

BITUSELF SEALANT PS /GG& PG

Two component Gun and Pouring Grade polysulfide sealant.

DESCRIPTION

Bituself Sealant PS is a two-component joint sealant based on a high-quality liquid polysulfide polymer. The cured sealant is a tough rubber like seal exhibiting excellent adhesion to most surfaces including concrete, glass, Aluminum, stainless steel etc., with the use of appropriate primers. **Bituself Sealant PS** is available in two grades:

1. **Gun Grade:** This is ideal for general application on vertical and horizontal surfaces. This is available in a small range of colors.
2. **Pouring Grade:** This is for application for joints in horizontal surfaces and is available in grey color only.

USES

Sealing joints subject to expansion and contraction resulting from temperature changes in buildings and civil engineering structures including superstructures, reservoirs, floors, basements, subways. Some of the recommended applications are as follows:

- As a highly elastomeric sealing material for expansion and crack control joints
- For sealing curtain wall panels, tilt-up panels, window glazing, flashing and material setting.
- For joint sealing applications where a short curing period is required such as expansion and contraction joints in shopping centers, sidewalks or any other trafficked areas.
- For sealing coping joints and deck joints in frequently watered areas such as swimming pool decks, planter's pots, etc.,
- For sealing horizontal joints and vertical joints where movement is expected or where other mastics would prove to be ineffective.
- For sealing joints in reinforced concrete structures such as reservoirs, water treatment works, sea walls and roads etc.,

BITUSELF SEALANT PS is particularly recommended for use in high rise buildings and other applications where access for It is also suitable for sealing joints in brickwork, retaining walls, basements, and subways.

ADVANTAGES

- A high-quality product meeting key international standard.
- It forms a tough elastic rubber like a seal.
- Outstanding resistance to deterioration due to weathering, ozone, UV Light and attack by chemicals present in industrial atmosphere.
- Ability to withstand continuous and pronounced cyclic movements.
- Excellent adhesion to most of the commonly employed materials in building and construction.
- Very good resistance Fuels, dilute acids, and dilute alkalis.

Bitumode Qatar Waterproofing Factory

New Industrial Zone, Doha, Qatar
Tel: (+974) 44 44 2717
Fax: (+974) 44 44 2818
P.O. Box 39199, Doha, Qatar
Email: info@bitumodeqatar.com
Website: www.bitumodeqatar.com



BITUSELF SEALANT PS /GG& PG

Two component Gun and Pouring Grade polysulfide sealant.

STANDARDS

British standards **BS 4254 – 1983** British standard **BS 6920 – 1988**

US Federal specification TTS 00227E Type II Class A. **ASTM C (920-2002)** Type M Class 25 grade P & NS. Suitable for potable water use (Grey Gun Grade)

TYPICAL PROPERTIES

1. **Appearance:** multi component pasty compound.

2. **Type:** Gun Grade – grey.

3. **Application Temperature:** 5 to 50°C

4. **Solid content:** 100%

5. **Cure Mechanism:** Chemical cure

6. **Movement Accommodation Factor (BS 6093):**
25% Butt joints
50% Lap joint

7. **Pot life:**
2 Hours @ 25°C
1 Hours @ 35°C

8. **Setting time:**
60 Hours @ 10°C
18 Hours @ 25°C
12 Hours @ 35°C

9. **Cure time:**

	(Weeks)	
	Grey	White/Off White
10 °C	3	6
25 °C	1	2
35 °C	0.5	1

10. **Hardness (Shore A @ 25°C):**

Gun Grade Grey 22+/-3
Gun Grade White/Off-white 20+/-3
Pouring Grade Grey 16+/-3

11. **Density:** 1.53 to 1.68 according to color and grade.

Bitumode Qatar Waterproofing Factory

New Industrial Zone, Doha, Qatar

Tel: (+974) 44 44 2717

Fax: (+974) 44 44 2818

P.O. Box 39199, Doha, Qatar

Email: info@bitumodeqatar.com

Website: www.bitumodeqatar.com





BITUSELF SEALANT PS /GG& PG

Two component Gun and Pouring Grade polysulfide sealant.

12. Chemical Resistance to occasional spillage:

Resistant to dilute acids, dilute alkalis, petrol, aviation fuels, diesel fuels, kerosene, lubricating oils, Skydrol and White Spirit. Not resistant to chlorinated solvents, aromatic solvents and dilute oxidizing acids.

13. Gun grade: Grey is preferentially recommended, for resistance in microbiologically active situations and in aerobic conditions.

14. Flammability: Burns but does not readily support combustion.

APPLICATION

Joint Preparation:

- (a) **Concrete & Masonry:** Surfaces must be clean and dry. Wire brush thoroughly to remove all contaminants and dust.
- (b) **Metals:** Remove any corrosion or mill scale by grit blasting or shot blasting. Degrease with clean lint free cloths soaked in oil free cleaning solvent.
- (c) **Wood:** Wood surfaces must be clean and dry. Cut back or abrade to expose sound timber.
- (d) **Glass and Glazed Materials:** Thoroughly clean surfaces with clear lint free cloths soaked in oil free cleaning solvent.
- (e) **Coated surface:** Coating should be removed, and surface treated as above:

Any expansion joint filler must be checked to ensure it is tightly packed and no gaps or voids exist at the base of the sealing slot before positioning a bond breaker. The use of a bond breaker is not required in expansion joints containing polyethylene expansion joint fillers. For construction or contractions joints a bond breaker tape or back-up strip should be used. Where hydrostatic pressure exists, only bond breaking tapes must be used, not foamed back-up strips. Where a particularly neat finish is required, mask the fade edges of the joint before priming and remove immediately after tooling is completed.

PRIMING: The correct primer must always be used in some critical cases
For additional information contact Bitumode Representative

MIXING:

- 1. **Gun Grade:** The base component and curing agent are mixed thoroughly using a slow speed drill (300-500 rpm) fitted with a Paddle Stirrer for 5 minutes. Only thorough mixing, including material right at the bottom of the tin, will result in proper curing. In cold weather **BITUSELF SEALANT PS** mixes more easily if stored overnight at room temp. Immediately after mixing load the sealant into a caulking gun using the follower plate and apply to the joint.
- 2. **Pouring Grade: BITUSELF SEALANT PS** grade is mixed as per gun grade instructions. The pouring grade may be poured directly into horizontal joints. However, for joints less than 15mm wide a caulking-gun may be used, **FINISHING:**

BITUSELF SEALANT PS should be tooled to a smooth finish. A minimum of surface lubricant such as dilute detergent solution may be used to assist the process. Any masking tape should be removed immediately after tooling.

Bitumode Qatar Waterproofing Factory

New Industrial Zone, Doha, Qatar
Tel: (+974) 44 44 2717
Fax: (+974) 44 44 2818
P.O. Box 39199, Doha, Qatar
Email: info@bitumodeqatar.com
Website: www.bitumodeqatar.com



BITUSELF SEALANT PS /GG& PG

Two component Gun and Pouring Grade polysulfide sealant.

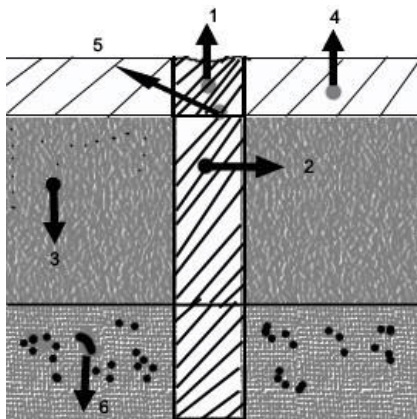
LIMITATIONS

- Over-painting of sealants is not recommended because of the inability of paint films to accept movement. However, if required, trials should be carried out to determine compatibility.
- Only **BITUSELF SEALANT PS** Gun grade should be used in vertical or horizontal joints in reservoirs or other water retaining structures.
- **BITUSELF SEALANT PS** is not recommended for use in highly chlorinated water. If in doubt, contact: BITUMODE QATAR WATER PROOFING

JOINT DESIGN CRITERIA:

- Joint size may range from a minimum of 5mm to a maximum 50mm wide. Joints with cyclic movements should have width: depth ratio 2:1 and designed such that total movement does not exceed the 25% M.A.F. related to the joint width in accordance with recommendations of BS 6093. Sealant depth shall not exceed joint width.
- **Minimum sealant depth recommended:**
 - 5 mm for metals, glass, and other impervious surfaces.
 - 10 mm for all porous surfaces.
 - 20 mm for joints exposed to traffic and hydrostatic pressures.
 - 5 mm below flush for joints exposed to traffic.
- The use of surface primer is recommended on porous surfaces. On non-porous surfaces a primer is not normally required except where glass or glazed surfaces are to be permanently immersed in water. Always check with Bitumode representative

EXAMPLE OF AN EXPANSION JOINT ACROSS FLOORS OF CLAY TILES



1. **BITUSELF SEALANT PS GG**
2. Compressible Filler board
3. Cement: Sand 1:4 bed
4. Clay floor tiles
5. Separating Strip
6. Concrete base

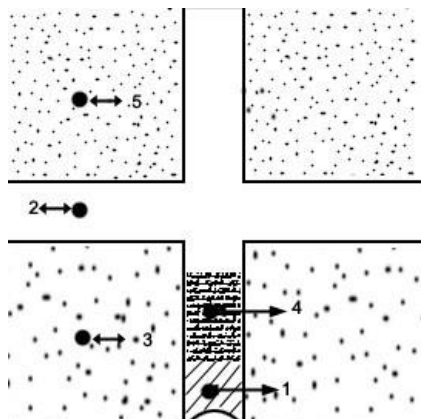
Bitumode Qatar Waterproofing Factory

New Industrial Zone, Doha, Qatar
Tel: (+974) 44 44 2717
Fax: (+974) 44 44 2818
P.O. Box 39199, Doha, Qatar
Email: info@bitumodeqatar.com
Website: www.bitumodeqatar.com



BITUSELF SEALANT PS /GG& PG

Two component Gun and Pouring Grade polysulfide sealant.



BITUSELF SEALANT PS GG

2. Void 20mm wide
3. Granite Cladding unit 40mm thick
4. Expanded rubber OR polyethylene back-up material.
5. Concrete support wall.

ESTIMATION OF QUANTITIES: (Excluding wastage)

BITUSELF SEALANT PS meter run per 3-liter pack. In various joints dimensions is tabulated below:

Depth of joint (mm)	Width of joint (mm)							
	5	10	15	20	25	30	40	50
5	120	60	-	-	-	-	-	-
10		30	20	15	12	10	-	-
15			13.3	10	8	6.7	-	-
20				7.4	6	5	3.7	-
25					4.8	4	3	2.4
30						3.3	2.4	1.9
40							1.8	1.5
50								1.2

PACKAGING

All grades of **BITUSELF SEALANT PS GG / PG** are normally supplied in 3 liters cans.

STORAGE

BITUSELF SEALANT PS in original containers when kept in dry conditions at 5°C to 27°C has a shelf life of 12 months

Bitumode Qatar Waterproofing Factory

New Industrial Zone, Doha, Qatar
Tel: (+974) 44 44 2717
Fax: (+974) 44 44 2818
P.O. Box 39199, Doha, Qatar
Email: info@bitumodeqatar.com
Website: www.bitumodeqatar.com

