

## PRODUCT DATA SHEET

# Sika® Polysulphide Gun Grade

### TWO COMPONENT POLYSULPHIDE SEALANT - GUN GRADE

#### DESCRIPTION

Sika® Polysulphide Gun Grade is a two component Polysulphide sealant. It is used for sealing expansion joints where large movement is anticipated in concrete construction and for joints between diverse construction materials. It is suitable for sealing joints subjected to vehicular traffic and is chemically resistant to water, fuels, oils and solvents.

#### USES

Wherever a permanently flexible seal is required, it is used in horizontal expansion joints in many types of buildings and civil engineering constructions such as

- Precast concrete elements
- Dams, Reservoirs and water treatment plants
- Residential & Commercial buildings
- Subways, bridges, culverts, tunnels
- Rigid pavements of highways, airport runways, aprons, etc

#### CHARACTERISTICS / ADVANTAGES

- Excellent adhesion with most common construction materials
- Resistant to UV and weathering in exposed conditions
- High movement accommodation
- Non-sag in vertical and overhead joints
- Good chemical resistance
- Permanently elastic and forms watertight seal
- Flame and fuel resistant
- Easy to use
- Economical

#### APPROVALS / CERTIFICATES

Conforms to  
 BS 4254 - 1983  
 BS 5212 - 1990  
 IRC : 57-2006  
 IS : 12118 (Part 1)  
 JIS K 6820

#### PRODUCT INFORMATION

<b>Composition</b>	Cross linking polysulphide
<b>Packaging</b>	Part A : 3.68 kg, Part B : 0.32 kg, Total : 4 kg 1 Box = 4 kg x 2 sets
<b>Colour</b>	Grey Paste
<b>Shelf life</b>	12 months in unopened condition from the date of production if stored as per recommendation
<b>Storage conditions</b>	Store properly in unopened, undamaged and sealed original packaging in cool and dry condition at temperature +5°C to +25°C at a Relative Humidity of 50%
<b>Density</b>	1.6 -1.7 kg/litre at 30°C (JIS K 6820)

#### TECHNICAL INFORMATION

<b>Shore A Hardness</b>	18 ± 4	(ASTM D2240)						
<b>Elongation</b>	≥ 450%	(ASTM D 882)						
<b>Elastic Recovery</b>	<table border="1"> <tr> <td>Before Ageing</td> <td>&gt; 75%</td> </tr> <tr> <td>After Heat Ageing (70 °C / 14 days)</td> <td>&gt; 75%</td> </tr> <tr> <td>After fuel immersion (48 hrs)</td> <td>&gt; 75%</td> </tr> </table>	Before Ageing	> 75%	After Heat Ageing (70 °C / 14 days)	> 75%	After fuel immersion (48 hrs)	> 75%	(BS 5212 - 1990)
Before Ageing	> 75%							
After Heat Ageing (70 °C / 14 days)	> 75%							
After fuel immersion (48 hrs)	> 75%							
<b>Movement Capability</b>	± 25%	(IRC : 57-2006)						
<b>Resistance to Fire</b>	Pass (Flame Resistance Test)	(BS 5212-1990)						
<b>Service Temperature</b>	-40°C to + 80 °C							
<b>Joint Design</b>	<p>The product may be applied to joint between 5 to 50 mm wide. Joints subjected to cyclic movements should be designed for an optimum width/Depth ratio of 2 : 1 (W = 2D).</p> <p>Minimum joint depths are:</p> <p>5mm for metals, glass and other non – porous surfaces.  10mm for all porous surfaces like brick and concrete.  20mm for trafficked joints and those subject to hydraulic pressures.</p>							

## APPLICATION INFORMATION

<b>Mixing Ratio</b>	Part A : Part B, 92 : 8 (by weight)	
<b>Sag Flow</b>	Non Sag	
<b>Ambient Air Temperature</b>	+5°C min. / +45°C max.	
<b>Substrate Temperature</b>	+5°C min. / +45°C max.	
<b>Substrate Moisture Content</b>	Dry joint with sound concrete edges. For joints under wet conditions, use Sika® Primer 3 IN	
<b>Pot Life</b>	> 90 minutes at 30°C (500g mix)	
<b>Curing Time</b>	6 hrs at 30° C (500g mix) The product will achieve its handling strength after 24 hrs at 30° C and curing continues for at least 7 days before full properties are developed.	
<b>Tack free time</b>	16 ± 0.1 hrs	(BS 5212 - 1990)

## APPLICATION INSTRUCTIONS

### SUBSTRATE PREPARATION

All surfaces must be clean, dry and free from any loosely adhering particles  
Check the joints edges for soundness and if found weak cut recess and fill up with suitable repair mortar (Consult Sika Technical services). Correct joint depth can be established by inserting polyethylene based Sika® Backer Material tightly into the joint. When the joints have been filled with fibre filled board, this must be raked back to the required depth. Use bond breaker tape over the backer material. Protect surfaces with masking tape.  
Sika® Primer 3 IN should be used as a primer only on the two sides. Allow a flash-off time of at least 45 minutes before sealant application (maximum 8 hours).

### MIXING

The two components are mixed in the ratio Comp. A : Comp B = 92 : 8 by weight with a low speed mixer (400 - 600 rpm). Mix for approximately 8 - 10 minutes until a smooth, even consistency is achieved.

### APPLICATION METHOD / TOOLS

Wherever required, protect the surface with masking tape. Install the sealant into the joint without entrapping air. Tool Off with spatula to lightly concave profile. Remove masking tape.

### CLEANING OF EQUIPMENT

Clean all the tools with Solvent immediately after use. Hardened/ Cured material can only be mechanically removed.

## FURTHER INFORMATION

Do not use in contact with drinking water or food.  
Use primer for application of sealant in wet or damp conditions.  
Allow the sealant to fully cure for 7 days before immersing in water, contact with fuel or vehicular traffic.

## BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

## ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

## LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

### Sika Services AG

Tüffenwies 16  
8048 Zürich  
Tel: +41 58 436 4040  
www.sika.com



### PRODUCT DATA SHEET

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