American Sealants, Inc.

"High Performance Silicones, Sealants, and Adhesives"

1987-2017 CELEBRATING 30 YEARS

TECHNICAL DATA SHEET

ASI 502 100% RTV Silicone

Features

- 100% Acetoxy RTV Silicone
- Mold & Mildew Resistant
- Resistant to UV Degradation And Weathering
- Withstands Extreme Cold & Extreme Heat
- 25% Joint Movement Capability
- One-Component, Easy To Use Formulation

Additional Features

- Easy to Extrude At Cold Temperatures
- Non-Slump, Can Use On Overhead & Vertical Applications
- Excellent For Indoor & Outdoor Applications
- Creates A Waterproof Seal

Conforms, Meets & Exceeds

- ASTM C920 Class 25, Type S, Grade NS, Use NT, G, O
- TT-S-01543A
- TT-S-00230-C
- MIL-A-46106A
- NSF Standard 51
- FDA Regulation No. 21 CFR 177.2600
- UL Recognized
- VOC Compliant (23 grams/liter ASTM D2369)

Description

ASI 502 100% RTV Silicone is a one-component, moisture cure, acetoxy silicone that cures to form an extremely durable rubber that can withstand a variety of extreme environments. Unlike many organic sealants, ASI 502 is extremely resistant to degradation, weathering, extreme temperatures and mold and mildew. ASI 502 meets the requirements of NSF Standard 51 and FDA Regulation No. 21 CFR 177.2600 for food grade applications. ASI 502 100% RTV Silicone can be applied to both vertical and overhead joints without sagging and is easy to extrude at both hot and cold temperatures. It will adhere to most common building materials (see list on back of TDS).

NSF

File No. E209770

Physical Properties	Test Method	Result
Viscosity	ASI Test Method	582,000 cps (Spindle 7, 4rpm)
Skin Formation Time	ASI Test Method	10 minutes (70°F, 50% RH)
Density	ASTM D1475	8.5 lbs./gal
Hardness	ASTM C661	25 (Shore A)
Extrusion Rate	ASI Test Method	365 g/min
Tensile Strength	ASTM D412	264 psi
Elongation at Break	ASTM D412	500%
Application Temperature	ASI Test Method	-35°F to 150°F
Gun Grade	ASI Test Method	Pass (Non-Slump)
QUV Testing	ASTM G26	Pass (10,000 hrs)
Service Temperature	ASI Test Method	-50°F to 400°F
Typical Cure Rate	ASI Test Method	24 hrs. (1/8" bead)

Strength will start to develop immediately and continue increasing for 7 days after application. ASI recommends testing strength and adhesion on the 7th day. ASI 502 suggested application temperature range: -35°F to 150°F. ASI 502 can be used at temperatures higher than 400°F for intermittent periods. Testing should be done to confirm temperature requirements are met.



MADE IN ★ THE ★ USA

Information on this data sheet can change without notice and it is therefore not recommened that these figures be used in spec writing. If you have any questions contact manufacturer 's sales and technical service department.

American Sealants, Inc.

"High Performance Silicones, Sealants, and Adhesives"

Common Applications:

ASI 502 is an excellent sealant/adhesive for many Commercial, Industrial and Construction applications. Such applications include:

- Walk-In Freezer Manufacturing & Installation
- RV & Trailer Manufacturing
- Countertop Installation & Sealing
- Formed-In-Place Gasket Applications
- Industrial Manufacturing Applications
- Bathroom Installation & Sealing
- HVAC Applications
- Fireplace Manufacturing
- Appliance Manufacturing
- Sheet Metal Work & Sealing
- Marine Applications
- General Sealing & Bonding Applications
- ***Can be used for additional applications not listed. ASI recommends testing prior to use.***

Directions

ASI 502 is ready to use and requires no mixing or additives. Tooling, if necessary, should be done before skinning takes place. In applications where partial or total confinement of sealant is prevalent, the time required for proper cure is generally lengthened by the degree of confinement. Higher temperature and higher humidity will accelerate skin & cure time. Cold temperatures and low humidity will slow down skin & cure time.

Clean Up

Wet adhesive can be cleaned with ASI 0240 Adhesive Remover & Cleaner. Dry sealant can be removed by abrading or scraping with aid from ASI 0240. See ASI 0240 TDS for more information.

Colors

ASI 502 is available in clear, white, black, aluminum, almond, bronze, gray, trans white, trans blue, trans rose, trans green, trans charcoal, trans beige, trans earth and trans gray. Additional colors can be available for purchase. Inquire to ASI sales staff for additional information.

Packaging

ASI 502 is stocked in squeeze tubes, cartridges, pails and drums. It can also be packaged into quart cartridges, sausage packs, semcos and pouches. Inquire to ASI sales staff for additional information.

Caution/Safety

Please refer to the SDS for the corresponding product for information regarding safety and handling.

Limitations

Do not store at elevated temperatures. Use only on clean surfaces free of contaminants. Cold temperature and low humidity will slow curing. Do not use on porous surfaces such as concrete, mortar or brick. It is not paintable.

Common Bonding Substrates:

ASI 502 can be used on a variety of substrates. Please inquire or test your substrates before use. Substrates may vary with manufacturer. We have listed some common substrates:

- Glass
- Granite
- Marble
- Metal
- Most Types Of Woods
- Most Fiberglass
- Aluminum
- Ceramic
- Natural & Synthetic Fiber
- Most Painted Surfaces
- Some Plastics
- ***Can be used on additional substrates not listed. ASI recommends testing prior to use.***

Surface Preparation

All surfaces should be dry and clean. Alcohol or acetone can be used to clean the surface depending on the substrate. Priming for ASI 502 is not normally required. If a primer is required, please inquire to ASI sales staff. Unprimed adhesion can be easily tested by applying a small trial bead and allowing 7 days for maximum adhesion to occur. If primer is required, contact ASI.

Testing

Test per application requirement. Allow 7 days for maximum strength to develop before testing adhesion or strength.

Storage

When stored at 70°F and 50% RH, ASI 502 has a shelf-life of 12 months in cartridges, squeeze tubes, pails & drums. High temperature and high humidity can significantly reduce shelf-life.

Warranty Limitations

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 such authorization. Because the storage, handling and application of the material is beyond ASI's control, we can accept no liability for the results obtained. ASI's sole limited warranty is that the product meets the manufacturing specifications in effect at time of shipment. There is no warranty of merchantability or fitness for use, nor any other express or implied warranty. ASI will not be liable for incidental or consequential damages of any kind. The exclusive remedy for breach of such limited warranty is a refund of purchase price or replacement of any product shown to be other than as warranted. Suggestions of uses should not be taken as inducements to infringe upon any patents.