

# Sikasil® IG-25 HM Plus us

## High Modulus Sealant for air and gas filled insulating glass

**Technical Product Data (typical values)** \*Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

Properties	Component A	Component B
Chemical base	2-C silicone	
Color (CQP <sup>1</sup> 001-1)	White / Light Grey	Black / Dark Grey
Color mixed	Black / Grey S6	
Cure mechanism	Polycondensation	
Cure type	Neutral	
Density (CQP 006-4)	1.42 kg/l approx.	1.12 kg/l approx.
Density Mixed	1.40 kg/l approx. = 11.68 lbs/gal	
Viscosity (CQP 029-6)	900 Pa·s approx.	550 Pa·s approx.
Mixing Ratio A:B by volume	10:1	
Mixing Ratio A:B by weight	13:1	
Consistency	Paste	
Application temperature	40°F to 105°F (5°C to 40°C)	
Snap time <sup>2</sup> (CQP 554-1)	40 minutes approx.	
Tack free time <sup>2</sup> (CQP 019-1)	180 minutes approx.	
Shore A-hardness (CQP 023-1/ ISO 868/ ASTM C-661)	60 approx.	
Tensile strength (CQP 036-1/ISO 37/ASTM D-412)	362. psi (2.5 N/mm <sup>2</sup> ) approx.	
Elongation at break (CQP 036-1 / ISO 37/ ASTM D-412)	150%	
Tear propagation resistance (CQP 045-1 / ISO 34)	28.5 pli (5.0 N/mm <sup>2</sup> ) approx.	
100% Modulus (CQP 036-1/ISO 37/ASTM D-412)	305. psi (2.1 N/mm <sup>2</sup> ) approx.	
12.5% Modulus (CQP 036-1/ISO 37/ASTM D-412)	72 psi (0.5 N/mm <sup>2</sup> ) approx.	
Thermal resistance (CQP 513-1) 4 hours	390°F (200°C)	
Short term 1 hour	430°F (220°C)	
Movement accommodation capability (ASTM C 719)	+/- 12.5%	
Water vapor permeability	18g H <sub>2</sub> O / m <sup>2</sup> ·24 h·2 mm	
Service temperature	-40° - 300°F (-40° - 150°C)	
Shelf life (storage below 77°F (25°C)) (CQP 016-1)	15 months	12 months

<sup>1</sup> CQP=Corporate Quality Procedure <sup>2</sup> 73°F (23°C) / 50% r.h.

### Description

Sikasil® IG-25 HM Plus US is a two-part, neutral-curing insulating glass sealant with structural capabilities. Sikasil® IG-25 HM Plus US is manufactured in accordance with 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
- Meets requirements of EN 1279 (including part 3), EOTA ETAG 002 and EN 15434, and ASTM 2190
- CEKAL and SNJF VI-VEC recognized
- CE marked

### Areas of Application

Sikasil® IG-25 HM Plus US 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.

Industry



## Cure Mechanism

Sikasil®IG-25 HM Plus US 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 122°F (50°C) is not advisable as it may lead to bubble formation. The mixer 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 (tsmh@us.sika.com).

## Method of Application

### Surface preparation

Surfaces must be clean, dry and free from oil, grease and dust. Advice on specific applications and surface pre-treatment methods will be given on request. Contact Technical Service at (tsmh@us.sika.com).

### Mixing

Prior to processing with Sikasil®IG-25 HM Plus US, 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. While the A-part of Sikasil®IG-25 HM Plus US is stable in air, the B-part is moisture sensitive and must only be exposed briefly to air. Advice on specific applications will be given on request. Contact Technical Service at (tsmh@us.sika.com).

### Tooling and Finishing

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

### Removal

Uncured Sikasil®IG-25 HM Plus US may be removed from tools and equipment with Sika®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 skin!

### Overpainting

Sikasil®IG-25 HM Plus US cannot be overpainted.

## Limitations

Most Sikasil® WS, FS, SG, IG, WT, AS and other engineering silicone sealants manufactured by Sika are compatible with each other and SikaGlaze® IG Sealants, however in all cases for specific information regarding compatibility between various Sikasil (with other Sikasil®) and SikaGlaze® products please contact the Technical Service Department of Sika Industry at tsmh@us.sika.com. All other manufacturer sealants have to be approved by Sika before using them in combination with Sikasil®IG-25 HM Plus US. Where two or more different reactive sealants are used, allow the first to cure completely before applying the next.

- While the A-part of Sikasil®IG-25 HM Plus US is stable in air, the B-part is moisture sensitive and must be only briefly exposed to air.
- Sikasil®IG, SG, and WT sealants and adhesives may only be used in structural glazing or window bonding applications by experienced professionals after a detailed examination and written approval of the corresponding project details by the Technical Service Department of Sika Industry.
- The compatibility of gaskets, backer rods, setting blocks and other accessory materials with Sikasil®IG-25 HM Plus US must be tested in advance.
- Where two or more different reactive sealants are used, allow the first to cure completely before applying the next

## PART A:

**WARNING: IRRITANT.** Contains Siloxanes and Silicones, di-Me (CAS: 63148-62-9). Causes eye/skin irritation. Harmful if swallowed. May cause respiratory tract irritation.

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

## PART B:

**WARNING: IRRITANT, SENSITIZER.** Contains tetraethyl silicate (CAS: 78-10-4), Carbon black (CAS: 1333-86-4), N-[3-(triethoxysilyl)propyl]ethylenediamine (CAS: 5089-72-5), and 4,4,7,7-tetraethoxy-3,8-dioxo-4,7-disiladecane (CAS: 16068-37-4). May cause skin sensitization after prolonged contact. May cause gastrointestinal disturbance. Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage. **Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal.**

**WARNING!** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

## HMIS

	Part A	Part B
Health	2	*2
Flammability	1	2
Reactivity	0	0
Personal Protection	B	G

## FIRST AID

**PART A and Part B: 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

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,

Further information available at:  
[www.sikausa.com](http://www.sikausa.com)

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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 PROFESSIONAL USE ONLY.**
- **KEEP CONTAINER TIGHTLY CLOSED.**

Copies of the following publications are available at [www.sikausa.com](http://www.sikausa.com):

- Material Safety Data Sheet
- Product Data Sheet

**In case of emergency, call CHEMTREC at 800-424-9300, International 703-527-3887**

#### Packaging Information

Pail (Part B)	20 kg
Drum (Part A)	260 kg

#### 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

**PART A and Part B:** 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.

#### Clean Up

**PART A and Part B:** 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.**

#### Legal Notes/Disclaimer

All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the

product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s).

Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at [www.sikausa.com](http://www.sikausa.com) or by calling 201-933-8800.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Material Safety Data Sheet which are available at [www.sikausa.com](http://www.sikausa.com).

Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Material Safety Data Sheet prior to product use.

Further information available at:  
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