SILANDE®

MF203
Polyurethane Sealant

DESCRIPTION

Mf203 is one component, moisture cured polyurethane based sealant direct bonding between rear & side glass and the body of vehicles, which cures on exposure to atmospheric moisture to form an elastic product. The curing time depends on temperature and humidity, as well as joint depth. Curing time can be shortened by increasing temperature and humidity. MF203 is manufactured in accordance with the ISO 9001/14001 ISO/TS 16949 Quality Assurance System and the Responsible Care Program.

APPLICATION AREAS

MF203 is mainly applied to direct glazing to rear and side windows of passenger cars, buses, trucks and railway coach. Joint sealing of watercraft, container and refrigerator equipment. Suit for direct bonding applications in both OEM and repair markets.

CHARACTERISTICS

- One component, moisture cured at room temperature.
- Good working characteristics.
- Excellent adhesion and elastic performance.
- Resistance to aging, vibration and low temperature.
- No corrosive to substrates.

TECHNICAL PRODUCT DATA

Appearance	Ropy paste consistency
Chemical base	1-C polyurethane
Color	Black
Cure mechanism	Moisture curing
Density (uncured)	1.2 g/cm^3 approx.
Non-sag property	Excellent
Application temperature	+10℃ ~ +35℃
Application time	30 mins
Tack free time	55 mins
Shrinkage	10% approx.
Hardness-Shore A	45 approx.
Elongation at break	500% approx.
Tensile strength	4.5 N/mm^2 approx.
Tensile lap-shear strength	3.5 N/mm^2 approx.
Service temperature	-40℃ ~ +90℃

(T:23℃±2 H:50%±5)

APPLICATION

1. Surface cleaning The surfaces to be bonded must be clean, dry and free from grease, oil, wax, dust and other contaminants. Glass and ceramic coatings as well as painted surface should be cleaned with Cleaner.
2. Priming (if necessary) Surface priming is carried out by a thin and even coating of primer MF2031on the cleaned glass. The primed area must be allowed to air dry for about 15 mins before applying MF203.
3. Application Sausage packing: Place sausage in the application gun and snip off the closure clip. Cut off the tip of the nozzle and apply the adhesive evenly on the primed places with a hand operated gun, piston-type compressed-air or battery powered gun. Carry out tooling within the tack free time of the adhesive.

LIMITATIONS

1. Compatibility test must be performed between actual substrates and adhesives to ensure the good adhesion property.
2. Recommended condition: 15-25℃, relative humidity: 40-80%. Do not apply at the temperature below 10℃ or above 35℃.
3. Do not apply on frozen surfaces or through standing water or under water.
4. Do not apply over silicones or in the presence of curing silicones.
5. Do not contact alcohol and alcohol containing solvents during curing.
6. Do not apply to glaze organic glass.

PRIMER

SILANDE MF203 Polyurethane 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 a blend or organic and inorganic chemicals, resigns and solvents. Never apply primer to glass surface.

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.

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. SILANDE 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 handing solvents, refer to manufacturer's MSDS for information and handing, safety and personal protective equipment. Isopropyl Alcohol (IPA) is commonly used and has proven useful for most substrates.

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

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

• Use primer when required.

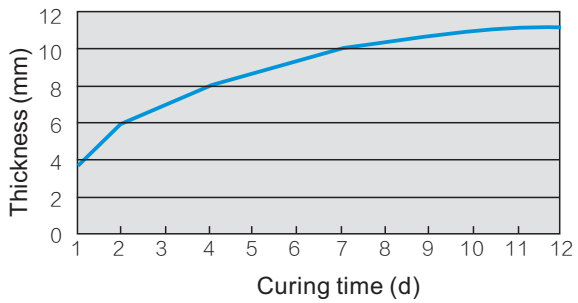
CLEANING PROCEDURES

- 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.

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 Date Sheet(TDS) for details. **Emergency Telephone Number:** +86 371 67982270

SILANDE MF203 Curing time evolution
（23℃/50% r. h）



TRANSPORT

Non-hazardous goods, can be transported by train, truck, ship and flight.

STORAGE

Recommended condition: temperature: 10-25℃ store in a cool, dry and ventilated place. Shelf life: 9 months in original packing.

PACKING

Cartridge: 300ml × 25pacs/case
Sausage: 600ml × 20pacs/case