



Polyseal 11 S

2K Primer for Polyurethe Sealants

Pack Size
6Kgs

TDS
Technical Data Sheet



Product Description

Polyseal 11 S is a two-component primer specifically formulated for polyurethane sealants. It enhances adhesion between the sealant and various substrates, ensuring long-term performance and durability. The product is designed for use in demanding construction applications where superior bonding and resistance to environmental factors are required.

Uses

Polyseal 11 S is recommended for use in:

- Expansion joints in precast concrete elements
- Dams, reservoirs, and water treatment plants
- Residential and commercial buildings
- Subways, bridges, culverts, and tunnels
- Rigid pavements of highways, airport runways, and aprons

Characteristics and Advantages

- Excellent adhesion with most construction materials
- Resistant to UV exposure and weathering
- High movement accommodation for flexible joints
- Non-sag properties for vertical and overhead joints
- Chemical and fuel resistance
- Permanently elastic, forming a durable and watertight seal
- Easy application and cost-effective solution

Product Information

Chemical Base: Cross-linking polysulphide

Packaging: 4 kg kit (two-component system)

Color: Grey paste

Shelf Life: 12 months from production date

Storage Conditions: Store in a cool, dry environment at +5°C to +25°C with a relative humidity of 50%

Density: 1.6 - 1.7 kg/l at 30°C (JIS K 6820)

Technical Information

Shore A Hardness: 18 ± 4 (ASTM D2240)

Elongation at Break: ≥ 450% (ASTM D 882)

Elastic Recovery:

- **Before Aging:** > 75% (BS 5212 - 1990)
- **After Heat Aging (70°C /14 days):** > 75%
- **After Fuel Immersion (48 hrs):** > 75% Movement Capability: ± 25% (IRC : 57-2006) Resistance to Fire: Pass (Flame Resistance Test) (BS 5212-1990)

Service Temperature: -40°C to + 80°C

Joint Design and Depths

Application Type	Minimum Joint Depth
Metals, glass, and other non-porous surfaces	5 mm
Porous surfaces like brick and concrete	10 mm
Trafficked joints and joints under hydraulic pressure	20 mm

For cyclic movement joints, an optimum width-to-depth ratio of 2:1 (W = 2D) is recommended.

Application Information

Mixing Ratio: Part A : Part B = 92:8 by weight

Sag Flow: Non-sag

Ambient Air Temperature: +5°C min. / +45°C max.

Substrate Temperature: +5°C min. / +45°C max.

Substrate Moisture Content: Dry joint with sound concrete edges. For wet conditions, use Carbolink Primer-3.

Pot Life: > 90 minutes at 30°C (500g mix)

Curing Time:

• Skinning Time: ~ 6 hrs at +30°C

• Initial Setting: ~ 24 hrs at +30°C

• Full Cure: ~ 7 days at +30°C

Tack-Free Time: 16 ± 0.1 hrs (BS 5212 - 1990)

Application Instructions

Substrate Preparation

- Ensure all surfaces are clean, dry, and free from debris before application.
- Inspect joint edges for soundness. If weak, cut recesses and fill with suitable repair mortar (consult Carbolink Technical Services).
- Use polyethylene-based Carbolink Backer Material tightly fitted into the joint. When fiber-filled board is used, rake back to the required depth.
- Apply bond breaker tape over the backer material.
- Apply Carbolink Primer-3 only on joint sides. Allow a flash-off time of at least 45 minutes before sealant application (maximum 8 hours).

Mixing

- Mix Part A and Part B in the ratio 92:8 by weight using a low-speed mixer (300-600 rpm).
- Mix for approximately 8 - 10 minutes until a smooth, uniform consistency is achieved.

Application Method

- Apply masking tape on either side of the joint to prevent spillage.
- Use a Carbolink-approved caulking gun to install the sealant into the joint without entrapping air.
- Tool off with a spatula to achieve a slightly concave profile.
- Remove masking tape immediately after application.

Cleaning of Tools

- Use Carbolink Solvent immediately after use.
- Hardened/cured material can only be mechanically removed.

Limitations

- Do not apply on moist substrates.
- Sag resistance on vertical surfaces is limited to 200 µm.
- Freshly applied sealant must be protected from dampness, condensation, and water for at least 24 hours.
- Ensure the use of the same batch number for uniform color matching.

Packaging and Storage

Pack Size: 6 kg kit

Storage: Store in a cool, dry place at +5°C to +25°C.

Shelf Life: 12 months in original unopened packaging under recommended conditions.

Packaging and Storage.

Pack Size

6Kgs



Data Reliability

All technical data provided in this document are based on laboratory tests. Actual performance may vary due to factors beyond our control.

Regional Compliance

Product specifications may vary based on local regulations. Please refer to the local Product Data Sheet for precise information.

Legal Disclaimer

The information and recommendations regarding the application and end-use of Carbolink products are provided in good faith based on our current knowledge and experience. Due to variations in materials, substrates, and actual site conditions, no warranty of merchantability or fitness for a specific purpose can be inferred. The user must determine the product's suitability for the intended application. Carbolink reserves the right to change the properties of its products. All proprietary rights of third parties must be observed. Orders are subject to our current terms of sale and delivery. Always refer to the most recent local Product Data Sheet, available upon request.