

Viridian **Renew**TM Sealant & Gasket Advice

Sealant

Silicone is the most popular wet sealant used in the glazing industry. However, the use of silicone sealants presents a problem when used with Viridian **Renew**TM self-cleaning glass because silicone sealants leach material onto the surface of the glass. For normal glass this will manifest a gradual build-up of dirt adjacent to the sealant, but for Viridian **Renew**TM this has undesirable consequences. This leached material coats the surface and smothers the cleaning action of Viridian **Renew**TM. This means that an area around the edge of the glass does not self-clean.

Considerable resources has been used to find sealants which are suitable to use with Viridian **Renew**TM. The process has involved extensive testing to ensure that the sealant does not interfere with the cleaning action of Viridian **Renew**TM. This process has identified several sealants, one of which is now available in Australia.

The sealant is “Soudaseal SMX[®] 505” and is available locally from:

APTC Sealants and Adhesives
1a Roper Street
Moorabbin
VIC 3189

Phone 03 9532 0609
Fax 03 9532 0171
Email sales@aptc-adhesives-sealants.com.au

“Soudaseal SMX[®] 505” is not a silicone sealant but a MS Polymer sealant. Attached are technical data sheets which explain what it is and how to use it.

Gaskets

Gaskets are slightly more difficult to quantify as it is not only the material that needs to be considered but also the manufacturing and installation processes. Gaskets are formed by extrusion and this process requires a lubricant. A lubricant is also used sometimes during installation of the gasket to the frame. If the manufacturing or installation process for the gasket uses a lubricant which contains silicone, then the gasket will not be compatible with Viridian **Renew**TM.

EDPM or Vinyl are the most common materials used for gaskets and are materials that are compatible with Viridian **Renew**TM. However, this compatibility will be compromised by the use of any lubricants which contain silicone.

Glazing tapes

Compatible products are:

- Tremco Butyl Tape
- Tremco Polyshim Tape

Further information

Please visit viridianglass.com or freecall
1800 810 403

For Viridian disclaimer and warranty details please visit our website viridianglass.com

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Technical Data Sheet

SMX[®] 505

Revision: 19/07/2005

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Technical Characteristics:

Base	SMX [®] - technology
Consistency	Paste
Curing System	Moisture Cure
Skin Formation (*) (20°C/65% R.V.)	Ca. 10 min.
Curing Rate (*) (20°C/65% R.V.)	2 mm/24h
Hardness (DIN 53505)	20 ± 5 Shore A
Specific Gravity (DIN53479)	1,45 g/mL
Elastic recovery (ISO 7389)	> 70 %
Maximum Deformation	20 %
Temperature Resistance (fully cured)	-40°C to +90°C
Elasticity Modulus 100 % (DIN 53504)	0,30 N/mm ²
Tear Strength (DIN 53504)	0,89 N/mm ²
Elongation at break (DIN 53504)	500 %

(*) these values may vary depending on environmental factors such as temperature, moisture, and type of substrates

Product:

Soudal SMX[®] 505 is a high quality single component glazing sealant with high adhesive strength. It is based on SMX[®] - technology, chemically neutral and fully elastic and has been approved according to ISO 11600 G 20 LM.

Applications:

Glazing sealant between glass and all usual frame materials: timber, aluminium, steel, PVC. Specially developed for use on self-cleaning glass (Bioclean[®] and Activ Glass[®])

Characteristics:

- High bond strength on nearly all surfaces
- Can be painted with most water based paints (see remarks)
- Excellent adhesion on glass, wood, metal and PVC
- Ecological advantages – free from Isocyanates, solvents, halogens and acids
- Flexible elastic rubber – movement accommodation up to 20%
- Straightforward application even in adverse conditions
- No bubble formation within sealant (in high temperature and humidity applications)
- Primerless adhesion on many substrates (consult our Technical Service for more details)
- Easy to tool and finish with soapy water
- Good extrudability even at low temperatures
- Colour stable and UV resistant
- Minimal health and safety considerations

Packaging:

Colour: white, black
Packaging: cartridge 290mL

Shelflife:

12 months in unopened packaging in a cool and dry storage place at temperatures between +5°C and +25°C.

Resistance to chemical agents:

Good resistance to water, aliphatic solvents, mineral oils, grease, diluted inorganic acids and alkalis
Poor resistance to aromatic solvents, concentrated acids, chlorinated hydrocarbons

Remark: The directives contained in this documentation are the result of our experiments and of our experience and have been submitted in good faith. Because of the diversity of the materials and substrates and the great number of possible applications which are out of our control, we cannot accept any responsibility for the results obtained. In every case it is recommended to carry out preliminary experiments.

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Fax: +32 (0)14-42.65.14

2300 Turnhout, Belgium
www.soudal.com

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Substrates:

Nature: clean, dry and free of dust and grease
Priming: Surface Activator may be used on non-porous surfaces. Surface Activator may improve adhesion on metal substrates like (coated) aluminium. A preliminary test on this substrate is recommended.
We recommend preliminary compatibility tests prior to application
For instructions on the installation and use of this product on self-cleaning glass please consult the installation instructions of the concerned glass manufacturers

Application:

Method: Manual- or pneumatic caulking gun
Application temperature: +5°C until +35°C
Cleaning: White Spirit or Surface Cleaner
Immediately after application and before curing
Tooling: can be tooled with soapy solution before skin formation
Repair with: Same material

Health- and Safety Recommendation:

Apply the usual industrial hygiene
See packaging for more information

Remarks:

- Soudal SMX® 505 can be painted with water based paints. However due to the large number of paints and varnishes available we strongly suggest a compatibility test before application
- Remove all traces of soap (tooling) because it will harm the adhesion of the paint onto the sealant
- The use of metal spatula or other hard tooling equipment on Self-cleaning glass is not recommended in order to prevent the damaging of the active layer of the glass
- We recommend the use of Soudaseal 215 LM for all perimeter joints (between wall and window profiles) in applications where Self-cleaning glass is used
- SMX 505 should never be used in applications where stagnant water can occur. We therefore always recommend a minimum pitch of the substrates of 10°

Self Cleaning Glass:

Soudal SMX® 505 allows for a primer-free application on self-cleaning-glass. (e.g. Activ Glass® by Pilkington and Bioclean® by Saint-Gobain Glass). All naturally and accelerated weathering tests performed up till now show an excellent compatibility and adhesion of the product on the self-cleaning-glass. Our growing experience with this type of glass will also allow for a more accurately predicted long-term functionality of the product onto this type of glass

Norms:

Soudal SMX 505 has been tested and approved according to:

- ISO 11600-G-20LM (IFT Prüfbericht 504 28498/2)
- ISO 11431 on SGG Bioclean® and Activ Glass® (IFT Prüfbericht 504 28498/3)

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