



PRODUCT INFORMATION

BOSS® 322 100% RTV Silicone Sealant

TYPICAL PROPERTIES

Uncured

Colors clear, white, black, aluminum, bronze and almond
Specific Gravity @77°F (25°C) 1.01-1.04
Extrusion Rate (1/8-inch orifice, 90 psi air pressure)
gms/min 350-400
Flow Rate (sag or slump on 1/8 X 4-inch bead, in NIL
Tack-Free Time at 77°F (25°C) and 50% RH, min 10-20
Cure Time at 77°F (25°C) and 50% RH
(1/8-inch thickness), hours 24

Cured - Physical

ASTM D 676 Durometer Hardness, Shore A, points 30
ASTM D 412 Tensile Strength psi (MPa) 350
ASTM D 412 Elongation, percent 500
ASTM D 746 Brittle Point, degrees -100°F (-73°C)
ASTM D 2137A Volume Coefficient of Thermal Expansion,
32°F to 212°F (0°C to 100°C) 9.3 X 10⁻⁴

*Information on this data sheet is subject to change without notice and should not be used for writing specifications.
For additional information on specific applications, contact Accumetric, LLC



DESCRIPTION

BOSS® 322 100% RTV Silicone Sealant is a paste-like, one-component material which cures to a tough, rubbery solid when exposed to moisture in the air. Since it will not flow of its own weight, this sealant can be applied overhead or on sidewall joints and surfaces without sagging, slumping or running off. It will adhere to clean metal, glass, most types of wood, silicone resin, vulcanized silicone rubber, ceramic, natural and synthetic fiber, as well as painted and many plastic surfaces.

BOSS® 322 100% RTV Silicone Sealant has good resistance to weathering, vibration, moisture, ozone and extreme temperatures. It may be applied in sub-zero weather without loss of extrusion or physical property characteristics. Fully cured BOSS® 322 can be used for extended periods at temperatures up to 450°F (232°C), and for shorter periods as high as 500°F (260°C). Tests have shown that even after two months at 450°F (232°C), or up to one week at 500°F (260°C), the sealant remains rubbery.

BOSS® 322 is available in a variety of colors including clear, white, black, aluminum, bronze and almond.

USES

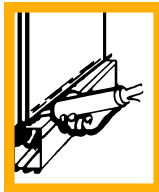
- Glazing sealant
- Construction sealant
- Windshield and backlite replacement
- One-part sealant capable of ±25% joint movement
- Sealing trailers, truck cabs
- Filleting and caulking joints in sheetmetal stacks, ductwork and equipment housings
- Adhering auto and appliance trim, including metal, fabric and fabric-backed plastics
- Sealing of marine cabins and windows
- Bonding signs and sign letters
- Bonding gaskets in heating and refrigeration units
- Formed-in-place gasket for gear boxes, compressors, pumps



Windows



Plumbing



Metal Channels



Store Fronts



Boats



Automobiles

HOW TO USE

Applying the Material: Tack-Free Time

BOSS® 322 100% RTV Silicone Sealant is supplied ready-to-use. Under pressure it flows readily from its container. The paste-like consistency makes it easy to work; a spatula or wooden paddle can be used for tooling the surface.

The cure progresses inward from the surface. At conditions of at least 75°F (24°C) and 50% relative humidity, the sealant forms a tack-free skin within 20 minutes. Tooling is not practical after this skin begins forming and should be completed within 5 to 10 minutes of application, even though this may require alternate periods of applying and tooling. Likewise, if masking tape has been used to mark off the area, it should be removed before the tack-free skin forms.

Cure Time

Cure time is affected by relative humidity, degree of confinement and cross-sectional thickness of the sealant. Sections up to 1/8" thick become rubbery solids in about 24 hours at room temperature and 20 percent relative humidity. Less moisture content reduces it slightly. In 24 hours, sections up to 1/8" thick cure to a rubber with a Shore A durometer hardness rating of about 25 points. After 3 days at room temperature, this durometer hardness levels off to about 30 points.

In applications where **BOSS® 322** may be partly or totally confined during cure, the time required for proper cure is generally lengthened by the degree of confinement. It is possible, with absolute confinement, that cure will not be completed. The result is the softening of the sealant at elevated temperatures. Metal-to-metal bonds should not overlap more than one inch. Every application involving confinement during curing should be thoroughly tested before commercialization.

Curing time increases with the thickness of the sealant. A 1/2" cross-section, for example, may require 3 or 4 days for complete solidification. However, the cure will have penetrated the outer 1/8" in about 24 hours. **BOSS® 322** has a typical peel strength of 20 pounds per inch after 72 hours at room temperature.

The odor given off during cure is due to the liberation of acetic acid. This odor disappears as the cure progresses, and is not detectable after the cure is complete.

Bonding

1. Thoroughly clean and degrease metal and plastic surfaces, then rinse all surfaces, except plastic, with acetone. Rubber surfaces should be roughened

with sandpaper, then wiped with acetone. Follow the precautions given on solvent container label.

2. For stronger, more uniform bonds, apply a thin film of A-120 prime coat to all surfaces except rubber and silicone rubber. Allow to air-dry for 30 to 45 minutes at room temperature. (Full instructions are provided with the prime coat.)

CAUTION: A-120 prime coat is flammable and has no FDA status. Keep away from heat and open flames. Use only with adequate ventilation.

3. Apply **BOSS® 322** to the prepared surface in a uniform thickness. Best adhesion is obtained with a 15-30 mil glue line. In those cases where the adhesive is used between two surfaces, put the second surface in place using enough pressure to displace the air but not the adhesive.

4. Let the unit stand undisturbed at room temperature to cure.

Sealing

Using **BOSS® 322** 100% RTV Silicone Sealant in sealing applications follows approximately the same step-by-step procedures as outlined for bonding applications. After preparing the surface and priming where required, the sealant is applied by forcing it in the joint or seam to obtain full contact between sealant and surfaces.

SPECIFICATIONS

BOSS® 322 meets performance requirements for the following: FDA/USDA requirements for use in establishments operating under Federal Meat and Poultry Inspection Program. When cured and washed, ingredients remaining or which could migrate to food are listed on FDA Regulation No. 21 CFR 177.2600. Meets Federal Specifications TT-S-001543A, TT-S-00230C, ASTM C920-86 and MIL-A-46106A, Amend. 2, type 1.

CAUTION

DIRECT CONTACT OF UNCURED SEALANT IRRITATES EYES AND MAY IRRITATE SKIN. OVEREXPOSURE TO VAPOR MAY IRRITATE EYES, NOSE, AND THROAT. Avoid eye and skin contact. Use with adequate ventilation. Do not handle contact lenses with sealant on hands. IN CASE OF EYE CONTACT, flush eyes with water for 15 minutes. Obtain medical attention. IN CASE OF SKIN CONTACT, remove from skin and flush with water. Sealant releases acetic acid (vinegar-like odor) during cure. KEEP OUT OF THE REACH OF CHILDREN.

PACKAGING

BOSS® 322 100% RTV Silicone Sealant is available in 3 oz. aluminum tubes, 300 gram cartridges and 5 gallon pails. Other sizes available upon request.

SHIPPING LIMITATIONS

None.

STORAGE AND SHELF LIFE

When stored in original unopened container at or below 90°F (32°C), **BOSS® 322** 100% RTV Silicone Sealant has a shelf life of 12 months from date of shipment. Containers should always be kept sealed when not in use.

USERS PLEASE READ

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

It is the user's responsibility to thoroughly test any proposed use of our products and independently conclude satisfactory performance in the application.

Likewise, if the application, product specifications or manner in which our products are used requires government approval or clearance, it is the sole responsibility of the user to obtain sure authorization.

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

Suggestions of uses should not be taken as inducements to infringe any patents.

MADE IN U.S.A.

BOSS® PRODUCTS

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