

INNERBOND SL7700 RTV ADHESIVE/SEALANT

Innerbond SL7700 is a one-component, ready-to-use, silicone that cures to a tough, rubbery solid when exposed to atmospheric moisture.

Innerbond SL7700 has the following features:

- One-component product – no mixing or catalyzing necessary.
- Adhesion properties – will bond to many surfaces without the use of primers.
- Weatherability and ozone resistant – has excellent resistance to weathering, vibration, moisture and ozone.
- Chemical resistant – provides reliability and extended service life in adverse environments.
- Resistant to high temperatures – will retain electrical and physical properties for long periods at temperatures up to 450°F (232°C) and for shorter periods up to 500°F (260°C).
- Low temperature flexibility – properties retained at temperatures down to -75°F (-60°).
- Electrical insulation properties – can be used for electrical insulation.

BONDING

In addition to the effects of temperature and humidity on cure time, maximum development of bond strength will depend on joint configuration, sealant thickness, degree of confinement and the porosity of the substrate.

Usually, bond strength will develop sufficiently within 12 to 24 hours to permit handling. Low stress levels should be applied to the joint until full adhesion strength is developed.

LIMITATIONS

Innerbond SL7700 adhesive is not recommended for concrete joints or for use with materials that bleed oil or solvents.

CLEANUP

Before curing, solvents such as methyl ethyl ketone (MEK), naphtha, and 1,1,1-trichlorethane can be used. After sealant cure, specialized strippers are needed to remove sealant.

STORAGE AND HANDLING

When stored in the original, unopened container at temperatures less than 90°F, Innerbond SL7700 has a shelf life of one year.

Uncured sealant will irritate the eyes. In case of contact with eyes, flush with water for 15 minutes and consult a physician. It may also irritate the skin. Prompt removal by wiping with a dry cloth or paper towel, followed by washing the skin with soap and water is recommended.

Innerbond SL7700 releases acetic acid vapors during the curing period. Effective ventilation must be maintained during application and curing to limit the concentration of acetic acid vapor which is irritating to the eyes and breathing passages. Wearing of contact lenses during use should be avoided because vapor may be trapped behind the lenses. OSHA regulations have been established as Threshold Limit Value (TLV) for acetic acid at 10 ppm.

SPECIFICATIONS

The typical properties shown in this technical data sheet should not be used as a basis for preparing specifications.

TYPICAL PROPERTIES

UNCURED			
Consistency	Liquid	Specific Gravity (at 77°)	1.06
Application Rate (0.125 in orifice at 90 psi).	100 gm/minute	Tack Free Time (77°F, 50% RH)	10-20 minutes
CURED			
Hardness, Shore A	30	Tensile Strength	300 psi
Elongation	500%	Volume resistivity, ohm, cm	10 ⁻¹⁴
Dielectric strength kv/mm	16	Dielectric constant @ 60HZ	2.8
Dissipation factor @ 60HZ	0.0028	Brittle Point	-80° F
Thermal conductivity Cal/see/cm ² , degrees C/cm	0.008		

USE INSTRUCTIONS

Innerbond SL7700 adheres to many clean surfaces without the use of primers. These surfaces include glass, ceramic, and many metals, some rigid plastics and silicone rubber. It will also produce a fair bond to some flexible plastics which do not contain plasticizers, which migrate to one surface and to organic rubber. For any of the applications above, an evaluation should be made to determine bond strength.

In order to prepare surfaces for maximum adhesion, surfaces should be cleaned with suitable solvents such as MEK (methyl ethyl ketone), naphtha, or 1,1,1-trichloroethane to remove all grease, dirt and oil. All solvents must be removed from surfaces before sealant is applied.

If solvents are used as described above, please follow solvent manufacturer's safety procedures for their use.

Innerbond SL7700 may be rolled or brushed on properly prepared surfaces. Average coverage per 5 gallon pail is 450-600 square feet based on 1/16 inch thickness. If entire contents are not used, reseal promptly. A cured layer of silicone may be present when pail is reopened, simply peel cured material off and discard. The rest of the material should be unaffected.

A product Material Safety Data Sheet is available upon request.

PACKAGING

Innerbond SL7700 is available in 10.3 oz cartridges, 1 gallon and 5 gallon containers.

CURE TIME

Cure time is affected by relative humidity, degree of confinement and cross-sectional thickness of the sealant. The cure progresses inward from the surface.

At 75°F (23.8°C) and 50% relative humidity, the sealant forms a tack free skin within 20-30 minutes. Therefore, tooling is not practical after this skin begins to form and should be completed within 5 to 10 minutes of applications.

Sections up to 1/8" thick become rubbery solids in about 24 hours at room temperature and 30% relative humidity.

As the sealant cures, acetic acid vapors are released from the surface of the sealant. The acetic odor will disappear when cure is complete.

NOTE

The information and data contained herein are believed to be accurate and reliable; however, it is the user's responsibility to determine suitability of use. Since Inland, Inc. cannot know all of the uses to which its products may be put or the conditions of use, it makes no warranties concerning the fitness or suitability of its products for a particular use or purpose.

Thorough testing of our product on any proposed use should be conducted prior to each application. It is the responsibility of the consumer to evaluate the performance of our product in each given application. Likewise, if the manner in which our products are used requires governmental approval or clearance, it is the user's responsibility to obtain it.

Inland, Inc. warrants only that each product will meet its specifications. There is no warranty of merchantability or fitness for use, nor any other expressed or implied warranties. The user's exclusive remedy and Inland, Inc.'s sole liability is limited to replacement of any product shown to be otherwise than as warranted. Inland, Inc. will not be liable for incidental or consequential damages of any kind.

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