

N-70 Industrial Silicone

Neutral Curing Industrial Grade Silicone Sealant.



Description

Ideal for use as a weather seal, for general glazing, around pools and for most common construction and industrial applications. With excellent adhesion, N-70 achieves a superior bond to challenging substrates such as glazed surfaces and ceramic tiles. Once fully cured, it forms a flexible gasket, ensuring a reliable, long-lasting seal.

N-70 has high elasticity and can accommodate movement of up to $\pm 50\%$ of the original joint width. The easy-to-tool formulation allows effortless application and finishing, and cures to form a permanently elastic, dust-proof joint seal. N-70 is UV-stable and colour-fast, making it suitable for outdoor applications. It is commonly used in industries such as construction, mechanical engineering, shipbuilding, automotive and manufacturing.

Uses:

- Expansion and control joints in masonry and concrete (driveways and walkways)
- Joint sealing applications
- Perimeter sealing around windows, doors and curtain walls
- Glazing applications such as glass partitions and general glazing
- Air-conditioning duct seals and HVAC penetrations
- Weather-sealing
- Roof and gutter applications
- Skylight and solar installations
- General-purpose construction and industrial sealing
- Interior and exterior application

Acceptable Substrates

- Glazed and unglazed ceramic tiles (including porcelain) and vitreous enamel finishes
- Concrete and masonry surfaces
- Most metals, including Zincolume®, Colorbond®, galvanised steel, stainless steel and aluminium
- Timber
- Some plastics, including PVC
- Most laminated surfaces
- Glass & Fibreglass
- Most common construction materials.

Benefits:

- Ready to use — single pack; matt finish
- Rapid drying and easy tooling
- Compatible with common building materials
- Once cured, suitable for below-waterline applications (confirm for specific projects)
- High permanent flexibility — $\pm 50\%$ movement capability
- Suitable for internal and external applications
- Neutral (oxime) curing system
- Maintains a waterproof, flexible joint
- Low odour
- Will not corrode galvanised/zinc-coated steel or attack concrete

Adheseal: N-70 Silicone - TDS

Limitations.

Adheseal N-70 Silicone Neutral Cure is NOT suitable for use in the following applications: -

- Totally confined spaces, as the sealant requires atmospheric humidity to cure, it will not cure where it does not have access to atmospheric humidity.
- Aquariums
- Adhering Mirrors (High Power 609 can be used - test first)
- Structural Glazing (N-80 or N-60 Glazing silicone).
- Composite panels- (Adheseal recommends Hi Flex Construction, subject to test first)
- Applying Sealant underwater (including swimming pools, ponds, etc.).
- Some natural stone (We recommend the completion of a stain testing program before using any sealant on stone). S100 is recommended for marble and granite (after stain test).
- Polycarbonate sheeting
- Sealant may discolour copper & brass.
- Do not clean or treat the sealant with materials, cleaning agents or solvents that may affect or discolour the sealant, particularly during product curing.
- This silicone is not paintable.

Application

Surface preparation:

All surfaces must be structurally sound, stable, dry, clean, and free of dust, loose, flaking, friable material and free from oils, grease, form release agents, curing compounds, and any other surface contamination that may hinder adhesion. Substrate must be free from surface water and continual dampness. Concrete must be allowed to cure for at least 28 days. Failure to do so may result in mould growth, poor adhesion and subsequent delamination. Use the two-wipe process for impervious substrates. Ensure the cloths are clean and moistened with a suitable cleaner/solvent such as Acetone or 100% White Spirits and changed frequently. To achieve a neater finish and to avoid getting excessive silicone on the tiles or stone, mask joint edges.

Priming: Adhesion test is recommended. Where the use of Primer is necessary, it must be applied with a small brush onto the appropriate areas of the joints and left to dry for several minutes to allow the solvent to evaporate, 50A for non-porous & Everflex Supaprime for porous substrates.

Sealant Joint Design:

Where possible, the silicone should be at a 2:1 ratio (width:depth), Diagrams A & C. For internal joints, the width and the depth of the joint should be a minimum of 5mm, and for external joints, 10mm. Maximum joint width is 30mm and depth 15mm. For joints greater than 10mm deep, a backing rod should be used. Use a backing rod 25% larger than the joint width to control the depth of the joint where required. The silicone should only be fixed to two surfaces to allow movement. Hence, on flat joints, use a polyethylene tape or release agent to prevent a 3-sided adhesion of the silicone, Diagram B.

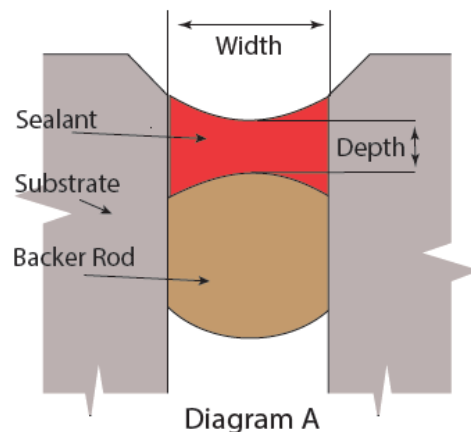


Diagram A

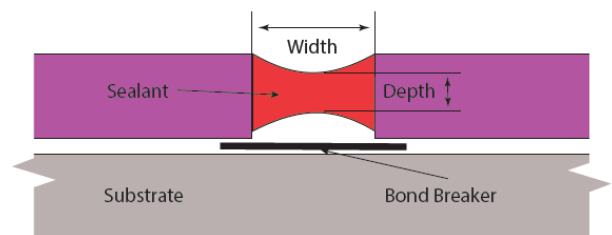


Diagram B

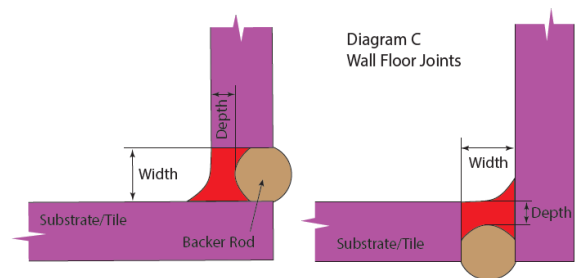


Diagram C
Wall Floor Joints

Width	Depth
5-10mm	As the width min 5mm
10mm	5-8mm
15mm	7-10mm
20mm	10mm
25mm	12mm

Adheseal: N-70 Silicone - TDS

N-70 Installation:

Apply at a temperature between 5°C and 40 °C. Cut nozzle at a 45° angle to the desired thickness. Cut the opening in the Foil Sausage. Insert the Foil Sausage into the caulking gun and fix the nozzle. Hold the gun at a 45° angle with the nozzle in contact with both sides of the joint. Apply by pushing sealant ahead of the nozzle, thus ensuring sealant is being pushed firmly into place, in a steady, continuous motion, ensuring good contact with both sides of the joint to achieve optimum adhesion. Tool off with a moistened spatula to finish the joint smoothly before the skin forms, approximately 15 minutes. While the silicone is still wet, clean off any excess. If joint edges have been masked, remove tape whilst the sealant is still wet. If the silicone has dried on the surface, clean with white spirit solvent to soften the silicone, then scrape off with a blade. Do not paint over the silicone. The incompatibility of some substrates may cause discolouration of the sealant, poor sealant adhesion or long-term degradation of the sealant. Always carry out compatibility tests where contact with potentially incompatible materials may occur.

Coverage

Coverage will vary according to joint width and depth, as well as the type and method of application. The figures below can be used as a guide for:

Adheseal Sealant Calculator				
Joint Size mm		M per ctg	M Per ssg	M per Lt
6	X 6	8.3	16.7	27.78
10	X 6	5.0	10.0	16.67
10	X 10	3.0	6.0	10.00
12	X 12	2.1	4.2	6.94
15	X 8	2.5	5.0	8.33
15	X 15	1.3	2.7	4.44
20	X 10	1.5	3.0	5.00
20	X 20	0.8	1.5	2.50
25	X 12	1.0	2.0	3.33

Triangular Joint Beads	
Joint Size mm Width x Height	Lm Per Sausage
5x5mm	50
10x10mm	12
10x15mm	6
10x20mm	3

Cure Time.

Allow approximately 20 minutes skin time, cure time 2mm per day at 25 °C & 50% humidity. Please note that all cure times vary depending on atmospheric conditions and porosity of the substrate.

Clean Up.

While the product is still wet, tools and spills can be cleaned with white spirit. Once cured, the product can be removed by mechanical means.

Packaging

600ml Foil Sausage, in cartons of 20.

Colours

Matt Grey, SILADN70GR/SSG

Note: Before application, refer to all relevant TDS's and SDS's detailed product specifications & application instructions.

Physical Properties	
Type of product	Polysiloxanes
Curing system	Oxime
Density (specific gravity)	Trans 1.03
Shore A hardness	25—30
Elongation at break (ISO 8339)	600%
Application temperature	5°C to 40°C
Storage: Cool Dry between	+5°C and 30°C
Temperature Resistance	-50°C to 150°C
Best Before	18-24 months in original packaging
Clean up	Uncured: white spirit or isopropyl alcohol (IPA)
Movement Capability	±50%
Elastic recovery	>90%
Colour	Matt Grey

Adheseal: N-70 Silicone - TDS

Specification: The information contained in this TDS is typical but does not constitute a full specification, as conditions and specific requirements may vary from project to project. The instructions should be considered as a minimum requirement. The applicator or contractor must use their skill, knowledge, and experience to carry out additional works as may be necessary to meet the requirements of the project. Specifications for specific projects should be sought from the company in writing.

Health and Safety

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Skin Contact: Gently brush away loose particles. Irritation is unlikely. However, if irritation occurs, flush with lukewarm, gentle flowing water for 5 mins or until the chemical is removed.

Eye contact: Gently brush away loose particles. No effects expected. However, if irritation occurs, flush with lukewarm, gentle flowing water for 5 mins or until the chemical is removed. Obtain Medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if the exposed person is wearing contact lenses.

Ingestion: If swallowed, do not induce vomiting. Wash your mouth with water and give some water to drink. If symptoms persist, contact a Poisons Information Centre or a Doctor

PPE for First Aiders: Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

Notes to physician: Treat symptomatically. Effects may be delayed. Treat symptomatically.

Conditions Of Use and Disclaimer:

The information contained in this TDS is given in good faith based upon our current knowledge and does not imply warranty, express or implied. The information is provided, and the product is sold on the basis that the product is used for its intended purpose and is used in a proper workman-like manner in accordance with the instructions of the TDS in suitable and safe working

conditions. Under no circumstances will the Company be liable for loss, consequential or otherwise, arising from the use of the product.

WARNING



Brisbane North 26 Wolverhampton St, Stafford QLD 4053
Brisbane South 8 Moss St, Slacks Creek QLD 4127
Sunshine Coast 18 Kessling Ave, Kunda Park QLD 4556
Gold Coast 12 Distribution AV Molendinar QLD 4214

PH (07) 3356 0000 Email sales@adheseal.com.au
PH (07) 3111 6666 Email slacks@adheseal.com.au
PH (07) 5477 0022 Email sc@adheseal.com.au
PH (07) 5681 1111 Email gc@adheseal.com.au

www.adheseal.com.au