

313 Fast Cure Silicone Sealant



NEUTRAL CURE SILICONE TECHNICAL DATA SHEET

NuFlex® 313 Fast-Cure Glass & Vinyl Silicone Sealant is a one-part, 100% silicone sealant that exhibits accelerated development of its surface elastic properties and provides excellent unprimed adhesion to a wide variety of substrates.

FEATURES & TYPICAL USES:

NuFlex® 313 is particularly effective in industrial sealing and adhesive applications where rapid curing characteristics are required. At 23°C (73°F) and 50% relative humidity, **NuFlex® 313** has a skin-over time of 7 minutes, a tack-free time of 15 minutes and a light surface scratch resistance time of 30 minutes. **NuFlex® 313** forms a flexible, durable, watertight bond to glass, aluminum, wood, galvanized steel, most metals, most vinyl and plastics. It is virtually unaffected by ultraviolet radiation, ozone, air-borne chemicals or temperature extremes.

SURFACE PREPARATION & APPLICATION:

All surfaces must be dry and 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 (oilfree) is adequate. Most substrates do not require a primer before application of the **NuFlex® 313** 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 on to 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.

Joint Design: Joint depths should not exceed 12.7 mm (1/2") and be no thinner than 3.2 mm (1/8"). A thinner bead of **NuFlex® 313** will allow more joint movement than a thick bead. For perimeter sealing or expansion joint design, the ratio of joint width to depth should be about 2:1. Polyurethane or polyethylene backer rod is recommended for deep joints and polyethylene tape for shallow joints. These materials act as bond breakers and allow the sealant to stretch freely with joint movement. Install back-up material, setting blocks, spacer shims and tapes as specified. Apply **NuFlex® 313** in a continuous bead to fill joint. Tool with enough pressure to push the sealant down into and against the sides of the joint. Tool the sealant applied at the sill on a slight upward angle so that moisture will not pool. Excess sealant should be cleaned from glass, metal and plastic with a commercial solvent such as xylol, toluol or methyl ethyl ketone before sealant cures. Sealant that comes in contact with porous surfaces should be allowed to cure and then be removed with abrasion or other mechanical means.

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 temps between 4°C to 32°C (40°F to 90°F).

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: 313_TDS.DOC

REV.: 4 DATE: 05/16



FEATURES:

- 100% Silicone.
- 100% RTV.
- 50 year durability.
- Skins over in less than 7 minutes.
- Adheres to many porous 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: clear & white.

**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
Skin Over Time at 23°C (73°F) and 50% R.H.:	5 - 7 Minutes
Tack Free Time at 23°C (73°F) and 50% R.H.:	15 Minutes
Scratch-Resistance Time at 23°C (73°F) and 50% R.H.:	30 Minutes
As Cured – Physical – after 7 days at 25°C (77°F) and 50% Relative Humidity:	
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 (220)
Elongation (ASTM D 412):	500%
Tear Strength (ASTM D 624, die 'C')...kN/m (ppi):	6.1 (35)
Hardness (ASTM C 661, Shore A):	20
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® 313 meets or exceeds the following specs:

- U.S. Fed. Spec. TT-S-001543A (COM-NBS) Class A and
- TTS-00230CC (COM-NBS) Class A.
- ASTM: C-920, Type S, Grade NS, Class 25 Use NT, M, G, A, O;
- CAN/CGSB-19.13-M87,
- Class MCG-2-25-A-L
- AAMA 802.3, Type II
- AAMA 803.3, Type I

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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