

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 / STANDARDS

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

PRODUCT INFORMATION

Chemical Base	Cross linking polysulphide	
Packaging	Part A	3.68 kg
	Part B	0.32 kg
	Part A+B	4 kg x 2 sets
Colour	Grey Paste	
Shelf Life	12 months from the date of production	
Storage Conditions	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%	
Density	1.6 -1.7 kg/litre at 30°C	(JIS K 6820)

TECHNICAL INFORMATION

Shore A Hardness	18 ± 4	(ASTM D2240)								
Elongation	≥ 450%	(ASTM D 882)								
Elastic Recovery	<table border="1"> <tr> <td>Before Ageing</td> <td>> 75%</td> </tr> <tr> <td>After Heat Ageing (70 °C / 14 days)</td> <td>> 75%</td> </tr> <tr> <td>After fuel immersion (48 hrs)</td> <td>> 75%</td> </tr> </table>	Before Ageing	> 75%	After Heat Ageing (70 °C / 14 days)	> 75%	After fuel immersion (48 hrs)	> 75%	(BS 5212 - 1990)		
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After Heat Ageing (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	<table border="1"> <thead> <tr> <th>Type of substrate or application</th> <th>Minimum joint depths</th> </tr> </thead> <tbody> <tr> <td>Metals, glass and other non-porous surfaces.</td> <td>5 mm</td> </tr> <tr> <td>Porous surfaces like brick and concrete.</td> <td>10 mm</td> </tr> <tr> <td>Traffickable joints and those subject to hydraulic pressures.</td> <td>20 mm</td> </tr> </tbody> </table> <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>	Type of substrate or application	Minimum joint depths	Metals, glass and other non-porous surfaces.	5 mm	Porous surfaces like brick and concrete.	10 mm	Traffickable joints and those subject to hydraulic pressures.	20 mm	
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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 joints under wet conditions, use Sika® Primer-3.								
Pot Life	> 90 minutes at 30°C (500g mix)								
Curing Time	<table border="1"> <thead> <tr> <th colspan="2">For 500 g mix</th> </tr> </thead> <tbody> <tr> <td>Skinning Time</td> <td>~ 6 hrs at +30°C</td> </tr> <tr> <td>Initial Setting</td> <td>~ 24 hrs at +30°C</td> </tr> <tr> <td>Full Cure</td> <td>~ 7 days at +30°C</td> </tr> </tbody> </table>	For 500 g mix		Skinning Time	~ 6 hrs at +30°C	Initial Setting	~ 24 hrs at +30°C	Full Cure	~ 7 days at +30°C
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Tack Free Time	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 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 (300 - 600 rpm). Mix for approximately 8 - 10 minutes until a smooth, even consistency is achieved.

APPLICATION METHOD / TOOLS

- Fix masking tape on either side of the joint
- Wherever required, protect the surface with masking tape
- Install the sealant into the joint using Sika® approved caulking gun without entrapping air.
- Tool off with spatula to lightly concave profile
- Remove masking tape.

CLEANING OF TOOLS

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

FURTHER DOCUMENTS

- 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.
- Use only Sika® approved caulking gun for proper extrusion of sealant

BASIS OF PRODUCT DATA

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

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

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.

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