled

**AREAS OF APPLICATION**

Sealing of movement and construction joints in:
- Structural floor joints
- Airports runways and apron pavements
- Industrial warehouses
- Garages & workshops
- Water retaining structures
- Sewage treatment plants

**APPROVALS & STANDARDS**

- British Standard BS 4254
- British Standard BS 5212 : Part 1
- US Federal Specification TTS-00 227E
- WATS - BS 6920 Test On Effect Of Water Quality
- ASTM C920, Type M, Grade P, Class 25, Use T

**JOINT DESIGN GEOMETRY**

The width of the joint should be a minimum of 4 times the anticipated movement. Joints with cyclic movement should have a width to depth ratio of 2:1. Minimum depth of the sealant should be maintained as recommended below
- 10mm for all porous surfaces
- 20mm for joints exposed to traffic & hydrostatic pressure
- 5mm for impervious surfaces such as metal, glass etc.
**Coverage**

Length of joint in metres filled per litre of Polyseal PS

<table>
<thead>
<tr>
<th>Width</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
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<tbody>
<tr>
<td>10</td>
<td>10</td>
<td>6.7</td>
<td>5</td>
<td>-</td>
<td>-</td>
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<td>6.7</td>
<td>4.4</td>
<td>3.3</td>
<td>2.6</td>
<td>2.2</td>
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<tr>
<td>20</td>
<td>5</td>
<td>3.3</td>
<td>2.5</td>
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<td>1.67</td>
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<tr>
<td>25</td>
<td>-</td>
<td>2.6</td>
<td>2.0</td>
<td>1.6</td>
<td>1.3</td>
</tr>
</tbody>
</table>

*Note: Calculation based on theoretical coverage. Actual material consumption at site will vary depending on the condition of the joints and wastage etc.*

**Packaging**

- 2.5 Litre Gun Grade
  (Part A & Part B in the same pack)
- 4 Litre Pouring Grade - Part A
- 500 ml Pouring Grade - Part B
  (Part A & Part B separate packs)

**Physical Properties**

<table>
<thead>
<tr>
<th>Properties</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Grey</td>
</tr>
<tr>
<td>Density, [g/cc] - Gun Grade</td>
<td>1.5 ± 0.05</td>
</tr>
<tr>
<td>- Pouring Grade</td>
<td>1.3 ± 0.05</td>
</tr>
<tr>
<td>Viscosity - Gun Grade</td>
<td>Thixotropic paste</td>
</tr>
<tr>
<td>- Pouring Grade</td>
<td>Free flowing</td>
</tr>
<tr>
<td>Shrinkage</td>
<td>Negligible</td>
</tr>
<tr>
<td>Application life [min]</td>
<td>&gt;120</td>
</tr>
<tr>
<td>Shore 'A' Hardness</td>
<td>20 - 35</td>
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<tr>
<td>Tack free time [hrs]</td>
<td>5</td>
</tr>
<tr>
<td>Adhesion to concrete [N]</td>
<td>&gt;25</td>
</tr>
<tr>
<td>Elongation, [%]</td>
<td>&gt;300</td>
</tr>
<tr>
<td>UV resistance @300 hrs</td>
<td>No Deterioration</td>
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<tr>
<td>Water potability [WRC]</td>
<td>Passes</td>
</tr>
<tr>
<td>Chemical resistance</td>
<td>pH 2.5 to 11.5, hydrocarbon fuels, vegetable oil, urea, seawater</td>
</tr>
</tbody>
</table>

Cracking & Chalking after heat ageing @ 70ºC | No Deterioration
Initial cure @ standard conditions [days]   | 24
Final cure @ standard conditions [days]     | 7
Application temp [ºC]                      | +5 to +45
Service temp [ºC]                          | -20 to +80

**Application Procedures**

**Joint Preparation**
The joint surface must be clean, dry and free from oils, loose mortar, laitance, release agents and other contaminants. A thorough wire brushing, grinding, sand blasting or solvent cleaning may be required to expose a clean, sound surface.

**Priming**
Primer should be applied to a clean, dry surface prior to installation of backer rod and/or bond breaker tape. Polyseal Primer is recommended for most common substrates like concrete, tiles etc. For non-porous substrates like glass & steel, special primer can be applied to achieve optimum adhesion. Where a particularly neat finish is required, apply masking tape on both sides of the joint before priming and remove immediately once the sealant application is complete.

**Backing Material**
Closed cell polyethylene backer rod should be used to control the depth of the joint sealant to the recommended thickness. Where joint design or depth of joint will not permit the use of backing rod, use a bond breaker tape.
MIXING PROCEDURES

GUN GRADE
Supplied in a ready to mix container with base and curing agent in a single tin. Mix thoroughly with a slow speed drill fitted with a paddle until a uniform colour is obtained. Avoid entrapping air bubbles during mixing by keeping the paddle below the surface level. After mixing, load the sealant into a sealant gun and apply accordingly.

POURING GRADE
Is supplied in a pre-weighed two part pack which requires on-site mixing. Pour the hardener (part B) into the base (part A) pail and mix thoroughly with a slow speed drill fitted with a paddle for 3-4 minutes until a uniform colour is obtained. After mixing, it can be poured directly into the horizontal joint and finish with a scraper if needed or allow the sealant to self-level.
Note: Mix one full kit at a time to avoid improper mix ratio. Do not part mix.

FINISHING
Once the sealant has been applied, a suitable rounded tool soaked in soapy water shall be used to achieve a smooth finish. Any masking tape applied should be removed before the sealant cures.

CLEANING
Remove all excess sealant with a scraper. Any spillage can be cleaned using a solvent like Xylol. Clean all tools and sealant gun using a similar solvent immediately after the tooling is finished.

TYPICAL APPLICATIONS
STORAGE & SHELF LIFE

Store in a cool, dry place and keep away from all sources of heat and sunlight. In tropical climates, store in air conditioned rooms. The shelf life is up to 12 months in unopened condition and stored as per recommendations. Excessive exposure to sunlight, humidity and UV will result in deterioration of the quality of the product and reduces its shelf life.

MAINTENANCE

If the sealant is damaged and bond is intact, cut out the damaged area and re-apply. If the bond has been affected remove the sealant, clean and prepare the joint in accordance with instructions under “Joint Preparation” and re-apply.

WRITTEN SPECIFICATION

Where shown in the drawings, the joint sealant shall be Polyseal PS Polysulphide joint sealant as supplied by CORKJOINT. The application/installation of the product must be in accordance with the manufacturer’s recommendations and Polyseal Primer must be used in conjunction with the application of the joint sealant.

DISPOSAL

Mix separate product components in ratio and as supplied in suitable metal containers. Allow the mix to cure completely and dispose as hazardous waste. It is recommended to use licensed waste disposal contractors and consult the local authority regarding the regulations.

HEALTH & SAFETY INFORMATION

As with all construction chemical products, caution should be exercised. Protective clothing such as gloves and goggles should be worn. Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

For further information or advice on health and safety precautions, safe handling, storage and correct disposal of products, please refer to the most recent product Material Safety Data Sheet (MSDS), which is available upon request.