

## **BUILDING TRUST**

# PRODUCT DATA SHEET

# SikaSeal®-470 GG

(formerly MSeal GG 470)

High performance, elastomeric, gun grade polysulphide joint sealant

#### **DESCRIPTION**

SikaSeal®-470 GG is a high grade, chemically curing, two-component polysulphide sealant which adheres to most common construction surfaces. SikaSeal®-470 GG is developed for sealing of vertical and horizontal joints.

#### **USES**

SikaSeal®-470 GG is used in joints in critical situations in many types of buildings and structures:

- Bridges, tunnels and other civil engineering structures
- Precast concrete paneling, and high-rise buildings
- Concrete and brick foundations, retaining walls and bridge abutments,
- Reservoirs, water treatment works, sea walls and roads
- Secondary containment areas
- Wet areas such as kitchens, laundries, bathrooms and showers, beneath tiles
- Terraces, decks and balconies
- Floor joints subject to heavy usage and traffic
- Industrial areas and those subject to chemical spillage
- Remedial repairs to asphalt, concrete, fiber reinforced cement or similar slab surface
- As a bolt hole sealant for the WABO®FLEX REJ / WABO®FLEX SR expansion joints

## **FEATURES**

- Forms a tough, flexible, elastomeric, weatherproof seal
- Excellent resistance to deterioration due to weathering
- Excellent chemical resistance
- Durable water and weather proof sealing even in joints with high levels of deformation (M.A.F. 25%) or repeated cyclic movement of compression and extension over a wide temperature range
- Excellent adhesion to concrete, brickwork, metal, tiling, masonry, stone, steel
- Lead free curing compounds ensure that the product is safe for handling and application

## **CERTIFICATES AND TEST REPORTS**

- Complies to ASTM C 920, Type M, Class 25
- Complies to BS EN ISO 11600, Class 25LM

**SikaSeal®-470 GG** September 2024, Version 02.02 020515070000000094

## PRODUCT INFORMATION

Packaging	Ready to mix packing			
	5.0	(Comp. A + Comp. B)		
	(Confirm the local available packing and adjust in Child PDS)			
Shelf life	12 months from the date of production, if it is stored in undamaged, original, sealed packaging, and if the storage conditions are met.			
Storage conditions	SikaSeal®-470 GG shall be stored in dry conditions, where it is protected from direct sunlight and at temperatures between +5°C and +30°C.			
Colour	Grey			
Density	y ~1.60 kg/l			

## **TECHNICAL INFORMATION**

Shore A hardness	~22			
Movement capability	±25 %	(ASTM C 719)		
Service temperature	-20°C min. / +80°C max.			
Chemical resistance	Resistant to many chemicals, contact Sika Technical Department for details.			
Joint design	Joint configuration Minimum Joint width: 6 mm	•		

Maximum Joint width: 50 mm

## Width: Depth Ratio

The joint width must be designed to suit the movement capability of the sealant. Joints expected to movement a width to depth ratio of approximately 2:1 must be maintained. For butt joint the width to depth ratio should be 1:1.

#### Minimum joint depth is recommended:

- 6 mm for non-porous surfaces
- 8 mm for porous surfaces
- 20 mm for trafficked joints and joints that are exposed to hydrostatic pressure

At chamfered elements, don't fill the chamfer with sealant.

## **APPLICATION INFORMATION**

Yield	Joint length [m] per 1 L	Joint width [mm]	Joint depth [mm]					
	16	10	6					
	8	15	8					
	5 3 2	20 25 30	10 12 15					
				These are approx. consumption and may vary based on actual site conditions.				
				Ambient air temperature	+5°C to +45°C, min. 3°C above dew point temperature			
	Substrate temperature	+5°C to +45°C						
Pot Life	~120 min		23°C/ 50% RH					



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## **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.
- Internal Reference Version: M\_B\_S\_ CC-UAE/SI \_GG4 70\_05\_ 06/v2/10\_14

## **FURTHER DOCUMENTATION**

General Method Statement (GMS)

### **IMPORTANT CONSIDERATIONS**

- Sealant joint movement should not exceed ±25 % of the joint width when installed in a width to depth ratio of 2:1.
- SikaSeal®-470 GG is not chemically resistance to chlorinated solvents, aromatic solvent and diluted oxidizing acids.
- SikaSeal®-470 GG must be fully cured before permanent immersion in water.
- Paint compatibility with sealant should be checked prior to painting.

## **ECOLOGY, HEALTH AND SAFETY**

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

## **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.
- Correct joint depth can be established by inserting closed cell polyethylene backing rod tightly into the joint.
- When the joints have been filled with fiber filled board, this must be raked back to the required depth. Use bond breaker tape over the backer material.
- Protect surfaces with masking tape.

#### **Concrete and Masonry**

Surfaces must be clean and dry. Wire brush thoroughly and remove dust and all contaminants.

#### Metals

- Remove any corrosion or millscale by grit or shotblast, wirebrush, grinder or chemical remover.
- De-grease the surfaces with clean cloths soaked in oil-free cleansing solvent.

#### Wood (bare)

 Wood surfaces must be clean and dry, cut back or abrade where necessary to sound timber.

#### Glass and glazed materials

 Thoroughly clean the surfaces with clean cloths soaked in oil-free cleansing solvent.

#### **Coating surfaces**

 Coating should be removed and the surfaces treated as above.

#### **Priming**

- Application of Sika® Primer-101 should not be carried out below 5°C.
- A single coat of primer should be applied by brush in accordance with the instructions on the primer tins.
- Sika® Primer-101 must be allowed to dry to a tack free state before applying SikaSeal®-470 GG.
- SikaSeal®-470 GG should be applied within 3 hours of primer, otherwise repriming will be necessary.

#### **MIXING**

- Mix and use one complete unit at a time. Do not split the units.
- Gun grade is supplied with base and catalyst in the same single container.
- SikaSeal®-470 GG is supplied in separate A and B component units. Sometimes slight settlement may occur in the comp. A, mix well, before adding to the comp. A.
- Add comp. B into the bigger comp. A pail. Mix the product thoroughly with a mixing paddle fitted to an electric hand drill not exceeding 500 rpm to avoid entrapping air. Mix for approximately 5 - 10 minutes until a smooth, even consistency is achieved.
- The sides and base of the container should be periodically scraped down to ensure all of the comp. B is completely blended with the comp. A.
- Failure to mix correctly will result in uncured sealant.
- Once mixed SikaSeal®-470 GG should be used immediately.



#### **APPLICATION**

- Where required, protect the surface with masking tape.
- SikaSeal®-470 GG is formulated to be applied using a sealant gun but may be applied by trowel if required.
- Sealant guns are fitted with conical nozzles which can be cut to suit the joint width.
- The sealant should be gunned into the joint using an even trigger pressure, cleaning the nozzle occasionally to avoid contamination.
- Deep joints should be filled in two or more runs, to prevent air entrapment.
- When applying the sealant to a vertical joint, start application at the bottom of the joint so as to continuously support the sealant.
- SikaSeal®-470 GG should be tooled to a smooth finish.
- A minimum of surface lubricant such as dilute soap solution may be used to assist the process.
- Any masking tape should be removed immediately after tooling.

#### **CLEANING OF EQUIPMENT**

- Application equipment should be cleaned immediately with Sika®Colma Cleaner, acetone or any suitable cleaning solvent after use.
- Hardened / cured material can only be mechanically removed.

#### 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 exact product data and uses.

### **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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