

# ONEBOND MS SEAL 50

## Description

OneBond MS Seal 50 is a multipurpose one-component, gun-grade, non-sagging SiMP – Silyl Modified Polymer elastic adhesive and sealant. It cures under the influence of atmospheric moisture to form a high performance, permanently flexible elastic adhesive. Solvent- and isocyanate-free.

**Certified according to:** ISEGA EC Regulation 1935/2004 for food contact

IMO Resolution MSC.307(88)-Fire Testing Procedures Code (2010 FTP Code) – Annex 1 Part 5

EN 15651-1/3/4 (TYPE F INT-EXT / XS3 / PW EXT-INT)

EN 45545-2 R1 & R7

**Compliant to:** LEED IEQc 4.1; SCAQMD Rule 1168; BAAQMD Reg 8 Rule 51

## Technical Data

Appearance	Non-sag thixotropic paste
Colour:	White, Grey, Black. Special colors on request
Chemical nature:	SiMP Silyl-Modified Polymer
Curing Mechanism:	Moisture-curing
Curing through volume [mm] (24h - 23°C and 50% RH):	ca. 3.0
Hardness Shore A:	ca. 50
Density	ca. 1.65
Skin Time (min) (23°C and 50% RH):	ca. 20
Tensile strength [N/mm <sup>2</sup> ]	ca. 2.6
Elastic modulus at 100% [N/mm <sup>2</sup> ]	ca. 1.8
Elongation at break [%]	ca. 270
Application temperature (°C)	From +5 to +40
Temperature Resistance [°C]	From -40 to +100, with brief points up to +140

## Application

The surfaces to be treated should be perfectly clean, dry and free from dust and grease. It is necessary to treat the bonding surface according to Onebond application guidelines, eventually using a specific CLEANER. It is advisable to carry out preliminary adhesion tests on the support.

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Apply the plastic nozzle and cut it at an angle according to the desired bead thickness and profile. Fit the cartridge into a manual or pneumatic air operated gun (provided with telescopic piston) and extrude the adhesive/sealant carefully preventing air entrapment. Once opened, packs should be used up within a relatively short time. The optimum operating temperature for both substrate and sealant is between 15°C and 25°C.

Tooling and finishing must be carried out within the tack-free time of the sealant. MS Seal 50 can be over-painted. The paint must be tested for compatibility by carrying out preliminary trials. Attention must be observed with the use of alcohol or alkyd-resin since they may interfere with the curing process of the sealant and reduce the drying time of the paint itself. It should be understood that the hardness and film thickness of the paint may impair the elasticity of the sealant and lead to cracking of the paint film.

Do not cure in the presence of curing silicone sealants. Avoid contact with solvent cleaners during cure. When applying sealant, avoid air-entrapment. Since system is moisture-cured, permit sufficient exposure to air. Bonded elements may require additional holding or support during curing period.

## Areas of Application

OneBond MS Seal 50 is a versatile and performant elastic adhesive and sealant for use in elastic bonding and sealing applications in construction and industrial assembly, automotive, transportation (coach, caravan, refrigerated vehicles, containers), marine, air conditioning and ventilation, where a tough flexible rubber joint or a powerful elastic adhesive is required.

## Features

- SiMP Silyl-Modified Polymer
- Solvent and isocyanate free
- Good ageing and weather resistance
- Permanently flexible over a wide range of temperatures
- Outstanding thixotropy, short cut-off string and non-sagging
- No bubble formation
- Bonds on wet surfaces and underwater
- Easy to gun with excellent tooling consistency
- Excellent primerless adhesion on all typical construction and industrial materials and substrates
- Neutral behavior, does not attack support surface
- No hazard symbol required
- Over-paintable with many water and solvent based paints (preliminary tests recommended)

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## Cleaning of Equipment and Personal Protective Measures

Clean the tools used with acetone or solvent. When the adhesive has not yet hardened, it can be removed using paper or a cloth. Once hardened, the product can only be removed mechanically. Avoid skin contact by using latex, rubber or polyethylene gloves. If it comes in contact with the skin, remove immediately and wash with soap and water.

## Packaging

PE cartridge 290ml – 12 pieces per box

## Storage

OneBond MS Seal 50 can be stored for 12 months in its original packaging (unopened container) between 10°C and 25°C in a cool, dry place. The storage temperature should not exceed 25°C for extended periods of time. Keep away from wet areas, direct sunlight and heat sources.

## Safety Considerations

Safety Data Sheets (SDS) are available from OneBond. SDS include information regarding the physical, health, and environmental health hazards, safety precautions, for products handling, storing and disposal. SDS are available in the language of the country or area of destination and may include locally applicable health and safety regulations. SDS are updated regularly and can be downloaded from [www.onebondadhesives.com](http://www.onebondadhesives.com). OneBond encourages users to review the up-to-date SDS before handling or using any product.

## Customer Notice

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