



600 HIGH-TEMP RESISTANT RTV SILICONE

TECHNICAL DATA SHEET



chemical-concepts.com

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410 Pike Road • Huntingdon Valley, PA 19006



HEAT RESISTANT



UV RESISTANT



WATER TIGHT

ASI 600 Hi-Temp Resistant RTV Silicone is a one-component, moisture cure, 100% RTV silicone that cures to form an extremely durable rubber that can withstand extreme heat while maintaining its physical properties. Due to the formulation, ASI 600 can resist constant temperatures up to 500°F and intermittent temperatures up to 600°F. ASI 600 meets the requirements of FDA Regulation No. 21 CFR 177.2600 for food grade applications. ASI 600 Hi-Temp Resistant 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).

COMMON BONDING SUBSTRATES:

ASI 600 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. End user is responsible for testing specific environment or substrate prior to use. Substrates may vary by manufacturer.

COMMON APPLICATIONS:

ASI 600 is an excellent sealant/adhesive for many Commercial, Industrial and Construction applications. Common applications include:

- Industrial Ovens
- RV & Trailer Manufacturing
- Sealing Heating Elements
- Formed-In-Place Gasket Applications
- Industrial Manufacturing Applications
- High Temperature Gasketing Applications
- HVAC Applications
- Fireplace Manufacturing
- Appliance Manufacturing
- Sheet Metal Work & Sealing
- Encapsulating & Coating Temperature Sensitive Parts
- General Sealing & Bonding Applications

Can be used for other various applications depending upon substrate. Test all substrates before use.

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
- 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
- FDA Regulation No. 21 CFR 177.2600
- VOC Compliant (23 grams/liter ASTM D2369)



Physical Properties	Test Method	Result
Viscosity	ASI Test Method	976,000 cps (Spindle 7, 4rpm)
Skin Formation Time	ASI Test Method	13 minutes (70°F, 50% RH)
Density	ASTM D1475	8.5 lbs./gal
Hardness	ASTM C661	25 (Shore A)
Extrusion Rate	ASI Test Method	362 g/min
Tensile Strength	ASTM D412	265 psi
Elongation at Break	ASTM D412	509%
Application Temperature	ASI Test Method	-35°F to 150°F
Gun Grade	ASI Test Method	Pass (Non-Slump)
QUV Testing	ASTM G154	Pass (10,000 hrs)
Service Temperature*	ASI Test Method	-50 °F to 500°F
Typical Cure Rate	ASI Test Method	24 hrs. (1/8" bead)

**Intermittent temperature up to 550°F. 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 600 suggested application temperature range: -35°F to 150°F. Testing should be done to confirm temperature requirements are met. Information on this data sheet can change without notice and it is therefore not recommended that these figures be used in spec writing. If you have any questions contact manufacturer's sales and technical service department.*

ASI 600 HIGH-TEMP RESISTANT RTV SILICONE

COLORS

ASI 600 is only available in red. Inquire to ASI sales staff for additional information.

PACKAGING

ASI 600 is stocked in squeeze tubes, cartridges, pails and drums. Additional packaging may be available upon request. Inquire to ASI sales staff for additional information.

SURFACE PREPARATION

All surfaces should be dry and clean. 100% IPA (isopropyl alcohol) or acetone can be used to clean the surface depending on the substrate. DO NOT USE petroleum based solvents. Priming for ASI 600 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.

DIRECTIONS

ASI 600 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.

CAUTION/SAFETY

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

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 600 has a shelf-life of 12 months from date of shipment in cartridges, squeeze tubes, pails & drums. High temperature and high humidity can significantly reduce shelf-life.

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. This product is not paintable.

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.



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