





# **TECHNICAL DATA SHEET**

# **BOSS**<sub>®</sub> 310 RTV Industrial Silicone Sealant

TYPICAL PROPERTIES
Uncured Colors clear, white, black, aluminum, bronze and almond Slump
Cured – Physical 7 Days at 77°F (25°C) and 50% RH (1/8" thickness)
Elongation 425   Durometer, Shore A 20   Tensile Strength 330 psi   Movement Capacity ±25%   Extrusion Rate 425 gr/min.   VOC 29 grams/liter
Service Temperature40°F to 400°F Application Temperature35° to 140°F
*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® 310** RTV Industrial Silicone Sealant is a one-part acetoxy cure adhesive sealant that is suitable for general industrial sealing and adhesive applications. This product will adhere to clean metal, glass, many types of wood, silicone resins, vulcanized silicone rubber, ceramics and plastic surfaces. A primer may be required for optimum adhesion to some surfaces.

**BOSS**® **310** RTV Industrial 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**® **310** can be used for extended periods at temperatures up to 400°F (204°C).

## USES

- · Seal heating, ventilating or air conditioning duct work
- Sealing cracks or gaps around windows, vents, ducts, fixtures and lights
- · Seal leaks in gutters, downspouts, ducts and piping
- Seal cracks in interior walls and ceilings, door joints and fixtures
- Seal out water from compartments in machinery or appliances
- Seal around freezer doors and windows to prevent frost and condensation from forming
- Seal electrical connections and boxes to waterproof

- · Seal joints and cracks in the roofs and sides of truck trailers
- · Seal stainless steel food service equipment
- Seal electrical controls, instruments, motors, fans and machinery to keep out dust, dirt and moisture
- · Make quick sheet metal patches
- · Seal wall-floor and wall-ceiling seams
- Seal windows in oven doors and flues on gas appliances, flanged pipe joints and access doors
- Adhering auto and appliance trim, including metal, fabric and fabric-backed plastics
- · Sealing trailers, truck cabs
- Filleting and caulking joints in sheet metal stacks, ductwork and equipment housings
- · Bonding gaskets in heating and refrigeration units
- Sealing marine cabins and windows
- Antiabrasion coating
- Bonding signs and sign letters
- Attaching screwless brackets or nameplates and tacking plastic materials to metal
- Formed-in-place gasket for gear boxes, compressors and pumps

# HOW TO USE

### Applying the Material: Tack-Free Time

**BOSS® 310** RTV Industrial 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 77°F (25°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 applications where **BOSS® 310** may be partly or totally confined during cure, the time required for proper cure is generally lengthened by the degree of confinement. Metal-to-metal bonds should not overlap more than one inch. Every application involving confinement during cure should be thoroughly tested before commercialization.

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

- 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.

#### Sealing

Using **BOSS® 310** RTV Industrial 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® 310** meets performance requirements of the following specifications:

- TT-S-001543A (silicone building sealant)
- TT-S-00230C (one component building sealant)
- ASTM C-920-86

Cured sealant stays rubbery from -60°F to 400°F.

## 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 eves 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. For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).

## PACKAGING

**BOSS**® **310** RTV Industrial Silicone is available in standard caulking cartridges and 4.5 gallon pails. Other sizes available upon request.

## STORAGE AND SHELF LIFE

When stored in the original unopened containers at or below 90°F (32°C), BOSS® 310 RTV Industrial Silicone has a shelf life of 12 months from date of shipment. In Countries where high heat and humidity are a factor, special precautions must be taken. Store product in a covered, well-ventilated warehouse and avoid excessive heat conditions. Storage in high heat, high humidity conditions may reduce shelf life by up to 30%. Rotation of stock is an absolute necessity. Cartons should always be stacked upright with the nozzle tip pointed upwards. DO NOT stack cartons on their side. NEVER stack cartons more than 8 high. DO NOT store within 1 meter (4 feet) of roofline of the warehouse or storage building.

# COLORS

**BOSS**® **310** is available in a variety of colors including clear, white, black, aluminum, bronze and almond.

## SHIPPING LIMITATIONS

None. Reactive VOC 29 g/l (<3% wt)

## **USERS PLEASE READ**

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

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