



Product Description

BCI-PS (PG/GG) is a two component polysulphide sealant that cures chemically to form a durable, flexible, watertight seal capable of accommodating dynamic joint movements.

It is available in two forms: Gun Grade (GG) and Pouring Grade (PG).

Uses

BCI-PS (PG/GG) is used to seal movement joints, expansion joints, isolation joints, construction joints, perimeter gaps in buildings and civil engineering structures. Typical areas of applications include parking decks, plazas, high rise buildings and malls, driveways, factory and warehouse floors, fuel storage areas, basements, reservoirs, subways, etc.

Advantages

- Elastomeric, reduces stress on the bond line
- Excellent adhesion to substrates
- Meets requirements of most international standards
- Good ageing resistance, excellent chemical and weathering resistance
- Can accommodate continuous and cyclic movement

Standards

ASTM C920-87 Type M, Grade P (pouring grade) and NS (gun grade), Class 25, BS: 4254:1983 IS:12118 (Part 1 & 2) - 1987 (Reaffirmed 2002)

Typical Properties at 25°C

| Property | Test Method | Value | |
|-------------------------------|-------------|--|--|
| Component | - | Gun Grade (GG) Two: Part A-Base Part B - Hardener Supplied in single container | Pouring Grade (PG) Two: Part A-Base Part B - Hardener |
| Mixed Form | - | Thixotropic Paste | Pourable Paste |
| Colour | - | Grey | Grey |
| Specific Gravity | - | 1.60 - 1.69 kg/Litre | 1.69 - 1.73 kg/Litre |
| Shore A Hardness | ASTM C661 | 25± 3 | 20 ± 3 |
| Application Life @ 20°C | - | 60 Minutes ± 10 | 40 Minutes ± 10 |
| Tack Free Time | - | 5 Hrs | 2-3 Hrs |
| Full Cure | - | 7 Days | |
| Solid Content | - | 100% | |
| Staining | ASTM C 510 | Non Staining | |
| Movement Accommodation Factor | ASTM C 719 | ±25% | ± 25% |
| Service Temperature | - | -15 ⁰ C to +80 ⁰ C | |
| Chemical Resistance | ASTM D 543 | Resistance to various chemicals like mild acids, alkalis, fuels, grease, petrol, etc | |

Application Instructions

Joint Preparation

Joint surface must be clean, dry, free of dust, grease, curing compounds, etc. New concrete joints must be dry and at least 3 weeks old. In case of old joints, traces of previous sealant and other contaminants should be removed by mechanical means to ensure a clean surface. Insert firmly closed cell polyethylene backer rods in the joints. Backer Rods are recommended because of their superior support to sealant. The diameter of the backer rod should be approximately 20 to 25% larger than the width of the joint.

Generally the joint depth should be equal to or half of its joint width (W:D = 2:1 or 1:1). At weak edges the joint should be strengthened by dressing with epoxy mortar maintaining joint size proportions.

Priming

Joint surfaces should be primed with BCI Primer before application of sealant. Joints must be completely dry before applying the primer. Brush apply primer only to vertical surfaces of joint. Excessive application and puddling of primer should be avoided.



BCI-PS (PG/GG)

Elastomeric Polysulphide Joint Sealant

Mixing

Add entire quantity of Part B to Part A (in case of Pouring Grade) and mix thoroughly using slow speed drill with paddle. In case of Gun grade, both the components are supplied in the same container. Mix contents of the container well, till uniform consistency is achieved.

Application

For Pouring Grade (PG): Pour the mixed BCI-PS (PG) into the prepared joint in a continuous operation. Agitate the pored sealant to allow entrapped air to escape.

For Gun Grade (GG): Load the mixed (GG) into the cartridge. Apply by using a professional caulking gun. Apply sealant in a continuous operation using positive pressure from the bottom of the joint to properly fill and seal the joint.

Ensure that sealant adheres to parallel sides of joint and not to the base, avoiding three point contact. Use a concave profile tool to finish the sealant before the skin forms. Once mixed, it is recommended to use the entire contents in single application.

Note: It is recommended that Sealant application is done when the joint is widest i.e., avoid application during noon in summer as the joint contracts

Package

Sealant : Gun Grade : 4kg set & 6.5kg set
Pouring Grade : 4kg set
32kg (4kg x 8 nos.)
Primer : BCI Primer : 1 Litre pack

Coverage

General guideline for Gun grade Polysulphide sealant material consumption.

| Joint Size (W:D) in mm | Running Meter / Pack of 4kg |
|------------------------|-----------------------------|
| 10 x 10 | 24.0 |
| 25 x 15 | 6.40 |

Estimation of Sealant Consumption

$$\text{Volume of Sealant (In Litre)} = \frac{(\text{Joint Size X 1 M})}{1000} = \frac{W(\text{mm}) \times D(\text{mm}) \times 1 \text{ M}}{1000}$$

$$\text{Running Meter / 4 kg pack} = \frac{2.4 \text{ Litre (approx.)}}{\text{Volume of Sealant (In Litre)}}$$

Primer Coverage

Typical coverage of a 250G Primer is 20-25 mm for standard 20 x12 mm joint.

Note: Allowance for wastage should be considered while estimating quantity. However Actual consumption of sealant and primer depends upon the substrate condition of the joint.

Cleaning

Clean all equipment and tools with Solvent.

Precautions & Limitations

Not recommended for use in direct contact with materials containing pitch or bitumen. Not recommended for use in highly chlorinated water.

BCI-PS (PG) pouring grade can not be used for vertical joints due to its consistency.

Shelf Life

12 Months from date of manufacture, if stored properly in original unopened packing under warehouse conditions. Extreme temperature / humidity may reduce shelf life.

Health & Safety

PPE's: Gloves, goggles and suitable mask must be worn.

Precautions: Contact with skin, eyes, etc. must be avoided.

Hazard: Regarded as non-hazardous for transportation.

Disposal: Do not reuse containers. To be disposed off as per local rules and regulations.

BCI ADDITIVES INDIA LLP.

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