# SikaSil<sup>®</sup> IG-25 HM

High Modulus Sealant for Air and Gas filled Insulated Glass.

Technical Product Data (typical values)

		Component A / Component B
Chemical base		2-c silicone
Color		white / black
Color mixed		black
Viscosity		1300 Pa.s / 150 Pa.s
Mixing Ratio	A:B by weight	10:1
Mixing Ratio	A:B by volume	7.5:1
Density		11.7 lb/gal / 9.2 lb/gal
Density Mixed		11.4 lb/gal
Consistency		Paste
Cure mechanism		Polycondensation
Cure type		Neutral
Application temperature		41°F to 104°F (5°C to 40°C)
Snap time <sup>1</sup>		110 min
Tack free time <sup>1</sup>		300 min
100% Modulus (CQP 036-1/ISO 37)		247 psi
12.5% Modulus (CQP 036-1/ISO 37)		73 psi
Shore A-hardness, (ASTM D2240)		60
Tensile strength, (ASTM D 412)		330 psi
Elongation at break, (ASTM D 412)		150%
Tear propagation resistance, (ASTM D624)		29 pli
Movement accommodation factor, (ASTM C719)		+/- 12.5%
Water Vapor Permeability (EN 1279-4)		18 g H <sub>2</sub> O/m <sup>2</sup> .24 hr.2 mm
Service temperature		-40°F-302°F (-40°C-150°C)
Shelf life (storage below 77°F (25°C))		12 months
1) 23C/73F; 50% r.h.		·

## Description

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SikaSil<sup>®</sup> IG-25 HM is a two-part, neutralcuring insulating glass sealant with structural capabilities. SikaSil<sup>®</sup> IG-25 HM is manufactured in accordance with ISO 9001 quality assurance system and the Responsible Care Program.

## Product Benefits

- High modulus, low movement sealant
- for optimum gas retention
- Suitable and approved for IG units in structural glazing facades
- Suitable for use in hot and cold climates
- Low IG gas loss rates for long service life.

## Areas of Application

SikaSil<sup>®</sup> IG-25 HM is ideal as a secondary edge seal for air and gas-filled insulating glass in structural glazing applications. This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.



## Cure Mechanism

SikaSil<sup>®</sup> IG-25 HM starts to cure immediately after mixing the two components. The speed of the reaction depends mainly on the temperature; the higher the temperature, the faster the curing process. Heating above 50C (122F) is not advisable as it may lead to bubble formation. The mixer open time, i.e. the time the material can remain in the mixer without flushing or extrusion of the product is significantly shorter than the snap time listed in the property table. For more information, please contact the Technical Service Department of Sika Industry at (888) 832-7452.

#### **Chemical Resistance**

In case of chemical exposure potential and possible resulting effects upon sealant performance, we recommend project testing; consult the Technical Service Department of Sika Industry at (888) 832-7452

## Method of Application

Surface preparation

Surfaces must be clean, dry and free from oil, grease and dust. Advice on specific applications and surface pretreatment methods is available from the Technical Service Department of Sika Industry at (888) 832-7452.

#### Mixing

Prior to processing with SikaSil<sup>®</sup> IG-25 HM, mix both components homogeneously and air bubble free; in the proper mixing ratio with an accuracy of +/- 10%. Most commercially available metering and mixing equipment are suitable. Contact the Technical Service Department of Sika Industry at (888) 832-7452 for specific advice.

#### Application

Joints must be properly dimensioned as changes are no longer possible after construction. Basis for calculation of the necessary joint dimensions are the technical values of the adhesive and the adjacent building materials, the exposure of the building elements, their construction and size as well as external loads.

SikaSil<sup>®</sup> IG, SG, and WT sealants and adhesives may only be used in structural glazing or window bonding applications by experienced professionals. The compatibility of gaskets, backer rods, setting blocks and other accessory materials with SikaSil<sup>®</sup> IG-25 HM must be tested in advance.

SikaSil<sup>®</sup> IG-25 HM silicone sealant is compatible with all other SikaSil<sup>®</sup> IG, SG, WT, WS and FS silicone sealants and adhesives. All other sealants have to be approved by Sika before using them in combination with SikaSil<sup>®</sup> IG-25 HM. Where two or more different reactive sealants are used, allow the first to cure completely before applying the next.

#### Tooling and Finishing

Tooling and finishing must be carried out within the snap time of the sealant.

#### Removal

Uncured SikaSil<sup>®</sup> IG-25 HM may be removed from tools and equipment with Sika<sup>®</sup>Remover-208 or another suitable solvent. Strictly follow solvent manufacturer's instructions for use and warnings. Once cured, the material can only be removed mechanically. Hands and exposed skin should be washed immediately using a suitable industrial hand cleaner and water. Do not use solvents on hands!

## Overpainting

SikaSil<sup>®</sup> IG-25 HM cannot be overpainted.

# Component A: CAUTION: IRRITANT.

Contains Calcium Carbonate (CAS: 471-34-1) and Limestone (CAS: 1317-65-3). May cause eye and skin irritation.

Component B: CAUTION: IRRITANT. Contains Carbon Black (CAS: 1333-86-

4). May cause eye and skin irritation.

**WARNING:** This product contains a chemical known to the State of California to cause cancer.

## HMIS (for both Component A and B)

	Α	В	
Health	1	1	
Flammability	1	2	
Reactivity	0	0	
Personal Protection	С	С	

#### **First Aid**

**Eyes** – Hold eyelids apart and flush thoroughly with water for 15 minutes. **Skin** – Remove contaminated clothing. Wash skin thoroughly for 15 minutes with soap and water. **Inhalation** – Remove to fresh air. **Ingestion** – Do not induce vomiting. Dilute with water. Contact physician. **In all cases contact a**  physician immediately if symptoms persist.

## **Further Information**

Copies of the following publications are available on our website <u>www.sikaindustry.com</u> or by calling 888-832-7452:

- Material Safety Data Sheets - Product Data Sheets In case of emergency call: Chemtrec: 800-424-9300 International: 703-527-3887

## **Health and Safety Information**

For further information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Material Safety Data Sheets containing physical, ecological, toxicological and other safety related data. It is highly recommended to read the actual Material Safety Data Sheet before using the product.

## -KEEP OUT OF REACH OF CHILDREN -NOT FOR INTERNAL CONSUMPTION -FOR INDUSTRIAL USE ONLY -KEEP CONTAINER TIGHTLY CLOSED -FOR PROFESSIONAL USE ONLY

# Packaging Information

Component A	260 kg drum
Component B	26 kg pail

#### Value Basis

All technical data stated on this Product Data Sheet are based on the results of laboratory tests only. Actual measured data in the field may vary due to site specific conditions which are not known to Sika and beyond our control.

## Handling and Storage

Avoid direct contact. Wear personal protective equipment (chemical resistant goggles/gloves/clothing) to prevent direct contact with skin and eyes. Use only in well ventilated areas. Open doors and windows during use. Use a properly fitted NIOSH respirator if ventilation is poor. Wash thoroughly with soap and water after use. Remove contaminated clothing and launder before reuse. Recommended storage temperature at or below 25C (77F).

Further information available at: www.sikaindustry.com

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## Clean Up

Use personal protective equipment (chemical resistant gloves/ goggles/clothing). Without direct contact, sweep up spilled or excess product and place in suitable sealed container. Dispose of excess product and container in accordance with applicable local, state, and federal regulations.

## **Limited Material Warranty**

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. NO OTHER WARRANTIES IMPLIED OR EXPRESS SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY **RIGHTS HELD BY OTHERS.** 

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Further information available at: www.sikaindustry.com

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