



MS-604

MS HYBRID SEALANT – HIGH MODULUS

x'traseal®

TECHNICAL DATA SHEET

REV: 08

Date: 17 April 2026

DESCRIPTION

MS-604 is based upon hybrid silyl modified polyether technology. It is an odorless, one part adhesive sealant suitable for all kind of industrial applications even in adverse conditions. It has high bond strength and primerless adhesion on most type of substrates or moist surfaces. It can be painted with most kind of paints and has superior weatherability in all climates. It has a wide temperature range and will not form bubble within sealant even in a high humidity condition. It is an ideal product for all in one indoor and outdoor bonding and sealing purposes.

FEATURES

- ◆ High modulus and high Shore A hardness
- ◆ Permanently flexible & non-shrinkage
- ◆ Non-bleeding & crack resistant
- ◆ No visible stain even on porous substrate
- ◆ Free of isocyanate, solvent, acid and silicone oil
- ◆ Excellent UV and weather resistance
- ◆ No bubble formation within sealant
- ◆ Can be applied on damp surfaces
- ◆ Primerless adhesion on most substrates
- ◆ Fungus is not easily grow on sealant

USES

MS-604 is specially developed as a universal sealant for sealing construction connection and expansion joint on most building materials such as concrete, brickwork, aluminium, stainless / mild or galvanized steel, door or metal frames, and ceramics. It's also suitable for sealing and bonding in automotive industry.

Due to a large variety of different coatings and substrates, we recommend preliminary compatibility tests prior to application to achieve desirable results.

JOINT DESIGN

The specified sealant bead size should be calculated to comply with the compression and extension capabilities of the sealant in relation to the anticipated joint width due to expansion and contraction.

MS-604 has a movement accommodation factor (MAF) of 20%. The theoretical minimum joint width may be calculated

$$W = \frac{M}{MAF/100} + M$$

M = expected maximum working movement of joint

MAF = movement accommodation factor of sealant

A minimum of 6 mm substrate sealant bond is necessary to ensure adequate adhesion and accommodate movement. Joint depth should not less than 6 mm and not greater than 12 mm. The optimal ratio of sealant width to depth is 2:1. Backer material should be installed to prevent 3 side adhesion and to control sealant depth.



MS-604

MS HYBRID SEALANT – HIGH MODULUS

x'traseal®

TECHNICAL DATA SHEET

REV: 08

Date: 17 April 2026

Suitable joint width * vs depth:

6 mm x 6 mm	20 mm x 10 mm
12 mm x 6 mm	25 mm x 12 mm
16 mm x 8 mm	30 mm x 12 mm

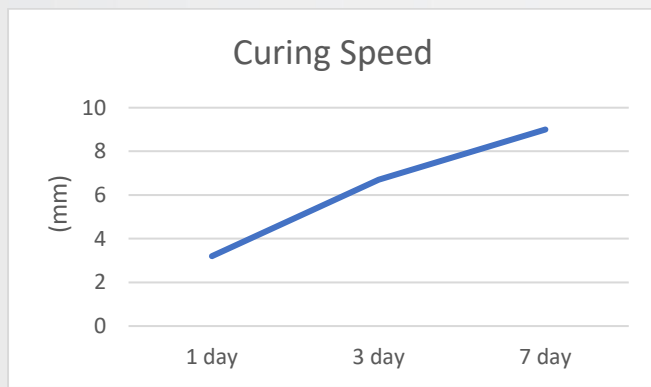
*Bigger joint width may encounter at the job site condition but have to take precautions step as sealant may sag on vertical application.

APPLICATION

- Substrates must be clean, dry and free from grease. Remove all dirt, oil, grease, detergents and loose material.
- The joint edges can be masked with tape to prevent contamination of adjacent substrates. The tape should be removed carefully after tooling.
- Cut tip off cartridge. Cut nozzle to desired size at 45° angle. Screw nozzle onto cartridge. Place cartridge into caulking gun.
- Extrude the sealant firmly into joint to ensure complete contact with joint faces.
- Tool as required within the tooling time to achieve smooth surface.

CURING TIME

MS-604 will skin forming in approximately 8 minutes and it will cure to a depth of 9 mm in 7 days. Longer curing time may be necessary in dry and low humidity area.



PAINTABILITY

MS-604 is paintable with water based paints, however due to large number of paints and varnishes available we strongly suggest a compatibility test before application. Paints based on alkyd resins may have extended drying time.

Note: MS-604 has larger movement capability than a normal paint film. Cracking of paint film may occur with movement in joint.

CHEMICAL RESISTANCE

Good resistance to water, diluted inorganic acids and alkalis.

Poor resistance to concentrated acids and alkaline solutions, organic solvents, and halogenated hydrocarbons.



MOHM CHEMICAL SDN. BHD. (REG NO 276851-U)
No. 32, Jalan Temenggong, Off Jalan Tampoi, 81100 Johor Bahru, Johor,
Malaysia. Tel : +607 333 1222 Fax : +607 332 0545 / 333 7919
Website: www.xtraseal.com Email: info@mochem.com



MS-604

MS HYBRID SEALANT – HIGH MODULUS

x'traseal®

TECHNICAL DATA SHEET

REV: 08

Date: 17 April 2026

CLEAN UP

Excess sealant can be removed with mineral spirit and cleaning solvent before cured. After curing, MS-604 may only be removed mechanically.

LIMITATIONS

MS-604 is not suitable for the following applications:

- PE, PP, PTFE, plastics containing softeners, and bituminous substrates
- Structural glazing
- Totally confined spaces where there is no atmospheric humidity, which is needed for proper curing
- Under water applications
- Heavy trafficable surface / joints
- Exposure to aggressive solvents or chemicals
- Food contact

PACKAGING SIZE

Cartridge: 290 mL (24 pcs per carton)

Sausage: 600 mL (20 pcs per carton)

COLOURS

Standard Colours: Grey, Black

Special Colours: White

SHELF LIFE

9 months for cartridge packaging & 12 months for sausage packaging (unopened) in a cool and dry storage place at temperatures between +5°C and +30°C.

QUANTITY ESTIMATION

Number of 600 mL sausage

$$= \frac{JOINT\ WIDTH\ (mm) \times JOINT\ DEPTH\ (mm) \times JOINT\ LENGTH\ (m) \times 1.15}{600}$$

Number of 290 mL cartridge

$$= \frac{JOINT\ WIDTH\ (mm) \times JOINT\ DEPTH\ (mm) \times JOINT\ LENGTH\ (m) \times 1.15}{290}$$

* With 15% wastage estimation



MOHM CHEMICAL SDN. BHD. (REG NO 276851-U)
No. 32, Jalan Temenggong, Off Jalan Tampoi, 81100 Johor Bahru, Johor,
Malaysia. Tel : +607 333 1222 Fax : +607 332 0545 / 333 7919
Website: www.xtraseal.com Email: info@mochem.com



MS-604

MS HYBRID SEALANT – HIGH MODULUS

x'traseal®

TECHNICAL DATA SHEET

REV: 08

Date: 17 April 2026

SPECIFICATION

Properties	Value	Method
Curing system	Neutral	-
Appearance	Non-sagging paste	Visual
Smell	Odorless	Visual
Specific gravity	1.66 ± 0.02 (white & grey) 1.64 ± 0.02 (black)	ASTM D1475
Hardness (Shore A)	55 approx.	ASTM D2240
Elongation at break	940 % approx.	ASTM D412
Tensile at break	1.69 MPa	ASTM D412
Secant modulus @ 23°C at 100% elongation	0.35 MPa	ASTM D412
Application temperature	+5°C to +40°C	-
Service temperature	-40°C to +100°C	-
Lap shear strength (Al to Al)	0.95 MPa	ASTM C961

CAUTION

Read and understand material safety data sheet of this product before handling or using.

This information is provided in good faith and is believed accurate based on a review of current composition and information supplied by vendors. No warranty is expressed or implied. Liability is expressly disclaimed.



MOHM CHEMICAL SDN. BHD. (REG NO 276851-U)
No. 32, Jalan Temenggong, Off Jalan Tampoi, 81100 Johor Bahru, Johor,
Malaysia. Tel : +607 333 1222 Fax : +607 332 0545 / 333 7919
Website: www.xtraseal.com Email: info@mochem.com