

309 Metal & Vinyl Silicone Sealant

NuFlex
SEALANTS

NEUTRAL CURE SILICONE TECHNICAL DATA SHEET

NuFlex® 309 Metal & Vinyl Silicone Sealant is a one-part, neutral-cure elastomeric silicone sealant that cures to form a durable, flexible, low modulus sealant that is compatible with common building materials.

FEATURES & TYPICAL USES:

NuFlex® 309 is particularly effective for sealing construction joints such as those found in precast concrete, curtain wall and mullion joints. It forms a durable, flexible, watertight bond with most building substrates in any combination: masonry, ceramics, galvanized steel, aluminum and most plastics. It is virtually unaffected by ultraviolet radiation, ozone, airborne chemicals or extreme temperatures.

SURFACE PREPARATION & APPLICATION:

All surfaces must be dry, frost-free, free of oil, grease, rust, dirt, or other contaminants that may inhibit proper adhesion. For porous substrates, such as concrete, wire brushing or air blasting (oil-free) is recommended and for non-porous substrates, a solvent wipe (oil-free) is adequate. Most substrates do not require a primer before application of the NuFlex® 309 sealant. It is recommended, however, that test samples of sealant be applied to the surface to test and verify adhesion. After preparatory work is complete, mask where necessary to avoid spillage onto adjoining surfaces. Tooling should be done immediately after sealant is applied and in one continuous motion. Masking Tape should be removed immediately after tooling is completed.

Limitations: NuFlex® 309 should not be applied below grade, to surfaces under continuous water immersion, to substrates that bleed oils, plasticizers or solvents (e.g. impregnated wood, oil-based caulks, green or partially vulcanized rubber gaskets or tapes), to surfaces in direct contact with food, and to surfaces that will be painted over.

Joint Design: For maximum sealant performance, the following joint design principles should be applied. A backer rod will: (1) ensure adequate backpressure during extrusion of the sealant which will provide good substrate wetting and adhesion (2) eliminate the possibility of three-sided adhesion and (3) control the depth of the sealant. The joint should be tooled concave to form the illustrated hour-glass shape which will accommodate any sealant bulge during compression. The joint width ("A") and sealant depth ("B") should not be less than 6.4 mm (1/4"). For joint widths in excess of 6.4 mm (1/4"), the depth of the sealant ("B") should be equal to one half of the joint width ("A"). For joint widths in excess of 25.4 mm (1"), the depth of the sealant ("B") should not exceed 12.7 mm (1/2").

CAUTION:

Use in well ventilated areas and avoid breathing vapors. On contact, uncured sealant irritates eyes. Flush eyes with lukewarm water. Call physician. Avoid skin contact and do not ingest. **Keep out of reach of children.** For complete safety information consult the Material Safety Data Sheet. Standard silicones may not be used to join sensitive natural stones such as marble, granite or quartz, as this may cause staining at the joint edges.

SHELF-LIFE & STORAGE:

Shelf-life is 12 months from date of shipment from our plant when stored in a clean, dry area with temp. between 4°C to 32°C (40°F to 90°F).

LIMITATION:

In confined cure conditions, NuFlex® Neutral Cure Sealant may: 1) Discolor brass, copper or other sensitive metals. 2) Stress crazes polycarbonate.

MANUFACTURED BY:

NUCO INC. T: 519.823.4994 TF: 1.800.853.3984
150 Curtis Drive F: 519.823.1099 E: sales@nucoinc.com
Guelph, ON N1K 1N5



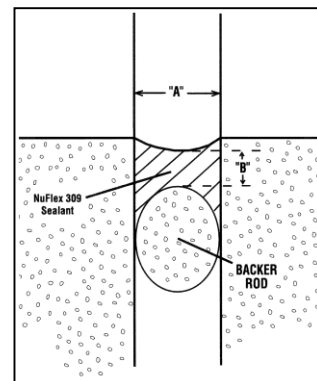
FORM: 309_TDS.DOC

REV.: 5 DATE: 05/16



FEATURES:

- 100% Silicone.
- 100% RTV.
- Freeze-thaw stable.
- Neutral Cure.
- Adheres to many substrates.



AVAILABLE SIZES & COLOUR:

- 300 mL (10.1 fl.oz.) cartridge
- 12 cartridges per case
- 144 cases per skid (300 mL)
- Available in larger sizes*
- Available colors include: white, black, bronze, natural stone, and grey.

*Special order items may require lead times and minimum order quantities.



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TYPICAL PROPERTIES:

These values are not intended for use in preparing specifications. Spec Writers; please contact NUCO Inc. before writing specifications if any further information is required.

Description	Specification
As Supplied...	
Type:	One part silicone sealant
Cure Method:	Neutral, moisture cure
Specific Gravity:	1.12
Tack Free Time at 25°C (77°F) and 50% R.H. - in minutes:	25 Minutes
Full Cure / Adhesion Time at 25°C (77°F) at 50% R.H.:	14 – 21 Days
As Cured...	
50% Modulus (ASTM D 421) MPa (psi):	0.21 (30)
100% Modulus (ASTM D 421) MPa (psi):	0.31 (45)
Tensile Strength (ASTM D 412) MPa (psi):	1.53 (200)
Elongation (ASTM D 412):	700%
Tear Strength (ASTM D624, die 'C'):	6.1 (35)
Hardness (ASTM C 661, Shore A):	20
Joint Movement Capability:	+/- 50%
Application Temperature Range:	-29°C to 50°C (-20°F to 122°F)
Service Temperature Range:	-51°C to 149°C (-60°F to 300°F)

DISCLOSURE

The information and data contained herein is BASED ON INFORMATION WE BELIEVE TO BE RELIABLE. Please read all statements, recommendations or suggestions herein in conjunction with our CONDITIONS OF SALE which apply to all goods supplied by us. We assume no responsibility for the use of these statements, recommendations or suggestions, nor do we intend them as recommendation for any use which would infringe any patent or copyright.

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SPECIFICATIONS:

NuFlex® 309 complies with:

- ASTM C 920, Type S, Grade NS, Class 25,
- Use NT, M, G, A, O and CAN/CGSB-19.13-M87, Class MCG-2-40-A-L

50 YR. DURABILITY STATEMENT:

Material will remain elastic in nature for 50 years. Independent tests indicate that silicone sealant will withstand outdoor weathering for 50 years without significant performance changes. This statement applies to the sealant itself and not to the substrates to which it is bonded to. In the event of elasticity failure, return original container and sales receipt to Nuco Inc., 150 Curtis Drive, Guelph ON N1K 1N5, Canada. NUCO's liability, expressed or implied is limited to the stated selling price of any goods found to be defective.

WARRANTY INFORMATION:

NUCO Inc., warrants only that its product will meet its specifications. NUCO shall in no event be liable for incidental or consequential damage. NUCO's liability, expressed or implied is limited to the stated selling price of any goods found to be defective.



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