



CONSTRUCTION SILICONES



Insulating Glass, Facade, Curtain Wall Window & Door

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MF881

Two Component Silicone Structural Sealant

Insulating Glass, Structural Glazing, Facade, Curtain Wall System

♦ APPLICATIONS

TG-SEALANT MF881 is a two-component neutral cured silicone sealant specifically developed for the manufacturing of high performance insulating glass units used in residential and commercial use of curtain wall systems and used in structural glazing applications such as factory glazing of curtain wall units and modules for unitized and panelized systems .

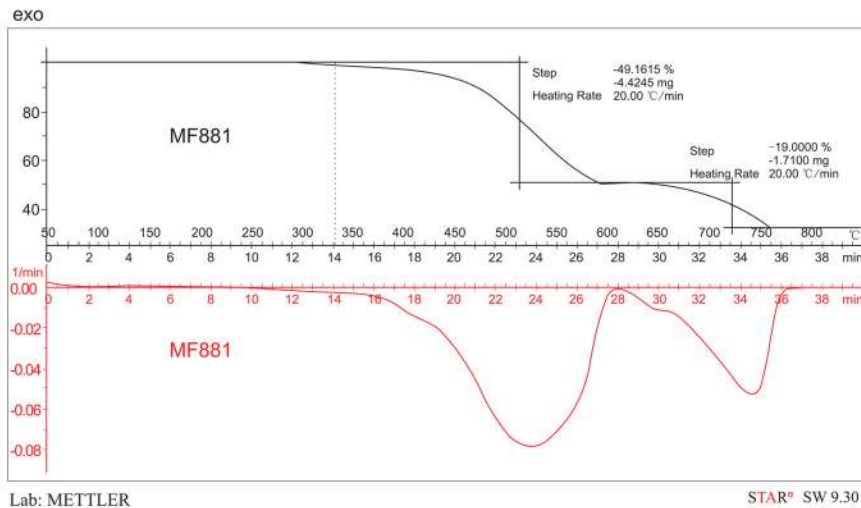
♦ FEATURES

- Excellent adhesion to a wide range of substrates including coated , enamelled and reflective glasses, anodised and polyester paint coated aluminium and stainless steel.
- Excellent temperature stability: - 60°C to 180°C.
- High level of mechanical properties.
- High elasticity and high modulus .
- Joint movement: $\pm 25\%$.
- Resistant to ozone.

♦ TYPICAL PROPERTIES

TEST ITEMS		MEASURED VALUE
Base (Com A)	Appearance	White / Grey Ropy Paste
	Density	1.41 g/cm ³
	Viscosity	170,000 mPa.S
Catalyst (Com B)	Appearance	Black/ White Ropy Paste
	Density	1.03 g/cm ³
	Viscosity	80,000 mPa.S
As mixed		
Mixture By weight (A:B = 12:1)	Appearance	Black / White / Grey
	Density	1.40 g/cm ³
	Viscosity	340,000 mPa.S
	Application Time (23°C, 50%)	30-50 mins
	Tack-free Time (23°C, 50%)	30-60 mins
Sag	Placed Vertical (50 °C)	0
	Placed Horizontal	No deformation
Hardness	Shore A- 24h	35
	Shore A-14 days	44
As cured - after 14 days at T 23°C and 50% R.H.		
Tensile Adhesion Strength	23°C	0.97 MPa
	90°C	0.85 MPa
	- 30°C	1.84 MPa
	After Water Immersion	1.01 MPa
	After Water-UV Immersion	0.97 MPa
	Adhesive Failure Area	0%
	23°C Elongation Under Max. Tensile Strength	140%
Temperature Resistance		- 60~ 180°C
Resistance to UV-Ozone		Continuous irradiation under water-UV 2500 hrs, No change.
Moisture Vapour Transmission Rate (MVTR)		17.7 [gr/m ² .24hrs.2mm] - EN1279/4
Gas Permeation Rate (Ar)		755 x 10 ⁻³ [gr/m ² .hrs] - EN1279/4

Fig. 1 TG-SEALANT MF881 Thermogravimetric Analysis Curve.



◆ MIXING AND DISPENSING INSTRUCTIONS

TG-SEALANT MF881 has to be mixed homogeneously and air-bubble free in the correct ratio. TG-SEALANT MF881 should be mixed in a ratio of 12:1 base to curing agent by weight, or equivalent 8.5:1 by volume for optimal properties. At this mix ratio, the sealant typically exhibits a working time of 30~50 minutes and allows units to be handled within 3 hours. Slight variations in mixing ratio can be tolerated, but these should not exceed 11:1 to 14:1 by weight to ensure minimum properties are obtained. To obtain the ultimate physical properties from TG-SEALANT MF881 Silicone Structural Sealant it is recommended that the base and curing agent are thoroughly mixed using an airless mixing system found on most existing commercially available two-part silicone dispensing machines. Neither hand mixing nor the use of hand-held power mixers are satisfactory due to their incorporation of air into the material during mixing that would result in altered physical properties of the cured sealant. Most commercially available metering and mixing equipments are suitable.

Part A is stable in air, Part B is moisture-sensitive, must only be exposed briefly to air.

◆ CURING

When mixing TG-SEALANT MF881 A base + TG-SEALANT MF881 B catalyst approximately in a 12:1 weight ratio, the material will become tack-free at about 50 minutes under ambient conditions of T 23°C, 50% R.H. Under these conditions approximately 70% of strength should develop within 24 hours. Development of full properties requires full evaporation of cure by-products and will normally be achieved within 7 days. Full properties will take additional time in colder climates or deeper SSG cavities. The speed of reaction mainly depends on the temperature, the higher temperature the faster curing process. Heating above 50°C is not advisable as it may lead to bubble formation.

◆ APPLICABLE STANDARDS

- ASTM C920
- EU Specification: EN1279 - part 2, 4
- China Specification: GB16776 -2005
- IGCC-IGMA Approved.

◆ SURFACE PREPARATION - IGU:

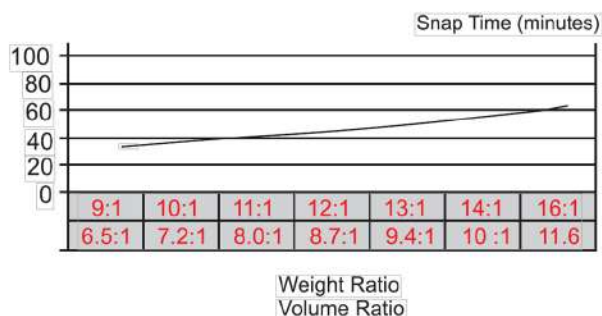
GLASS / SPACER - To achieve good adhesion, surfaces must be clean, dry and free from oil, grease and dust.

◆ SURFACE PREPARATION - SGS:

Clean all joints and glazing pockets, removing all foreign matter and contaminants such as grease, oil, dust, water, frost, surface dirt, old sealants, or glazing compounds and protective coatings. Metal, glass and plastic surfaces should be cleaned by mechanical or solvent procedures. Where used, solvent (non-water alcohol / acetone) should be wiped on and off with clean, oil- and lint-free cloths.

Advice on specific applications and surface pre-treatment methods is available from the Technical Service Department of TG-SEALANT.

Weight Ratio	Volume Ratio
9:1	6.5:1
10:1	7.2:1
11:1	8.0:1
12:1	8.7:1
13:1	9.4:1
14:1	10:1
16:1	11.6



♦ APPLICATION LIMITS

It is important when selecting components for a project that adhesion and compatibility tests are carried out, and found to be successful, before the project starts. TG-SEALANT MF881 adhesion with glass and Alu. spacer must be tested in advance and compatibility of gaskets, backer rods, setting blocks and other accessory materials with TG-SEALANT MF881 better to be tested in advance.

Regarding facade structural glazing, primer is not usually required when using TG-SEALANT MF881. However, it is essential that adhesion be tested prior to use. Specific primer recommendations will be made by TG-SEALANT on a project basis. Please contact TG-SEALANT for further advice.

♦ LIMITATIONS

TG-SEALANT MF881 should not be used for structural applications without the prior written approval of TG-SEALANT QC Department. Each project should be specifically and separately approved by TG-SEALANT.

Project specific approval involves the following prerequisites:

- Joint dimension and print reviews.
- Successful laboratory adhesion and compatibility testing to all building components.
- Observance of professional sealant application and workmanship standards.
- Users should always consult TG-SEALANT Technical Service Department for adhesion recommendation.

TG-SEALANT shall not be held liable for any possible claims arising from structural glazing use of TG-SEALANT MF881 for projects which have not been specifically approved by TG-SEALANT.

For projects which have been approved, TG-SEALANT will issue a structural adhesion warranty on a case by case basis at the user's request. It is the user's exclusive responsibility to ensure project compliance with local building regulations. Because of the risk of incompatibility, TG-SEALANT MF881 should not come into contact with, or be exposed to sealants that liberate acetic acid. This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

♦ FIRST AID INFORMATION

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Wash contaminated clothing and clean shoes before reuse.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention. **If swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give person two glasses of water. Never give anything by mouth to an unconscious person.

Keep out of reach children. Refer to Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) for details.

SHELF LIFE AND STORAGE

12 months from the date of production below 30°C.

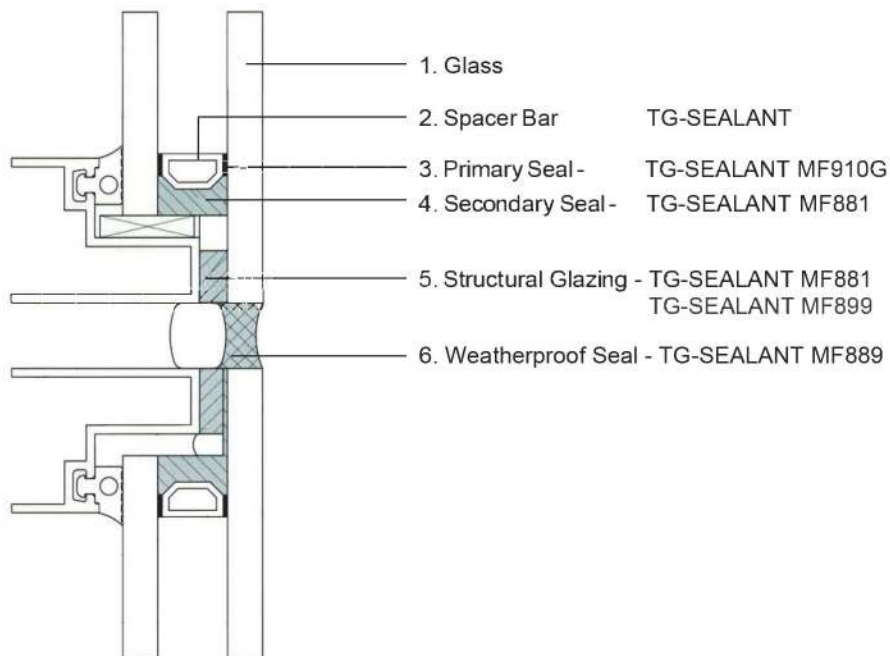
COLORS

Black / Grey / White

PACKAGING

Com A 265kg/drum	Com A 25kg/pail
Com B 19 kg/pail	Com B 300ml/cartridge x 7 pcs.

Fig. 2 Typical Section of Structural Glazing with Symmetric Insulating Glass Unit



MF881-25HM

Two Component Silicone Structural Sealant for Gas-filled Insulating Glass

Insulating Glass, Structural Glazing, Facade, Curtain Wall System

◆ APPLICATIONS

TG-SEALANT MF881-25HM is a high performance two-component neutral cured silicone sealant specifically developed for the manufacturing of air and gas-filled insulating glass in structural glazing applications. This product is suitable for professional experienced IG manufacturer only. Tests with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

◆ FEATURES

- Two component, neutral cured silicone structural sealant.
- Excellent adhesion to a wide range of substrates including coated, enamelled and reflective glasses, anodised and polyester paint coated aluminium and stainless steel.
- Excellent temperature stability: - 60°C to 180°C.
- High level of mechanical properties.
- High elasticity and high modulus.
- Low moisture vapour transmission property.
- Low gas permeation property.

◆ TYPICAL PROPERTIES

TEST ITEMS		MEASURED VALUE
Base (Com A)	Appearance	White / Grey
	Viscosity	550,000 mPa.S
Catalyst (Com B)	Appearance	Black / White
	Viscosity	80,000 mPa.S
Mixture By weight (A:B = 16:1)	Appearance	Black / White / Grey
	Application Time (23°C, 50%)	30~60 mins
	Tack-free Time (23°C, 50%)	30~90 mins
	Placed Vertical (50°C)	0
Sag	Placed Horizontal	No deformation
	Shore A 24h	40
Hardness	Shore A 14 days	55~60
After 28 days at T 23°C and 50% R.H.		
23°C Tensile Strength	Ru,5	1.16 Mpa
	Cohesive failure area	100%
-20°C Tensile Strength	Ru,5	1.24 Mpa
	Cohesive failure area	100%
80°C Tensile Strength	Ru,5	0.76 Mpa
	Cohesive failure area	100%
23°C Shear Strength	Ru,5	0.81 Mpa
	Ru,5	0.89 Mpa
-20°C Shear Strength	Cohesive failure area	100%
	Ru,5	0.69 Mpa
80°C Shear Strength	Cohesive failure area	100%
Creep Test		0.04 mm

Bubble	Without visual bubble
Resistance to UV-Ozone	Continuous irradiation under water-UV 2500 hrs, No change.
Elastic Recovery	0 %
Volume Shrinkage	3.60 %
Moisture Vapour Transmission Rate (MVPR)	11.5 [gr/m ² .24hrs.2mm] - EN1279/4
Gas Permeation Rate (Ar)	510x 10 ⁻³ [gr/m ² .hrs] - EN1279/4
Remarks: R _{u,5} describes the standard value of adhesion strength.	

♦ MIXING AND DISPENSING INSTRUCTIONS

TG-SEALANT MF881-25HM has to be mixed homogeneously and air-bubble free in the correct ratio. MF881-25HM should be mixed in a ratio of 12:1 base to curing agent by weight, or equivalent 8:1 by volume for optimal properties. At this mix ratio, the sealant typically exhibits a working time of 30-50 minutes and allows units to be handled within 3 hours. Slight variations in mixing ratio can be tolerated, but these should not exceed 11:1 to 14:1 by weight to ensure minimum properties are obtained. To obtain the ultimate physical properties from TG-SEALANT MF881-25HM Silicone Structural Sealant it is recommended that the base and curing agent are thoroughly mixed using an airless mixing system found on most existing commercially available two-part silicone dispensing machines. Neither hand mixing nor the use of hand-held power mixers are satisfactory due to their incorporation of air into the material during mixing that would result in altered physical properties of the cured sealant. Most commercially available metering and mixing equipments are suitable.

Part A is stable in air, Part B is moisture-sensitive, must only be exposed briefly to air.

♦ CURING

When mixing MF881-25HM base + TG-SEALANT MF881-25HM catalyst at approximately a 12:1 weight ratio, the material will become tack-free at about 50 minutes under ambient conditions of at 23 °C, 50% R.H. Under these conditions approximately 70% of strength should develop within 24 hours. Development of full properties requires full evaporation of cure by-products and will normally be achieved within 7 days. Full properties will take additional time in colder climates or deeper SSG cavities. The speed of reaction depends on mainly on the temperature, the higher temperature the faster curing process. Heating above 50 °C is not advisable as it may lead to bubble formation.

♦ APPLICABLE STANDARDS

- EU Specification: EN 1279 (part 2, 3, 4)
- EOTAETAG 002 (IFT Rosenheim/ TUV Rheinland) and EN 15434

Weight Ratio	Volume Ratio
10:1	6.4:1
11:1	7.1:1
12:1	7.7:1
13:1	8.4:1
14:1	9.0:1
16:1	10:1

♦ SURFACE PREPARATION - IGU:

GLASS / SPACER - To achieve good adhesion, surfaces must be clean, dry and free from oil, grease and dust.

♦ SURFACE PREPARATION - SGS:

Clean all joints and glazing pockets, removing all foreign matter and contaminants such as grease, oil, dust, water, frost, surface dirt, old sealants, or glazing compounds and protective coatings. Metal, glass and plastic surfaces should be cleaned by mechanical or solvent procedures. Where used, solvent (non-water alcohol/ acetone) should be wiped on and off with clean, oil- and lint-free cloths.

Advice on specific applications and surface pre-treatment methods is available from the Technical Service Department of TG-SEALANT.

◆ APPLICATION LIMITS

It is important when selecting components for a project that adhesion and compatibility tests are carried out, and found to be successful, before the project starts.

MF881-25HM adhesion with glass and Alu.spacer must be tested in advance and compatibility of gaskets, backer rods, setting blocks and other accessory materials with MF881-25HM best to be tested in advance.

Regarding facade structural glazing, primer is not usually required when using TG-SEALANT MF881-25HM. However, it is essential that adhesion be tested prior to use. Specific primer recommendations will be made by TG-SEALANT on a project basis. Please contact TG-SEALANT for further advice.

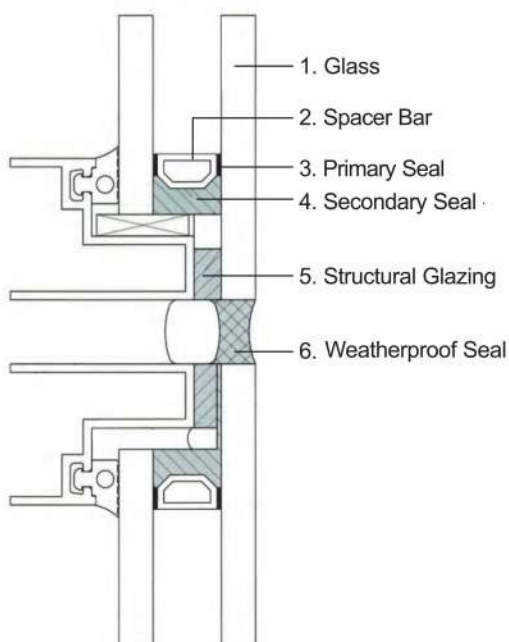
◆ SHELF LIFE AND STORAGE

12 months from the date of production below 30°C.

◆ PACKAGING

Com A 190 kg/drum

Com B 19 kg/pail



◆ FIRST AID INFORMATION

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Wash contaminated clothing and clean shoes before re use.

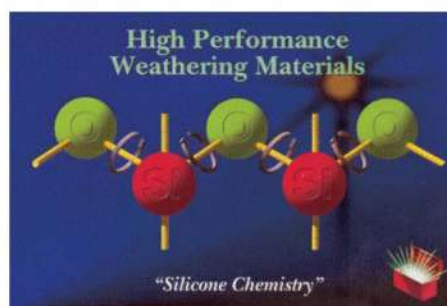
Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

If swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give person two glasses of water. Never give anything by mouth to an unconscious person.

Keep out of reach children. Refer to Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) for details. **Emergency Telephone Number:** +86 371 67982270

◆ COLORS

Black / Grey / White



MF882

Two Component Silicone Sealant for Insulating Glass

Secondary Sealant for the Manufacturing of Insulating Glass

♦ APPLICATIONS

TG-SEALANT MF882 is a two- component neutral cured silicone sealant specifically developed for the manufacturing of insulating glass units used for window and door, vehicles and refrigeration, also can be used for edge frame curtain wall system.

♦ FEATURES

- Excellent adhesion to a wide range of substrates including coated, enamelled and reflective glasses, anodised and polyester paint coated aluminium and stainless steel.
- Excellent temperature stability : - 60 °C to 180 °C.
- High level of mechanical properties .
- High elasticity and high modulus.
- Resistant to ozone.

♦ TYPICAL PROPERTIES

TEST ITEMS		MEASURED VALUE
Base (Com A)	Appearance	White / Grey Ropy Paste
	Density	1.45 ± 0.05 g/cm ³
	Viscosity	150,000 mPa.S
Catalyst (Com B)	Appearance	Black / White Ropy Paste
	Density	1.03 g/cm ³
	Viscosity	8 0,000 mPa.S
Mixture By weight (A:B = 12:1)	Appearance	Black / White / Grey
	Viscosity	360,000 mPa.S
	Application Time (23°C, 50%)	30-50 mins
	Tack-free Time (23 °C, 50%)	30-60 mins
Sag	Placed Vertical (50°C)	0
	Placed Horizontal	No deformation
Hardness	Shore A- 4h	22
	Shore A- 24h	40
	Shore A -14 days	46
After 14 days at a temperature of 23°C and 50%RH.		
Elastic Recovery		94%
Adhesion Property at Definite Elongation		No Damage
Tensile Adhesion Strength	23°C	0.92 MPa
	After Aging in Hot Air	1.10 MPa
	300 hr After Water-UV	0.82 MPa
	-20°C	1.28 MPa
	60°C	0.85 MPa
	After Water-UV Immersion	0.79 MPa
	Adhesive Failure Area	0%
Elongation Under Maximum Tensile Strength at 23°C		93%
TGA		3.6%
Moisture Vapour Transmission Rate (MVTR)		12.3 [gr/m ² .24hrs.2mm] - EN1279/4
Gas Permeation Rate (Ar)		360 x 10 ⁻³ [gr/m ² .hrs] - EN1279/4

♦ MIXING AND DISPENSING INSTRUCTIONS

TG-SEALANT MF882 has to be mixed homogeneously and air-bubble free in the correct ratio. TG-SEALANT MF882 should be mixed in a ratio of 12:1 base to curing agent by weight, or equivalent 8.0:1 by volume for optimal properties. At this mix ratio, the sealant typically exhibits a working time of 30-50 minutes and allows units to be handled within 3 hours. Slight variations in mixing ratio can be tolerated, but these should not exceed 11:1 to 14:1 by weight to ensure minimum properties are obtained. To obtain the ultimate physical properties from TG-SEALANT MF882, it is recommended that the base and curing agent are thoroughly mixed using an airless mixing system found on most existing commercially available two-part silicone dispensing machines. Neither hand mixing nor the use of hand-held power mixers are satisfactory due to their incorporation of air into the material during mixing that would result in altered physical properties of the cured sealant. Most commercially available metering and mixing equipments are suitable.

Part A is stable in air, Part B is moisture-sensitive, must only be exposed briefly to air.

♦ APPLICABLE STANDARDS

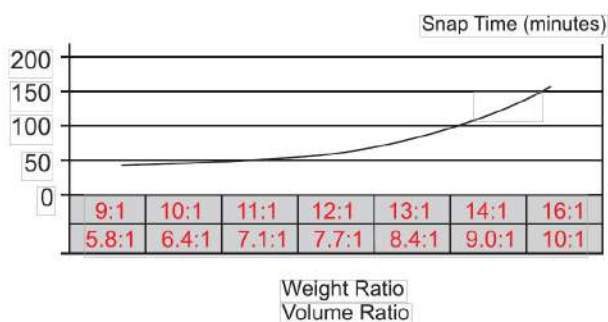
- EU Specification: EN1279- part 2, 4, 6
- China Specification: GB/T 29755, JC/T 471.
- IGCC-IGMA Approved.

♦ CURING

When mixing MF882 A base + MF882 B catalyst at approximately a 12:1 weight ratio, the material will become tack-free at about 50 minutes under ambient conditions of 23°C, 50% R.H. Under these conditions approximately 70% of strength should develop within 24 hours. Development of full properties requires full evaporation of cure by-products and will normally be achieved within 7 days. Full properties will take additional time in colder climates.

Weight Ratio / Volume Ratio for MF882 A Base with MF882 B Catalyst:

Weight Ratio	Volume Ratio
9:1	5.8:1
10:1	6.4:1
11:1	7.1:1
12:1	7.7:1
13:1	8.4:1
14:1	9.0:1
16:1	10:1



♦ LIMITATIONS

TG-SEALANT MF882 is not recommended for use in single seal insulating glass units, food contact applications, underwater or in other applications where the product will be in continuous contact with water. TG-SEALANT MF 882 should not be applied or used as the structural adhesive between insulating glass units or curtain wall in structural glazing applications.

♦ SURFACE PREPARATION

GLASS / SPACER - To achieve good adhesion, surfaces must be clean, dry and free from oil, grease and dust. Advice on specific applications and surface pre-treatment methods is available from the Technical Service Department of

♦ TG-SEALANT.

◆ FIRST AID INFORMATION

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention. **Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Wash contaminated clothing and clean shoes before reuse. **Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention. **If swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give person two glasses of water. Never give anything by mouth to an unconscious person. **Keep out of reach children.** Refer to Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) for details. **Emergency Telephone Number:** +86 371 67982270

◆ SHELF LIFE AND STORAGE

12 months from the date of production below 30°C.

◆ PACKAGING

Com A 265kg/drum	Com A 25kg/pail
Com B 19 kg/pail	Com B 300ml/cartridge x 7 pcs.

Fig. 1 TG-SEALANT MF882 Thermogravimetric Analysis Curve.

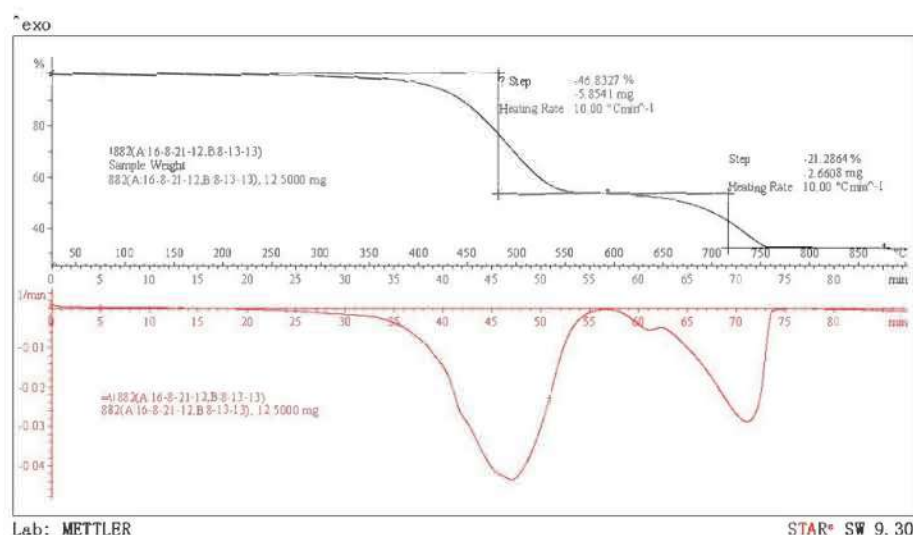
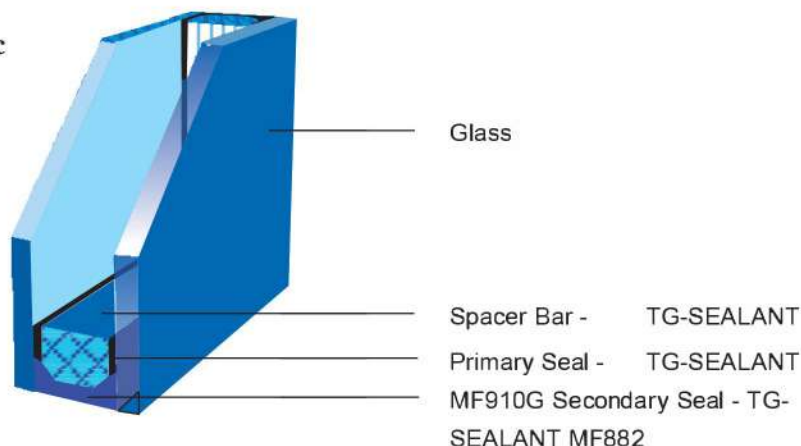


Fig. 2 Typical Section of Symmetric Insulating Glass Unit



MF883

Silicone Sealant for Insulating Glass

Insulating Glass, Structural Glazing, Facade, Curtain Wall System

◆ DESCRIPTION

MF883 is one component neutral cured RTV silicone structural sealant for secondary seal of insulating glass units.

◆ APPLICATIONS

MF883 is mainly applied to secondary seal of traditional insulating glass units, with butyl as its primary seal, also recommended to glazing micro insulating glass with free edge incorporated by specialty glass types like ultra-thin glass (solar glass or screen glass).

◆ FEATURES

- Form durable and elastic sealing layer on glass and spacer surface.
- Excellent adhesion to a wide range of substrates without primer.
- Neutral cured, no corrosion to substrates surface.
- Excellent temperature stability: -60°C to 180°C.
- Non-slump, solvent free, and no pollution to environment.

◆ TYPICAL PROPERTIES

STANDARD	TEST ITEMS	TECHNICAL DATA	TEST RESULT
Test condition--before cure, T: (23±2)°C, R.H: (50±5) %			
GB 16776	Extrudability, s	≤10	1.9
GB/T 13477.6	Sag, mm	≤3	0
-	Application Time, min	-	20
GB/T 13776.5	Tack free time, h	≤3	0.5
-	Curing time, d	-	7-14
-	Completely cured time, d	-	14-21
-	Range of Application Temperature, °C	-	10-40
Test condition--7days placed at T: (23±2)°C, R.H: (50±5) %			
GB/T 531.1	Hardness, Shore A	20-60	48
GB/T 528	Elongation at Break, %	-	500
	Tensile Strength, Mpa	-	2.31
Test condition-- 21days placed at T: (23±2)°C, R.H: (50±5) %			
GB 16776	Tensile Adhesive Strength, Mpa	23°C	≥0.6
		After Water Immersion	≥0.45
		After Water-UV	1.02
		90°C	0.97
		-30°C	1.45
	Adhesion Failure Area, %		≤5
	Elongation at Max Tensile(23°C), %		≥100
	Heating Ageing	TGA, %	≤10
		Cracking	No
		Chalking	No

◆ APPLICATION METHODS

Surface-preparation:

The sealing joint and assembly parts must be clean, dry and free from all contamination and impurities, such as grease, dust, water logging, frost, dirties, remaining glues, assembly accessories and protective coatings.

Primer:

Adhesion test must be proceeded to confirm if primer is necessary or not. If necessary, the primer shall be applied to be a thin layer with a white cloth on the surface before applied sealant. Otherwise, apply sealant directly to clean surface of substrate.

Injection of Sealant:

Continuously extrude MF883 with a positive pressure sealant gun and fully fill it in the joints.

Tooling:

Before a skin forms, tool the sealant with light pressure to spread the sealant and make sure complete surface contact with glass and spacer.

◆ APPLICABLE STANDARDS

- GB 16776
- GB/T 29755

◆ SHELF LIFE AND STORAGE

12 months from the date of manufacture, store in a low moisture, dark place below 30°C in the original unopened packing.

◆ PACKAGE

Sausage: 500 ml	
Drum:	200 L

◆ LIMITATIONS

The product is not applicable in the following conditions:

- Single seal or primary seal of insulating glass units.
- Immersion in the water.
- Any building materials exuding grease, plasticizer or solvents, vulcanized or semi-vulcanized rubber.
- Frosted or humid surface.
- The region where atmosphere vapor is closed and cut off (as sealant is moisture curing).
- Surfaces where paints are used (generally paints cannot be adhered on surface of silicone).
- contact with food or other affiliated category.

◆ ATTENTIONS

- In case of contact with eyes, rinse immediately with plenty of water.
- Avoid contacting with skins for a long time, and avoid contacting with children.
- Avoid contaminating foods, medicines or cosmetics.
- Do test on adhesive property of project materials before using and refer to MSDS.
- For more information on safety use and hazards, and for safety notice which is not mentioned, please refer to relevant specification of JGJ 102.



MF889

Silicone Weatherproofing Sealant

RTV, Neutral, One-Part Silicone Sealant

◆ DESCRIPTION / APPLICATIONS

TG- Sealant MF889 Silicone Weatherproofing Sealant, a one-part, RTV neutral-cure, architectural grade sealant, is a specified, premium performance weather sealing product specifically designed for general glazing and weather sealing in curtain wall and building facades.



◆ TYPICAL PERFORMANCE

- Excellent adhesion to a wide range of substrates including coated glass, galvanized steel, masonry, anodized and polyester paint coated aluminium and stainless steel and other porous and non-porous substrates.
- Ideal for expansion, connection, perimeter and other movement joints
- Suitable for use on extension/compression movement capability of up to $\pm 35\%$ of the original joint width.
- Excellent temperature stability: -60°C to 180°C .
- High level of mechanical properties.
- High elasticity and high modulus.
- Resistant to ozone.

◆ TECHNICAL DATA - TYPICAL PROPERTIES

TEST ITEMS	TECHNICAL DATA	TEST RESULT	STANDARD
Test Conditions: T (23\pm2)$^{\circ}\text{C}$, (50\pm5) % R.H.			
Sag, mm	≤ 3	0	GB/T 13477.6
Extrusion Property, ml/min	≥ 80	360	GB/T 13477.3
Application Time, min	—	30	—
Tack-free Time, h	≤ 3	2.5	GB/T 13477.5
Curing Time, d	—	7 ~ 14	—
Range of Application Temperature, $^{\circ}\text{C}$	—	5 ~ 40	—
Test Conditions: 28d placed at T (23\pm2)$^{\circ}\text{C}$, (50\pm5)% R.H.			
Hardness, Shore A	20~60	45	GB/T 531.1
Movement Capability, %	35	35	GB/T 22083
Range of Temperature Resistance, $^{\circ}\text{C}$	—	-60 ~ 180	—
Modulus at 100% Elongation, MPa	—	0.5	GB/T 13477.8
Elongation at Break, %	—	350	
Tensile Strength, Mpa	—	1.10	

♦ APPLICABLE STANDARDS

- ASTM C920, Type S, Grade NS, Class 25, NT, G, A
- China Specification JC/T 882 25HM
GB/T 14683 G, F 25HM
GB/T 22083 G, G 35HM
ISO 11600 F, G 25HM

♦ LIMITATIONS

TG-SEALANT MF889 should not be applied to:

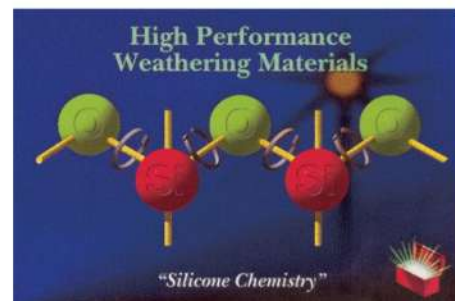
- Not suitable for structural glazing applications .
- In designs where the silicone is encapsulated and without access to atmospheric moisture.
- Do not use when application surface temperatures below 4°C or exceed 50°C.
- Surface which will be painted , as painting over rubber is not recommended .
- Do not use water for tooling and do not apply to wet or damp surface .
- On surfaces that are continuously immersed in water .

♦ APPLICATION METHODS

Install backing materials or joint fillers , setting blocks , spacer shims and tapes . Mask areas adjacent to joints to ensure neat sealant lines . Primer is generally not required on non-porous surfaces, but maybe necessary for optimal sealant of certain porous surfaces. A test placement is always recommended . Apply MF889 Silicone Weatherproofing Sealant in a continuous operation using a positive pressure. (The sealant can be applied using many types of air-operated guns and most types of bulk dispensing equipment. Before a skin forms (typically within 15 minutes), tool the sealant with light pressure to spread the sealant against backing material and the joint surfaces . Remove masking tape as soon as the bead is tooled.

♦ PREPARATION INSTRUCTION

- For good adhesion, a clean, dry and grease free surface is necessary. All contaminants, impurities , or other adhesion inhibitor (such as moisture/frost, oils, old sealant , soaps and other surface treatment , etc.) must be removed from the surfaces to which the sealant is intended to adhere . Clean by using a two-rag wipe technique - wet one rag with solvent and wipe the surface with it, the use the second rag to wipe the wet solvent from the surface before it evaporates . In all cases where used, solvent should be wiped dry with a clean , white cloth or other lint-free wiping materials .
- For cleaning, a solvent-dampened clean rag usually produces the desired result. Isopropyl Alcohol (IPA) is commonly used solvent and has proven useful for most substrates .
- Cleaning of surface should be done within 1 to 2 hours of when the sealant is to be applied.
- The use of masking tape is recommended where appropriate to ensure a neat job and to protect adjoining surfaces from over-application of sealant. Masking tape should be removed immediately after tooling the sealant and before the sealant begins to skin over (tooling time).
- Extrude with manual and pneumatic sealant gun, cut tip to desired bead size, puncture seal in nozzle and remove metal seal on end of cartridge before placing cartridge in caulking gun. Make bond before the product skins. Adhesive sealant must be used within 30 mins after inner seal is punctured. Good ventilation is necessary in the process of installation and curing. To ensure the best adhesive properties, do a test on adhesion before using in batches and peeling adhesion tests at regular intervals are also required while carrying out installation.



◆ FIRST AID INFORMATION

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention. **Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Wash contaminated clothing and clean shoes before reuse. **Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention. **If swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give person two glasses of water. Never give anything by mouth to an unconscious person. **Keep out of reach children.** Refer to Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) for details. **Emergency Telephone Number:** +86 371 67982270

◆ SHELF LIFE AND STORAGE

12 months from the date of manufacture, store in a low moisture, dark place below 30°C in the original unopened packing.

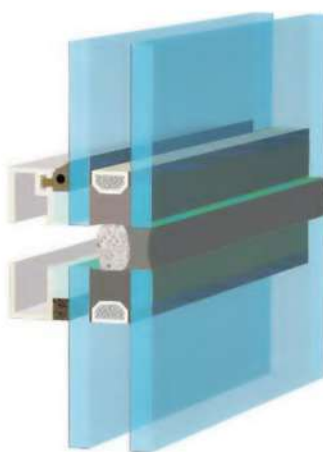
◆ PACKAGING

Cartridge: 300 ml / 25 pcs/carton

Sausage: 592 ml / 20 pcs/carton

◆ COLORS

Black / Grey / White
Custom colors may be ordered to match virtually any substrate.



MF889A

Silicone Stone Weatherproofing Sealant

◆ DESCRIPTION/APPLICATIONS

MF889A Silicone Stone Weatherproofing Sealant, a one-part, RTV, neutral-cure, architectural grade sealant, is designed specifically for the assembly of stone and the weatherproofing of stone, glass and most other construction substrates without primer. It easily extrudes in any weather and cure at ambient temperature by reaction with moisture in the air to form a durable, flexible silicone rubber seal.

◆ TYPICAL PERFORMANCE

- No corrosion and pollution to porous building materials such as granite and marble.
- Suitable for use on extension/compression movement capability of up to $\pm 25\%$ of the original joint size.
- Excellent adhesion to most building material without primer, such as stone, glass, metal, tiles and anodized aluminium.
- Excellent weather sealing and temperature stability: -60°C to 180°C .
- High elasticity and high modulus.
- Resistant to ozone.

◆ TECHNICAL DATA-TYPICAL PROPERTIES

TEST ITEMS	TECHNICAL DATA	TEST RESULT	STANDARD
Test Conditions: T (23 \pm 2)$^{\circ}\text{C}$, (50 \pm 5)% R.H.			
Sag, mm	≤ 3	0	GB/T 13477.6
Extrusion Property, s	≤ 10	1.9	GB/T 16776
Application Time, min	-	20	-
Tack-free Time, h	≤ 3	2.5	GB/T 13477.5
Curing Time, d	-	7-14	-
Range of Application Temperature, $^{\circ}\text{C}$	-	5-40	-
Test Conditions: 28d placed at T (23 \pm 2)$^{\circ}\text{C}$, (50 \pm 5)% R.H.			
Hardness, Shore A	20-60	51	GB/T 531.1
Range of Temperature Resistance, $^{\circ}\text{C}$	-	-60-180	-
Movement Capability, %	25	25	
Stain Property, mm	Stain Depth	0	GB/T 23261
	Stain Width	0	
Modulus at 100% Elongation, Mpa		0.7	
Elongation at Break, %	-	190	GB/T 13477.8
Tensile Strength, Mpa		1.00	

◆ APPLICABLE STANDARDS

- GB/T 23261 1 SR 25HM
- ASTM C 920 Type S, Grade NS, Class 25
- ASTM C1248

◆ LIMITATIONS

MF889A should not be applied to: Not suitable for structural glazing application. In design where the silicone is encapsulated and without access to atmosphere moisture. Do not use when application surface temperature below 4°C or exceed 50°C. Surface which will be painted, as painting over rubber is not recommended. Do not use water for tooling and do not apply to wet or damp surface. On surfaces that are continuously immersed in water.

◆ APPLICATION METHODS

Install backing material or joint filler, setting blocks, spacer shims and tapes. Mask areas adjacent to joints to ensure neat sealant lines. Primer is generally not required on non-porous surfaces, but maybe necessary for optimal sealant of certain porous surfaces. A test placement is always recommended. Apply MF889A Silicone Stone Weatherproofing Sealant in a continuous operation using a positive pressure. (The sealant can be applied using many types of air-operated guns and most types of bulk dispensing equipment). Before a skin forms, tool the sealant with light pressure to spread the sealant against backing material and joint surfaces. Remove masking tape as soon as the bead is tooled.

◆ COLOR

Black / Grey / White
Custom colors may be ordered to match virtually any substrate.

◆ SHELF LIFE AND STORAGE

12 months from the data of manufacture, store in a low moisture, dark place below 30°C in the original unopened packing.

◆ PREPARATION INSTRUCTION

- For good adhesion, a clean, dry and grease free surface is necessary. All contaminants, impurities, or other adhesion inhibitor (such as moisture/frost, oils, old sealant, soaps and other surface treatment, etc.) must be removed from the surfaces to which the sealant is intended to adhere. Clean by using a two-rag wipe technique - wet one rag with solvent and wipe the surface with it, the use the second rag to wipe the wet solvent from the surface before it evaporates.
- For cleaning, a solvent-dampened clean rag usually produces the desired result. Isopropyl Alcohol (IPA) is commonly used solvent.
- Cleaning of surface should be done within 1 to 2 hours of when the sealant is to be applied.
- The use of masking tape is recommended where appropriate to ensure a neat job and to protect adjoining surfaces from over-application of sealant.
- Extrude with manual and pneumatic sealant gun, Make bond before the product skins. Adhesive sealant must be used within 30 mins after inner seal is punctured. Good ventilation is necessary in the process of installation and curing. To ensure the best adhesive properties, do a test on adhesion before using in batches and peeling adhesion tests at regular intervals are also required while carrying out installation.



◆ PACKAGE

Cartridge: 300ml / 25pcs / carton

Sausage : 592ml / 20pcs / carton



MF898

Silicone Weatherproofing Sealant

RTV, Neutral, One-Part Silicone Sealant

◆ DESCRIPTION / APPLICATIONS

MF898 Silicone Weatherproofing Sealant, a one-part, RTV neutral-cure, architectural grade sealant, is a specified, premium performance weather sealing product specifically designed for general glazing and weather sealing in curtain wall and building facades.

◆ TYPICAL PERFORMANCE

- Excellent adhesion to a wide range of substrates including coated glass, galvanized steel, masonry, anodized and polyester paint coated aluminium and stainless steel and other porous and non-porous substrates.
- Ideal for expansion, connection, perimeter and other movement joints
- Suitable for use on extension/compression movement capability of up to $\pm 50\%$ of the original joint width.
- Excellent temperature stability: -60°C to 180°C .
- High level of mechanical properties.
- High elasticity and high modulus.
- Resistant to ozone. stain resistance to non-porous materials such as aluminum, glass and stainless steel.

◆ TECHNICAL DATA - TYPICAL PROPERTIES

TEST ITEMS	TECHNICAL DATA	TEST RESULT	STANDARD
Uncured-Test Conditions: T: $(23\pm 2)^{\circ}\text{C}$, $(50\pm 5)\%$ R.H.			
Rheological (Flow) Properties	Vertical displacement: sag ≤ 4.8	Vertical displacement: 0 mm sag	ASTM C639
	Horizontal displacement: No deformation	Horizontal displacement: no deformation	
Extrudability, ml/min	≥ 10	52.2	ASTM C1183
Tack-free Time, h	≤ 3	2.5	ASTM C679
Curing Time, d	/	7~14	
Range of Application Temperature, $^{\circ}\text{C}$	/	5~40	/
After cured-Test Conditions: 28 days placed at T: $(23\pm 2)^{\circ}\text{C}$, $(50\pm 5)\%$ R.H.			
Hardness, Shore A	15-50	40	ASTM C661
Movement capability %	± 50	± 50	ASTM C719
Range of Temperature Resistance, $^{\circ}\text{C}$	/	$-60\sim 180^{\circ}\text{C}$	/
Effects of Heat Aging	Shall lose $\leq 7\%$ of its original weight or show no cracking and chalking	Weight loss: 2.2% No cracking	ASTM C1246
Staining and Color Change	The sealant shall not cause any visible stain on the top surface of a white cement mortar bases	There was no visible stain on the top surface of a white cement mortar bases	ASTM C510
Adhesion&Cohesion under Cyclic Movement	$\leq 9\text{ cm}^2$	No loss in bond	ASTM C719
Adhesion-in-Peel	The peel strength shall ≥ 22.2 (5lbf) and the sealant shall show $\leq 25\%$ bond loss	104.1N (Substrate:Glass) 70.5 (Substrate: Aluminium) Cohesive failure, no adhesion bond loss between sealant and surface	ASTM C794

Adhesion-in-Peel for Use G (Exposed to Ultraviolet Exposure through Glass)	The peel strength shall ≥ 22.2 (5lbf) and the sealant shall show $\leq 25\%$ bond loss	97.8N (Substrate:Glass) Cohesive failure, no adhesion bond loss between sealant and surface	ASTM C794
Effects of Accelerated Weathering	Shall not cracks after specified UV&cold temperature exposure and bend test	No cracks after UV exposure and bend tes	ASTM C793
Tensile Strength, Mpa	/	1.1	ASTM C1135

◆ APPLICABLE STANDARDS

- ASTM C 920 Type S, Grade NS, Class 50, G,A
- China Specification: GB/T 22083 G, F 50

◆ LIMITATIONS

- MF898 should not be applied to:
- Not suitable for structural glazing applications.
 - In designs where the silicone is encapsulated and without access to atmospheric moisture.
 - Do not use when application surface temperatures below 4°C or exceed 50°C.
 - Surface which will be painted, as painting over rubber is not recommended.
 - Do not use water for tooling and do not apply to wet or damp surface.
 - On surfaces that are continuously immersed in water.

◆ APPLICATION METHODS

Install backing material or joint filler, setting blocks, spacer shims and tapes. Mask areas adjacent to joints to ensure neat sealant lines. Primer is generally not required on non-porous surfaces, but maybe necessary for optimal sealant of certain porous surfaces. A test placement is always recommended. Apply MF889A Silicone Stone Weatherproofing Sealant in a continuous operation using a positive pressure. (The sealant can be applied using many types of air-operated guns and most types of bulk dispensing equipment). Before a skin forms, tool the sealant with light pressure to spread the sealant against backing material and joint surfaces. Remove masking tape as soon as the bead is tooled.

◆ PREPARATION INSTRUCTION

- For good adhesion, a clean, dry and grease free surface is necessary. All contaminants, impurities, or other adhesion inhibitor (such as moisture/frost, oils, old sealant, soaps and other surface treatment, etc.) must be removed from the surfaces to which the sealant is intended to adhere. Clean by using a two-rag wipe technique - wet one rag with solvent and wipe the surface with it, the use the second rag to wipe the wet solvent from the surface before it evaporates.
- For cleaning, a solvent-dampened clean rag usually produces the desired result. Isopropyl Alcohol (IPA) is commonly used solvent.
- Cleaning of surface should be done within 1 to 2 hours of when the sealant is to be applied.
- The use of masking tape is recommended where appropriate to ensure a neat job and to protect adjoining surfaces from over-application of sealant.
- Extrude with manual and pneumatic sealant gun, Make bond before the product skins. Adhesive sealant must be used within 30 mins after inner seal is punctured. Good ventilation is necessary in the process of installation and curing. To ensure the best adhesive properties, do a test on adhesion before using in batches and peeling adhesion tests at regular intervals are also required while carrying out installation.

◆ FIRST AID INFORMATION

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention. **Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Wash contaminated clothing and clean shoes before reuse. **Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention. **If swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give person two glasses of water. Never give anything by mouth to an unconscious person. **Keep out of reach children.** Refer to Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) for details. **Emergency Telephone Number:** +86 371 67982270

◆ SHELF LIFE AND STORAGE

12 months from the date of manufacture, store in a low moisture, dark place below 30°C in the original unopened packing.

◆ SHELF LIFE AND STORAGE

12 months from the date of manufacture, store in a low moisture, dark place below 30°C in the original unopened packing.

◆ COLOR

Black / Grey / White
Custom colors may be ordered to match virtually any substrate.

◆ PACKAGING

Cartridge: 300 ml / 25 pcs/carton

Sausage: 592 ml / 20 pcs/carton



MF899

Silicone Structural Sealant

RTV, Neutral, One-Part Silicone Sealant for Structural Glazing

◆ DESCRIPTION / APPLICATIONS

TG Sealant MF899 Silicone Structural Sealant, a one-part, RTV neutral-cure, architectural grade sealant, designed specifically for the structural bonding of glass, metal, and other building components. It can also be used to adhere stiffening elements to building panels and for other similar adhesive applications. It easily extrudes in any weather and cures at ambient temperature by reaction with moisture in the air to form a durable, flexible silicone rubber seal.

◆ TYPICAL PERFORMANCE

- Excellent adhesion to a wide range of substrates including coated glass, galvanized steel, masonry, anodized and polyester paint coated aluminium and stainless steel and other porous and non-porous substrates.
- High ultimate tensile strength makes it ideally suited for structural bonding application.
- Excellent weathering characteristics and high resistance to ultra-violet radiation, heat and humidity.
- Excellent temperature stability: - 60°C to 180°C.
- High level of mechanical properties.
- High elasticity and high modulus.
- Resistant to ozone.

◆ TECHNICAL DATA - TYPICAL PROPERTIES

TEST ITEMS		TECHNICAL DATA	TEST RESULT	STANDARD	
Test Conditions: T (23±2)℃, (50±5) % R.H.					
Density, g/cm ³		—	1.43	GB/T 13477.2	
Sag, mm		≤3	0	GB/T 13477.6	
Extrusion Property, s		≤10	1.8	GB 16776	
Tack-free Time, h		≤3	2.5	GB/T 13477.5	
Curing Time, d		—	7 ~ 14	—	
Adhesion Time, d		—	14 ~ 21	—	
Application Time, min		—	20	—	
Test Conditions: 21d placed at T (23±2)℃, (50±5)% R.H.					
Range of Temperature Resistance, ℃		—	-50 ~ 180	—	
Hardness, Shore A		20 ~ 60	45	GB/T 531	
10% Modulus		—	0.15	GB 16776	
20% Modulus			0.23		
40% Modulus			0.39		
Thermal Aging	Thermal Weight Loss, %	≤1	3.1	GB 16776	
	Fracturing	No	No		
	Pulverizing	No	No		
Tensile Adhesion Property	Tensile Adhesion Strength	23℃, MPa	≥0.60		GB 16776
		90℃, MPa	≥ 0.45		
		-30℃, MPa	≥ 0.45		
		Immersion in Water, MPa	≥ 0.45		
		Water-UV Radiation, Mpa	≥ 0.45		
		Adhesion Failure Area, %	≤5		
Elongation Under Max. Tensile Strength at 23℃, %		≥ 100	325		
Test Conditions : 28d placed at T (23±2)℃, (50±5)% R.H.					
Adhesion after Radiation of Artificial Light through Glass and Immersion in Water	△Xmean	≥ 0.75	0.8	ETAG 002	
	Cohesion Faliure Area, %	≥ 90	95	JG/T 475	

NaCl Atmosphere	ΔX_{mean}	≥ 0.75	0.92	ETAG 002 JG/T 475
	Cohesion Faliure Area, %	≥ 90	100	
SO ₂ Atmosphere	ΔX_{mean}	≥ 0.75	0.9	
	Cohesion Faliure Area, %	≥ 90	100	
Adhesion after Cleaning Detergent	ΔX_{mean}	≥ 0.75	0.82	
	Cohesion Faliure Area, %	≥ 90	98	
Remarks: ΔX_{mean} means the specific value of the Adhesion Strength after Aging and that at standard condition.				

♦ INSTALLATION

For structural glazing application, TG-SEALANT MF899 Silicone Structural Sealant should be factory-applied. Factory application helps ensure optimal sealing conditions and performance. Job-site application should only be carried out for remedial work, or when the glazing design does not allow otherwise.



♦ JOINT DESIGN AND DIMENSIONS

As a general rule, structural sealant joints made with TG-SEALANT MF899 Silicone Structural Sealant should have a width between 6mm and 15mm. However, the exact width is determined by the structural calculations. The width (dimension) of the structural sealant joint should also be calculated to accommodate thermal and dynamic movements but as a rule should not be less than 6mm and ideally in a 3:1 ratio (width:depth).

Table.2 Joint Design for Sealant Application

Depth (mm)	Width (mm)					
	6	9	12	15	20	25
6	16.4	10.9	8.2	6.5	4.9	3.9
9	N.R	7.3	5.4	4.3	3.2	2.6
12	N.R	N.R	4.1	3.2	2.4	1.9

♦ APPLICABLE STANDARDS

- ASTM C920
- ETAG 002
- GB 16776
- JC/T 475

♦ APPLICATION METHODS

Install the backing materials, setting blocks and spacer tapes as specified. Apply TG-SEALANT MF899 in a continuous operation using positive pressure to properly fill and seal the joint. Tool the sealant with slight pressure to spread it against the backing materials and the joint surfaces. A tool with a concave profile is recommended to keep the sealant within the joint.

OPTIMAL GLAZING CONDITIONS

Ideally, all glazing should be done in- factory and within the following conditions of temperature and humidity:

Temperature conditions : 5°C to 40 °C.

Humidity conditions : 40% to 95%

Recommended temperatures range: 15°C and 30°C .

Any combination of the above conditions will ensure a cure schedule sufficient to allow transportation of the glazed modules within 21 days, depending on joint configuration. Consult TG-SEALANT for specific advice.

PREPARATORY WORK / INSTALLATION

Sealant may not adhere or maintain long-term adhesion to substrates if the surface is not prepared and cleaned properly before sealant application . Using proper materials and following prescribed surface preparation and cleaning procedures is vital for sealant adhesion . TG-SEALANT can provide quality control information and suggestions to user upon request.

- Use clean, fresh solvent as recommended by the sealant manufacturer 's test report. When handling solvents , refer to manufacturer 's MSDS for information and handling, safety and personal protective equipment. Isopropyl Alcohol (IPA) is commonly used and has proven useful for most substrates encountered in SSG systems.

- Use clean, white cloths free of lint or other lint-free wiping materials.

- Use a clean, narrow blade putty knife when tooling structural sealant in the cavity .

- Use primer when required.

PRIMER

TG-SEALANT MF899 Silicone Structural Sealant will bond to many clean surfaces without primer . For difficult to bond substrates , the use of a primer should be evaluated .When properly used, primers help assure strong and consistent adhesion to surfaces that maybe difficult to bond . Most primers are blend or organic and inorganic chemicals , resins and solvents . Never apply primer to glass sur face.

MASKING AND TOOLING

Areas adjacent to joints may be masked to ensure neat sealant lines. Do not allow masking tape to touch clean surfaces to which the sealant is to adhere . Tooling should be completed in one continuous stroke within 5 minutes after sealant application and before a skin forms. Remove masking tape immediately after tooling and before the sealant has started to form a skin .

CLEANING PROCEDURES

- Remove all loose material (such as dirt and dust) , plus any oil , frost or other contaminants from the substrates to which the structural silicone will be adhered .

- Do not use detergent to clean the substrate as residue may be left n the surface.

- Clean the substrates receiving the sealant as follows: Using a two-rag wipe technique . Wet one rag with solvent and wipe the surface with it, then use the second rag to wipe the wet solvent from the surface before it evaporates. Allowing solvent to dry on the surface without wiping with a second cloth can negate the entire cleaning procedure because the contaminants may be re-deposited as the solvent dries.

- When cleaning deep , narrow joints , wrap the cleaning cloth around a clean, narrow-blade putty knife . This permits force to be applied to the clean surface.

- Clean only as much area as can be sealed in one hour. If cleaned areas are again exposed to rain or contaminants, the surface must be cleaned again .

♦ LIMITATIONS

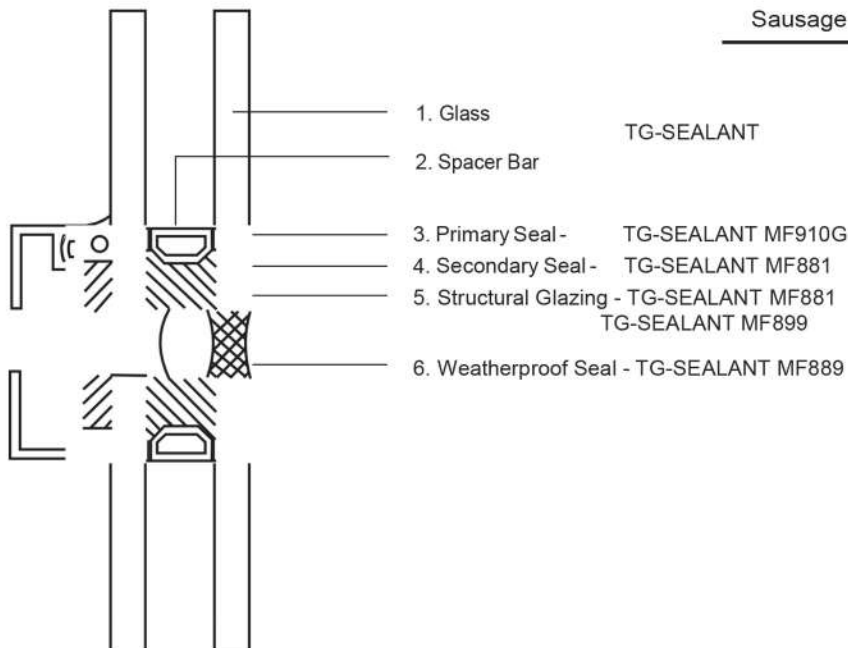
TG-SEALANT MF899 should not be used for structural applications without the prior written approval of TG-SEALANT QC Department. Each project should be specifically and separately approved by TG-SEALANT .

Project specific approval involves the following prerequisites :

- Joint dimension and print reviews.
- Successful laboratory adhesion and compatibility testing to all building components.
- Observance of professional sealant application and workmanship standards.
- Users should always consult TG-SEALANT Technical Service Department for adhesion recommendation.

TG-SEALANT shall not be held liable for any possible claims arising from structural glazing use of TG-SEALANT MF899 for projects which have not been specifically approved by TG-SEALANT .

For projects which have been approved , TG-SEALANT will issue a structural adhesion warranty on a case by case basis at the user's request. It is the user's exclusive responsibility to ensure project compliance with local building regulations . Because of the risk of incompatibility, TG-SEALANT MF899 should not come into contact with , or be exposed to sealants that liberate acetic acid. This product is neither tested nor represented as suitable for medical or pharmaceutical uses.



♦ FIRST AID INFORMATION

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist , get medical attention . **Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Wash contaminated clothing and clean shoes before reuse. **Inhalation:** Remove person to fresh air . If signs/symptoms develop, get medical attention. **If swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give person two glasses of water . Never give anything by mouth to an unconscious person. **Keep out of reach children.** Refer to Material Safety Data Sheet (MSDS) and Technical Data Sheet(TDS) for details. **Emergency Telephone Number:** +86 371 67982270

♦ COLORS

Black/ Grey/ White/ Clear

♦ STORAGE

12 months from the date of manufacture, store in a low moisture, dark place below 30 °C in the original unopened packing.

♦ PACKAGING

Cartridge: 300 ml / 25 pcs/carton

Sausage: 592 ml / 20 pcs/carton

MF890

Silicone Sealant

RTV, Neutral, One-Part Silicone Sealant

◆ DESCRIPTION / APPLICATIONS

MF890 Silicone Sealant is a one-part, RTV neutral-cure, architectural grade sealant. It easily extrudes in any weather and cures at ambient temperature by reaction with moisture in the air to form a durable, flexible silicone rubber seal. SILANDE MF890 may also be used to seal for housing window and door, freight container, car glass, metal cladding, ducting and interior sealing in building and housing, also designed for use in sealing for general glazing and showroom glazing and weatherproofing applications.

◆ TYPICAL PERFORMANCE

- Excellent adhesion to a wide range of substrates including coated glass, galvanized steel, masonry, anodized and polyester paint coated aluminium and stainless steel, and other porous and non-porous substrates.
- Ideal for expansion, connection, perimeter and other movement joints.
- Suitable for use on extension/compression movement capability of up to $\pm 25\%$ of the original joint width.
- Excellent temperature stability: -60°C to 180°C .
- High level of mechanical properties.
- High elasticity and high modulus.
- Resistant to ozone.

◆ TECHNICAL DATA - TYPICAL PROPERTIES

TEST ITEMS	TECHNICAL DATA	TEST RESULT	STANDARD
Test Conditions: T (23\pm2)$^{\circ}\text{C}$, (50\pm5)% R.H.			
Density, g/cm ³	—	1.49	GB/T 13477.2
Extrusion Property, ml/min	≥ 80	285	GB/T 13477.3
Sag, mm	≤ 3	0	GB/T 13477.6
Tack-free Time, h	≤ 3	2.5	GB/T 13477.5
Curing Time, d	—	7 ~ 14	—
Range of Application Temperature, $^{\circ}\text{C}$	—	5 ~ 40	—
Test Conditions: 28d placed at T (23\pm2)$^{\circ}\text{C}$, (50\pm5)% R.H.			
Hardness, Shore A	20 ~ 60	53	GB/T 531.1
Elastic Recovery, %	≥ 80	90	GB/T 13477.17
Range of Temperature Resistance, $^{\circ}\text{C}$	—	-60 ~ 180	—
Weight Loss Rate, %	≤ 10	3.1	GB/T 13477.19
Modulus at 100% Elongation, MPa	—	0.8	GB/T 13477.8
Elongation at Break, %	—	135	—
Tensile Strength, Mpa	—	1.2	—

◆ APPLICABLE STANDARDS

- ASTM C920, Type S, Grade NS, Class 25
- China Specification: GB/T 14683 G,F 25HM

◆ LIMITATIONS

- MF890 is not suitable for structural glazing use.
- MF890 should not be applied to: DO NOT USE when application surface temperatures below 4°C or exceed 50°C,. Surface which will be painted, as painting over rubber is not recommended. Do not use water for tooling and do not apply to wet or damp surface. On surfaces that are continuously immersed in water.

◆ PREPARATION INSTRUCTION

- For good adhesion, a clean, dry and grease free surface is necessary. All contaminants, impurities, or other adhesion inhibitor (such as moisture/frost, oils, old sealant, soaps and other surface treatment, etc.) must be removed from the surfaces to which the sealant is intended to adhere.
- For cleaning, a solvent-dampened clean rag usually produces the desired result. Isopropyl Alcohol (IPA) is commonly used solvent and had proven useful for most substrates.
- The use of masking tape is recommended where appropriate to ensure a neat job and to protect adjoining surfaces from over-application of sealant. Masking tape should be removed immediately after tooling the sealant and before the sealant begins to skin over (tooling time).
- Extrude with manual and pneumatic sealant gun, cut tip to desired bead size, puncture seal in nozzle and remove metal seal on end of cartridge before placing cartridge in caulking gun. Make bond before the product skins. Adhesive sealant must be used within 30 mins after inner seal is punctured. Good ventilation is necessary in the process of installation and curing. To ensure the best adhesive properties, do a test on adhesion before using in batches and peeling adhesion tests at regular intervals are also required while carrying out installation.

◆ APPLICATION METHODS

MF890 may not adhere or maintain long term adhesion to substrates if the surface is not prepared and cleaned properly before sealant application. Using proper materials and following prescribed surface preparation and cleaning procedures is vital for sealant adhesion. TG-Sealant MF890 is easily dispensed directly from cartridges and foil sausage using standard caulking guns or air operated guns. Mixing, heating and refrigeration are not required.

◆ FIRST AID INFORMATION

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention. **Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Wash contaminated clothing and clean shoes before reuse. **Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention. **If swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give person two glasses of water. Never give anything by mouth to an unconscious person. **Keep out of reach children.** Refer to Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) for details.

◆ SHELF LIFE AND STORAGE

12 months from the date of manufacture, store in a low moisture, dark place below 30°C in the original unopened packing.

◆ COLORS

Black / Grey / White / Clear
Custom colors may be ordered to match
virtually any substrate.



◆ PACKAGING

Cartridge: 300 ml / 25 pcs/carton

Sausage: 592 ml / 20 pcs/carton



♦ LIMITATIONS

- TG-SEALANT MF890 is not suitable for structural glazing use.
- TG-SEALANT MF890 should not be applied to: DO NOT USE when application surface temperatures below 4°C or exceed 50°C,. Surface which will be painted , as painting over rubber is not recommended.

Do not use water for tooling and do not apply to wet or damp surface.

On surfaces that are continuously immersed in water.

♦ PREPARATION INSTRUCTION

- For good adhesion, a clean , dry and grease free surface is necessary. All contaminants, impurities, or other adhesion inhibitor (such as moisture/ frost, oils, old sealant, soaps and other surface treatment, etc.) must be removed from the surfaces to which the sealant is intended to adhere.
- For cleaning, a solvent-dampened clean rag usually produces the desired result. Isopropyl Alcohol (IPA) is s commonly used solvent and had proven useful for most substrates.
- The use of masking tape is recommended where appropriate to ensure a neat job and to protect adjoining surfaces from over-application of sealant. Masking tape should be removed immediately after tooling the sealant and before the sealant begins to skin over (tooling time).
- Extrude with manual and pneumatic sealant gun, cut tip to desired bead size, puncture seal in nozzle and remove metal seal on end of cartridge before placing cartridge in caulking gun. Make bond before the product skins. Adhesive sealant must be used within 30 mins after inner seal is punctured. Good ventilation is necessary in the process of installation and curing. To ensure the best adhesive properties, do a test on adhesion before using in batches and peeling adhesion tests at regular intervals are also required while carrying out installation.

♦ STORAGE

12 months from the date of manufacture , store in a low moisture, dark place below 30 °C in the original unopened packing.

♦ COLORS

Black/ Grey/ White/ Clear
Custom colors may be ordered to match virtually any substrate .

♦ APPLICATION METHODS

TG-SEALANT MF890 may not adhere or maintain long term adhesion to substrates if the surface is not prepared and cleaned properly before sealant application . Using proper materials and following prescribed surface preparation and cleaning procedures is vital for sealant adhesion. TG-SEALANT MF890 is easily dispensed directly from cartridges and foil sausage using standard caulking guns or air operated guns. Mixing, heating and refrigeration are not required.

♦ FIRST AID INFORMATION

Eye Contact: Flush eyes with large amounts of wa ter . If signs/symptoms persist, get medical a tt enti on. **Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Wash contaminated clothing and clean shoes before reuse. **Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical att ention . **If swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give person two glasses of water. Never give anything by mouth to an unconscious person. **Keep out of reach children.** Refer to Material Safety Data Sheet (MSDS) and Technical Date Sheet(TDS) for detai l s. **Emergency Telephone Number:** +86 371 67982270

♦ PACKAGING

Cartridge: 300 ml / 25 pcs/carton

Sausage: 592 ml / 20 pcs/carton





CONSTRUCTION SEALANTS

Insulating Glass

◆ MF840 Two Component Polysulfide Sealant for Insulating Glass	-----	31
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◆ MF910S Butyl Thermoplastic Spacer for IG	-----	39
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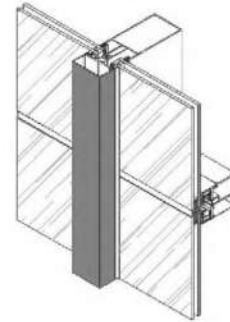
Joint Design--Correct Planning is Essential

In structural glazing, the adhesive joints should be planned and arranged according to optical requirements, but they should also take into consideration changes in the adjacent parts under the effects of temperature and the movement capability of the silicone sealant. The joint design thus combines shape with functionality.

Important

Seven criteria must be observed:

1. The joint seal must be able to freely accommodate tensile and compressive movements between the joint edges. Three-sided adhesion of the sealant must be avoided, because it inevitably results in damage to the joint.
2. The ratio of joint bite C_s to joint thickness t_s should be at least 1:1 and at most 3:1.
3. The minimum joint bite is always 6mm, irrespective of the calculated value.
4. The joint thickness t_s should be at least 6mm.
5. Always round the result up, never down.
6. The structural joints must not be subjected to external loads as a result of forces such as settlements, shrinkage, creep or permanent stress caused by gaskets etc.



Calculating the joint bite C_s

Joint bite C_s as a function of the wind load in supported constructions:

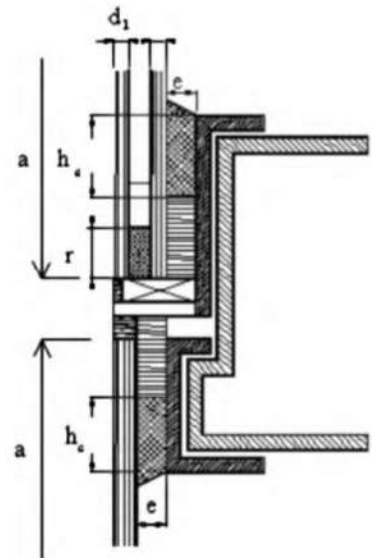
$$C_s = \frac{wa}{2000 f_1}$$

C_s -- minimum bite of the adhesive joint (mm)
 a -- length of the short edge of the glass pane or of the element (mm); with irregularly dimensioned glass element: longest of the short glass panes ¹⁾

w -- maximum wind load to be received (kN/mm^2).

f_1 -- maximum adhesive stress for supported construction, 0.2 N/mm^2 .

¹⁾ If the sides of the glass panes are of varying length, then the length of the longest side is used for the calculation.



Calculating the joint thickness t_s

$$t_s \geq \frac{us}{\sqrt{\delta(2+\delta)}} \quad ①$$

$$us = \theta hg \quad ②$$

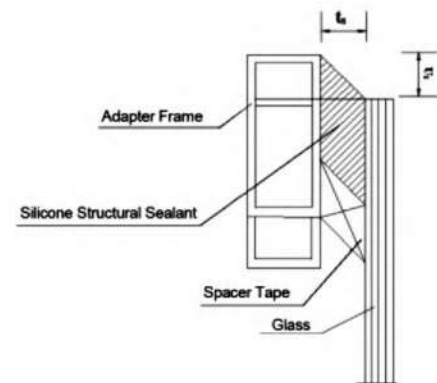
t_s -- minimum thickness of the adhesive joint (mm). us -- relative displacement in length of glass panel to adapter frame (mm), relative displacement yield from support construction lateral displacement can be calculated according

to formula ②, take into account displacement from temperature difference if necessary.

θ -- elastic layer displacement angle limit value (rad) of support construction subject to wind load standard value.

hg -- glazing height = vertical dimension a or b .

-- adhesive deformation tolerance, elongation subject to tensile stress of 0.14 kN/mm^2 .



Silicone Structural Sealant Joint Thickness Drawing

MF840

Two Component Polysulfide Sealant for Insulating Glass

Secondary Sealant for the Manufacturing of Insulating Glass

♦ APPLICATION FIELD

- Secondary sealant for the manufacturing of insulating glass.
- Two component, room temperature cured polysulfide sealant.
- Excellent adhesion to most building materials such as glass, aluminum alloy, and galvanized- steel, stainless steel etc.
- Solvent free, primers are not required.
- High strength and elasticity.

♦ APPLICABLE STANDARDS

- EU Specification: EN1279- part 2, 3, 4
- China Specification: GB/T 29755
- IGCC-IGMA Approved.

♦ TECHNICAL DATA - TYPICAL PROPERTIES

COLOR		Component A (base)	White
		Component B (catalyst)	Black
		Mixture (A+B) :	Black
MIXING RATIO		10:1(by weight)	
POT LIFE (23 °C)		20 min. Pot life is influenced by room conditions.	
HARDING TIME		2-3 hrs, depending from pot life.	
DENSITY	Com A [23 °C]	approx. 1.80	[g/cm ³]
	Com B [23 °C]	approx. 1.55	[g/cm ³]
VISCOSITY	Com A [23 °C]	490 Pa.s	
	Com B [23 °C]	120 Pa.s	
FINAL HARDNESS(Shore A)		35-45 [Shore A]	
MOISTURE VAPOUR TRANSMISSION (MVTR)		11 gr/m ² .24hrs.2mm	EN 1279/4
GAS PERMEATION(Ar)		6.63 x 10 ⁻³ [gr/m ² .hrs]	EN 1279/4
TENSILE ADHESION STRENGTH		approx. 0.70 [MPa]	
VOLATILE CONTENT(A+B)		< 1.0 %	
FOGGING		Without visual fogging	
Test Condition: As cured after 14 days at Temperature 23 °C and 50% R.H.			

MIXING AND DISPENSING INSTRUCTIONS

TG-SEALANT MF840 has to be mixed homogeneously and air-bubble free in the correct ratio .

TG-SEALANT MF840 should be mixed in a ratio of 10:1 base to curing agent by weight , or equivalent 8.6:1 by volume for optimal properties . At this mix ratio, the sealant typically exhibits a working time of 20-30 mins and allows units to be handled within 6-8 hours . Slight variations in mixing ratio can be tolerated , but these should not exceed 100:6 to 100:12 by weight to ensure minimum properties are obtained.

Mixing Ratio by Weight	100:6	100:8	100:10	100:12
Mixing Ratio by Volume	4.3:1	10.7:1	8.6:1	7.1:1

CURING

When mixing TG-SEALANT MF840 A base+ TG-SEALANT MF840 B catalyst at approximately a 10:1 weight ratio , the material will become tack-free at about 25-35 mins under ambient conditions of at 23°C, 50% R.H. After 3 days IGU can be transport to project, Development of full properties requires full evaporation of cure by-products and will normally be achieved within 5 days (can be start for installation) . Full properties will take additional time in colder climates.

It is important when selecting components for a project that adhesion and compatibility tests are carried out, and found to be successful, before the project starts.

SHELF LIFE AND STORAGE

12 months from the date of production below 30°C.

PACKAGING

Com A 190L/drum	Com A 30 kg/pail	Com A 4 kg/pail
Com B 19L/pail	Com B 3.6 kg/pail	Com B 0.48 g/bag

FIRST AID INFORMATION

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention. **Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Wash contaminated clothing and clean shoes before reuse. **Inhalation:** Remove person to fresh air . If signs/symptoms develop , get medical attention. **If swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give person two glasses of water . Never give anything by mouth to an unconscious person. **Keep out of reach children.** Refer to Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) for details .



MF910G

Hot Applied Butyl Sealant for Insulating Glass

Primary Sealant for the Manufacturing of Insulating Glass

◆ APPLICATION FIELD

- One component, solvent free, non-fogging, permanently plastic butyl sealant, formulated for primary sealing of insulating glass units.
- It can keep its plastic and sealing properties in a wide temperature range.
- Excellent adhesion properties on glass, aluminum alloy, galvanized steel and stainless steel.
- Minimum moisture vapour and gas permeation.
- Excellent temperature stability: - 30°C to 80°C.



◆ TECHNICAL DATA - TYPICAL PROPERTIES

TEST ITEMS	TEST RESULTS	TEST STANDARD
Base	Polyisobutylene (PIB)	—
Color	Black, White, Grey, Clear	—
Appearance	Solid mass	JC/T 914
Density	appro x.1.05 [g/cm ³]	GB/T 1033.1
Shear Strength	0.24 MPa	
Penetration (1/10mm)	25°C 42	JC/T 914
	130°C 246	
Volatile Content	Max. 0.02 %	
Fogging	Without visual fogging	—
Moisture Vapour Transmission Rate(MVTR)	0.25 [gr/m ² . 24hrs. 2mm]	EN1279 - 4
Gas Permeation Rate(Ar)	1.40 x 10 ⁻³ [gr/m ² . hrs]	EN1279 - 4

◆ SURFACE PREPARATION

GLASS / SPACER - To achieve good adhesion, the glass/ spacer surface must be clean, dry and free of any residue.

◆ APPLICATION INSTRUCTIONS

MF910G shall be applied at a temperature between 100 °C and 150 °C using appropriate extruders.

◆ APPLICABLE STANDARDS

- EU Specification: EN1279 - part 4
- China Specification: JC/T 914
- IGCC-IGMA Approved.

◆ SHELF LIFE AND STORAGE

24 months stored in cool, dry and ventilated places.

◆ PACKAGING

7 kg/barrel (Φ 190mm)
6 kg/barrel (Φ 190mm)
190 kg/drum (Φ 571.5mm)

◆ FIRST AID INFORMATION

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention. **Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Wash contaminated clothing and clean shoes before reuse. **Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention. **If swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give person two glasses of water. Never give anything by mouth to an unconscious person. **Keep out of reach children.** Refer to Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) for details.

MF910

Hot Applied Butyl Sealant for Insulating Glass

Primary Sealant for the Manufacturing of Insulating Glass

◆ APPLICATION FIELD

- One component, solvent free, non-fogging, permanently plastic butyl sealant, formulated for primary sealing of insulating glass units.
- It can keep its plastic and sealing properties in a wide temperature range.
- Excellent adhesion properties on glass, aluminum alloy, galvanized steel and stainless steel.
- Minimum moisture vapour and gas permeation.
- Excellent temperature stability: - 30°C to 80°C.



◆ TECHNICAL DATA - TYPICAL PROPERTIES

TEST ITEMS	TEST RESULTS	TEST STANDARD
Base	Polyisobutylene (PIB)	—
Color	Black	—
Appearance	Solid mass	GB/T 1033.1
Density	1.1/1.25 [g/cm ³]	JC/T 914
Shear Strength	0.21 MPa	
Penetration (1/10mm)	25°C 40	JC/T 914
	130°C 290	
Volatile Content	Max. 0.02 %	
Fogging	Without visual fogging	—
Moisture Vapour Transmission Rate (MVTR)	0.26 [gr/m ² . 24hrs. 2mm]	EN1279 - 4
Gas Permeation Rate (Ar)	1.30 x 10 ⁻³ [gr/m ² . hrs]	EN1279 - 4

◆ SURFACE PREPARATION

GLASS / SPACER - To achieve good adhesion, the glass / spacer surface must be clean, dry and free of any residue.

◆ APPLICATION INSTRUCTIONS

SILANDE MF910 shall be applied at a temperature between 100 °C and 150 °C using appropriate extruders.

◆ APPLICABLE STANDARDS

- EU Specification: EN1279 - part 4
- China Specification: JC/T 914

◆ SHELF LIFE AND STORAGE

24 months stored in cool, dry and ventilated places.

◆ PACKAGING

7 kg/barrel	(Φ 190mm)
6 kg/barrel	(Φ 185mm)
5 kg/barrel	(Φ 160mm)
2 kg/barrel	(Φ 126mm)

◆ FIRST AID INFORMATION

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention. **Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Wash contaminated clothing and clean shoes before reuse. **Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention. **If swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give person two glasses of water. Never give anything by mouth to an unconscious person. **Keep out of reach children.** Refer to Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) for details. **Emergency Telephone Number:** +86 371 67982270

MF910H

Hotmelt Sealant for Insulating Glass

Secondary Sealant for the Manufacturing of Insulating Glass

◆ DESCRIPTION

TG-SEALANT MF910H is a hot melt sealant formulated for single seal insulating glass. This product has been designed for insulating glass manufacturers running hand applied, semi- automated, and linear extruded operations.

◆ APPLICATION FIELD

- One component, solvent free, non-foaming, permanently plastic butyl sealant, formulated for secondary sealing of insulating glass units.
- It can keep its plastic and sealing properties in a wide temperature range.
- Excellent adhesion properties on glass, aluminum alloy, galvanized steel and stainless steel.
- Immediate high strength development for superior handling and transportation capabilities.
- Excellent slump resistance, resulting in reduced after-application tooling.
- Low after-application tack for easy of handling.
- Minimum moisture vapour and gas permeation.
- Excellent temperature stability: - 30°C to 80°C.

◆ TECHNICAL DATA - TYPICAL PROPERTIES

TEST ITEMS	TEST RESULTS	TEST STANDARD
Color	Black	
Consistency	100% Solid mass	
Density	Approx. 1.18 [g/cm ³]	GB/T 1033.1
Shear Strength	0.25 MPa	Q/ZZY 031
Penetration (1110mm, 25°C)	28	GB/T 4509
Volatile Content (130°C, 50 hrs)	Max. 0.02 %	
Elongation at Yield	Approx. 20%	Q/ZZY 031
Moisture Vapour Transmission Rate (MVTR)	0.39 [gr/m ² . 24hrs. 2mm]	EN1279-4
Gas Permeation Rate (Ar)	1.48 x 10 ⁻³ [gr/m ² . hrs]	EN1279-4

◆ SURFACE PREPARATION

GLASS / SPACER - To achieve good adhesion, the glass/ spacer surface must be clean, dry and free of any residue.

◆ APPLICATION INSTRUCTIONS

TG-SEALANT MF910H shall be applied at a temperature between 160 °C and 190 °C using appropriate extruders.

APPLICABLE STANDARDS

- EU Specification: EN1279 - part 4

SHELF LIFE AND STORAGE

24 months stored in cool, dry and ventilated places..

PACKAGING

6.5 kg/ box

220 kg/ drum (ct> 571.5mm)



FIRST AID INFORMATION

Eye Contact: Flush eyes with large amounts of water . If signs/symptoms persist, get medical attention .

Skin Contact: Remove contaminated clothing and shoes . Immediately flush skin with large amounts of water. Wash contaminated clothing and clean shoes before reuse.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

If swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give person two glasses of water. Never give anything by mouth to an unconscious person.

Keep out of reach children. Refer to Material Safety Data Sheet (MSDS) and Technical Data Sheet(TDS) for details.

MF910S

Butyl Thermoplastic Spacer for IG

◆ DESCRIPTION

TG-SEALANT MF910S is the ultimate warm edge spacer for the manufacturing of insulating glass units, polyisobutylene(PIB) as the base, consisting of a thermoplastic elastomer formulated with the inclusion of desiccant for drying the air space. Free of solvent, non-fogging and without sulfuration. It can keep its plasticity and sealing properties in wide temperature range and will not become harden and crack. It also has excellent resistance to air aging and perfect adhesion property to glass and rigidity. Meanwhile, it will compose an excellent anti-humidity system with elastic sealant due to its low moisture vapor transmission property.

◆ APPLICATION FIELD

TG-SEALANT MF910S is used for the manufacturing of warm edge insulating glass units with varying shapes and air space widths. The recommended secondary sealant for use is TG-SEALANT Two component MF840 Polysulfide Sealant.

◆ BASIC USE

The application surfaces must be clean, dry and free of dust and grease. Contact with any solvent, oil, or plasticizer containing glazing materials should be avoided. TG-SEALANT MF910S can be applied by extruder special for thermoplastic spacer. Its concrete condition can be achieved by adjusting temperature and pressure. The preferred range of temperature is 100°C~140°C and operating environment temperature should be 18 °C or above. It is recommended that glazing material Compatibility & Adhesion Test is necessary before use.

◆ TECHNICAL DATA - TYPICAL PROPERTIES

TEST ITEMS	TEST RESULTS	TEST STANDARD
Test Items	Typical Values	Test Standard
Color	Black	
Base	Synthetic Rubber(PIB), 100% solid.	
Specific Gravity	1.25 g/m ³	GB/T 1033.1
Shear Strength (0.5mm)	0.36 MPa	Q/ZZY 033
Penetration (1/10mm, 25°C)	25	GB/T 4509
Properties	Low moisture vapor transmission rate (MVTR), low gas permeability, low thermal conductivity.	
Moisture Vapour Transmission Rate(MVTR)	0.17 [gr/m ² . 24hrs. 2mm]	EN1279 - 4
Gas Permeation Rate(Ar)	1.80 x 10 ⁻³ [gr/m ² . hrs]	EN1279 - 4
Service Temperature	-40°C to 80°C	
Application Temperature	120°C to 140°C	

◆ APPLICABLE STANDARDS

EU Specification: EN1279 - part 4

◆ SHELF LIFE AND STORAGE

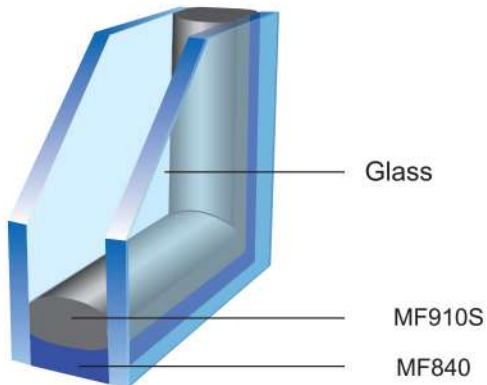
12 months stored in cool, dry and ventilated places below 30°C in the original unopened packing.

◆ PACKAGING

Steel drum: 220 kg/drum (Φ 571.5mm)

◆ TRANSPORTATION

Non-dangerous, can be transported by train, ship, automobile and plane.



MF910SG Thermoplastic Spacer has excellent adhesion and compability with Polysulfide Sealant .

MF910SG

Thermoplastic Spacer for IG

◆ DESCRIPTION

TG-SEALANT MF910SG is the ultimate warm edge spacer for the manufacturing of insulating glass units, polyisobutylene(PIB) as the base, consisting of a thermoplastic elastomer formulated with the inclusion of desiccant for drying the air space. Free of solvent, non-fogging and without sulfuration. It can keep its plasticity and sealing properties in wide temperature range and will not become harden and crack. It also has excellent resistance to air aging and perfect adhesion property to glass and rigidity. Meanwhile, it will compose an excellent anti-humidity system with elastic sealant due to its low moisture vapor transmission property.

◆ APPLICATION FIELD

TG-SEALANT MF910SG is used for the manufacturing of warm edge insulating glass units with varying shapes and air space widths. The recommended structural secondary sealant for use with TG-SEALANT Two Component, MF840 Polysulfide Sealant, MF881Silicone Structural Sealant, MF882 Silicone Sealant for IG.

◆ BASIC USE

The application surfaces must be clean, dry and free of dust and grease. Contact with any solvent, oil, or plasticizer containing glazing materials should be avoided. TG-SEALANT MF910SG can be applied by extruder special for thermoplastic spacer. Its concrete condition can be achieved by adjusting temperature and pressure. The preferred range of temperature is 100°C-140°C and operating environment temperature should be 18 °C or above. It is recommended that glazing material Compatibility & Adhesion Test is necessary before use.

◆ TECHNICAL DATA - TYPICAL PROPERTIES

Physical Properties		
Test Items	Typical Values	Test Standard
Color	Black	
Base	Synthetic Rubber(PIB), 100% solid.	
Specific Gravity	1.25 g/m ³	GB/T 1033.1
Shear Strength (0.5mm)	0.5 MPa	Q/ZZY 033
Penetration (1/10mm, 25°C)	25	GB/T 4509
Properties	Low moisture vapor transmission rate (MVTR), low gas permeability, low thermal conductivity.	
Moisture Vapour Transmission Rate(MVTR)	0.17 (gr/m ² . 24hrs. 2mm]	EN1279-4
Gas Permeation Rate(Ar)	1.80 x 10 ⁻³ [gr /m ² . hrs]	EN1279-4
Tc Value	4.3%	EN1279-2
Service Temperature	- 40°C to 80°C	
Application Temperature	120°C to 140°C	

♦ APPLICABLE STANDARDS

EU Specification: EN1279 - part 2,3,4

♦ SHELF LIFE AND STORAGE

12 months when stored as above recommended.

♦ STORAGE

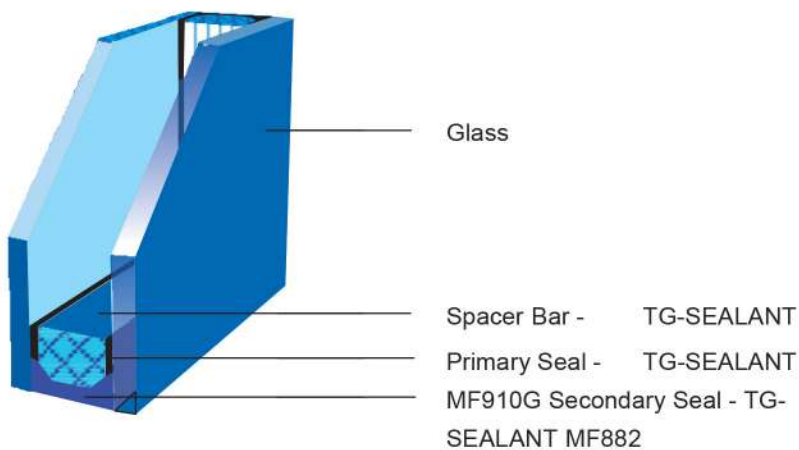
Store material in original unopened packaging at temperatures between -10°C - 30°C.

♦ PACKAGING

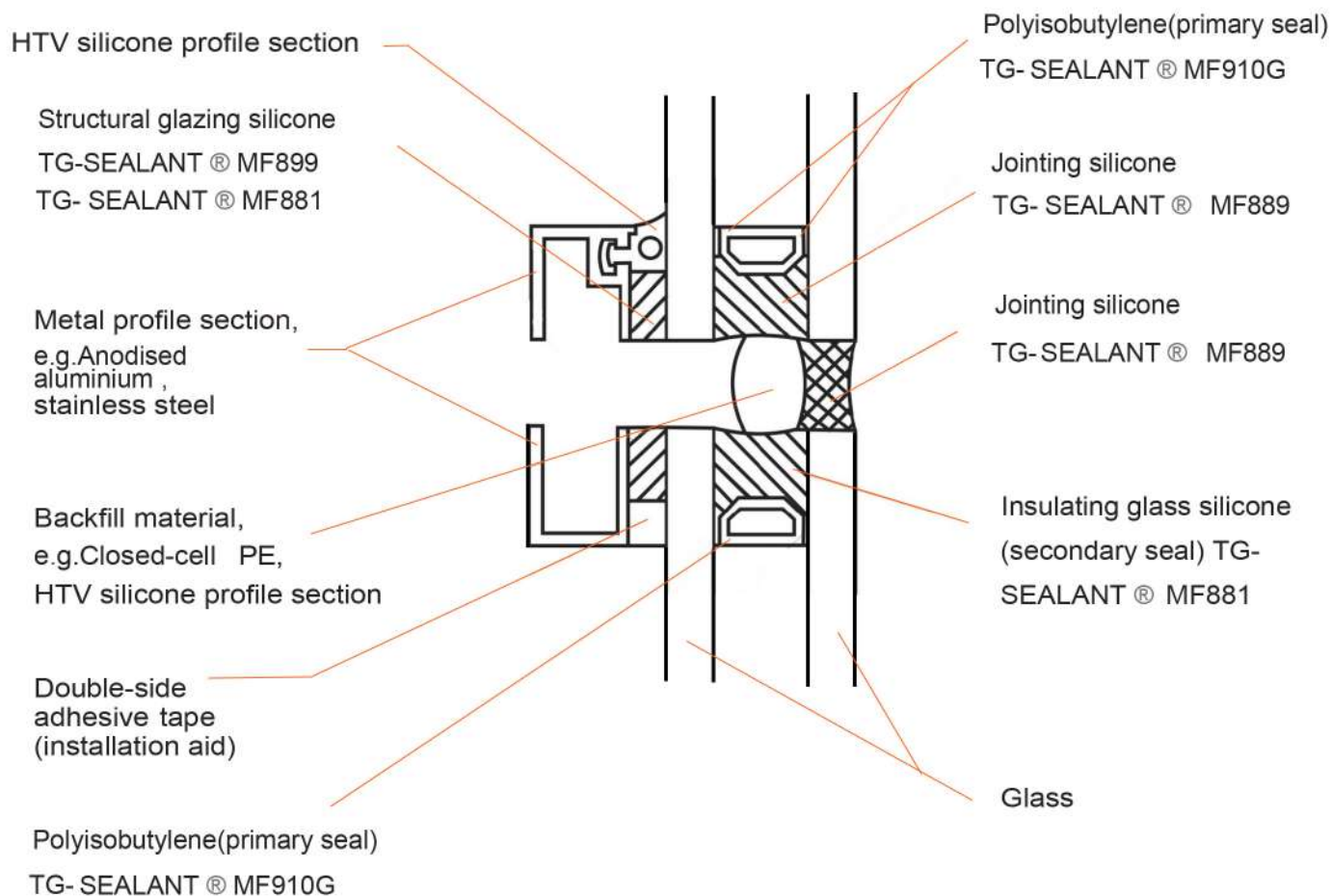
Steel drum: 220kg/drum (<l> 571.5mm)

♦ TRANSPORTATION

Non-dangerous, can be transported by train, ship, automobile and plane.



Structural Glazing with Symmetric Insulating Glass Unit



- MF881** **Two Component Silicone Structural Sealant**
- MF899** **Silicone Structural Sealant**
- MF889** **Silicone Weatherproofing Sealant**
- MF910G** **Hot Applied Butyl Sealant for I.G**