# TECHNICAL DATA SHEET

C-STALLION Africa

## PolySeal Max GG/PG

Multicomponent Gun Grade and Pouring Grade Polysuphide sealant.

### Uses

PolySeal Max is a joint sealant designed to be used as a seal for moderate movement joints.

### Advantages

- Designed to form a though rubber like seal.
- Excellent adhesion.

### Description

#### PolySeal Max PG – Pouring Grade

PolySeal Max PG is a pouring grade, self reveling multi-component joint sealant, based on the liquid polysulphide polymer, and recommended for sealing expansion joints and construction joints (stress relieving joints) in floors or other horizontal surfaces.

#### PolySeal Max GG – Gun Grade

PolySeal Max GG is a component pack vertical grade, joint sealant, based on liquid polysulphide polymer, which when mixed and applied, cures to form a tough, rubber like seal. It is particularly recommended for application on civil structures and high rise buildings where access may be difficult for future maintenances. It is suitable for sealing joints in structural concrete, brick works, retaining walls, reservoirs, basements and subways.

### Description

ASTM C920-87, Type M, Class 25.
BS.EN.ISO 11600

### Properties

| Form | Pouring Grade Viscous liquid | Gun Grade Two-component paste |
|---|---|---|
| Colour | Grey or Black | |
| Solid content | 98-100% | |
| VOC Content | <60 g/L | |
| Density Kg/ltr. | 1.55 – 1.66 | |
| Physical/Chemical Change | Chemical cure | |
| Pot life @25°C | 120 – 180 minutes | |
| Hardness Shore 'A'@25°C | 17-22 | 22-27 |
| Movement accommodation factor | ±25% | |
| Application Temperature | Ambient temperature +5°C to 40°C | |
| Setting time | 36 hours @15°C<br>16 hours @25°C | 36 hours @15°C<br>18 hours @25°C |
| Full Cure | 2 weeks @15°C<br>1 week @25°C | 2 weeks @15°C<br>1 week @25°C |
| Chemical Resistance (occasional spillages) | | |
| Dilute acids | Resistant | |
| Dilute alkalis | Resistant | |
| Resistant | Resistant | |
| Aviation fuel | Resistant | |
| Kerosene | Resistant | |
| Lub Oils | Resistant | |
| Skydrol | Resistant | |
| White spirit | Resistant | |
| Chlorinated solvents | Not Resistant | |
| Aromatic Solvent | Not Resistant | |
| Dilute oxidizing acids | Not Resistant | |
| Water Immersion | Must be fully cured before permanent immersion in water. | |

### Packaging and Yield

PolySeal Max PG : 2.5, 4, 5, 18 litre pack
PolySeal Max GG : 2.5, 4, 18 litre pack
PolySeal Max PSP : 1 litre pack

# TECHNICAL DATA SHEET

## PolySeal Max GG/PG

Multicomponent Gun Grade and Pouring Grade Polysuphide sealant.

### Storage

Shelf life of 12 months in original unopened containers.

Store in dry condition in enclosed warehouse at temperatures not exceeding 25°C

### Application

**Joint Preparation**

The joint surface must be thoroughly dry, clean and dust free. All dust and laitance must be removed by wire brushing, grinding or grit blasting. All metal surfaces must be free of all rust, scale and protective lacquers. Use a suitable solvent to remove any traces of oil or grease.

Ensure that the expansion joint filler is tightly packed and devoid of any gaps or spaces at the base of the sealing slot, prior to positioning of the bond breaker tape must be used.

To ensure a neat finish, use masking tape along the face edges of the joint before priming. Ensure the tapes are removed immediately on completion of tooling works.

### Priming

PolySeal Max PSP is one component chemically active liquid primer, recommended for all porous substrates namely concrete, stone, brickwork, timberetc.Apply a uniform coat of PolySeal Max PSP to the bonding faces of the joint ensuring a uniform application. Avoid ponding at the base of the joint.

Whenever excess porosity in encountered an additional coat is recommended. Allow the primer to become touch dry, before proceeding with the application of PolySeal Max.

Any primed areas not sealed within 3 hours of primer application, should be re-primed 30 minutes prior to the sealant application.

### Design Criteria

PolySeal Max is an elastomeric sealant and may be applied to joints between 5 and 50 mm wide. Joints which are expected to experience cyclic movements should be designed to an optimum width: depth ratio of 2:1, subject to the overriding recommended minimum sealant depths set out below:

- 5 mm for metals, glass and other non-porous surfaces;
- 10 mm for all porous surfaces.
- 20 mm for trafficked joints and those subject to hydrostatic pressures.

To ensure that the sealant remains withing its stated movement capacity (25% MAF); sealing slot widths should be designed in accordance the recommendations of BS 6093.

The use of a primer is always required on porous surfaces. On non-porous surface a primer is not normally required except where glass or glazed surfaces are to be permanently immersed in water.

### Limitation

Over-painting of sealants is not recommended because of the inability of paint films to accept movement. However, wherever required, trials should be carried out to determine compatibility.

PolySeal Max should not be used in direct contact with materials containing pitch or bitumen.

Note: Refer to C-Stallion Africa Tech Dept when joints are expected to be exposed to high levels of chlorine or swimming pool application.

# TECHNICAL DATA SHEET

## PolySeal Max GG/PG

Multicomponent Gun Grade and Pouring Grade Polysuphide sealant.

### Estimating

| Joint size in mm | Ltrs. Per RM* |
|---|---|
| 5x5 | 0.025 |
| 5x10 | 0.050 |
| 10x10 | 0.100 |
| 20x10 | 0.200 |
| 20x15 | 0.300 |
| 20x20 | 0.400 |
| 40x20 | 0.800 |
| 40x25 | 1.000 |
| 40x30 | 1.200 |
| 40x40 | 1.600 |
| 50x25 | 1.250 |
| 50x30 | 1.500 |
| 50x40 | 2.000 |
| 50x50 | 2.500 |

RM* = Running metre
No allowance for wastage.

### Health and Safety

Avoid contact with skin and eyes.
Wear suitable protective gloves and eyes/face protective in case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. Hands should be thoroughly washed with soap and water before eating or smoking.

Empty containers should be disposed of in accordance with waste disposal regulations.

For further details refer Material Safety Data Sheets.

**Updated: April 2024**

**C-STALLION AFRICA Co LTD**
P.O. Box 32224
Plot No 43, Block 313, Mwenge
Dar Es Salaam, Tanzania
Tel: +255 757 006 088
info@cstallionafrica.co.tz
www.cstallionafrica.co.tz