# 300 ELECTRONIC GRADE RTV SILICONE

#### TECHNICAL DATA SHEET







**ELECTRONIC GRADE** 

LOW ODOR

NON-CORROSIVE

ASI 388 Electronic Grade RTV Silicone is a one part, moisture cure sealant that cures to form a tough, durable, flexible rubber that is ideal for bonding, sealing, encapsulating and protecting electronic parts. Once cured, ASI 388 will withstand a constant temperature range of -70°F to 400°F and will resist some chemicals depending on duration, contact and the type of chemical. ASI 388 bonds to a wide variety of substrates which makes it ideal for protection against moisture and other external variables. ASI 388 exhibits consistent electrical properties even when subjected to environmental changes in temperature, humidity, etc., which makes it a good insulator for electronic components.

#### **COMMON BONDING SUBSTRATES:**

ASI 388 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
- Most Metals
- Most Fiberglass
- Aluminum
- Porous Surfaces
- Vinvl

- PVC
- Steel
- Rubber
- 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 388 Electronic Grade RTV Silicone is ideal for many bonding, sealing, encapsulating and waterproofing applications. Common applications include:

- Sealing Lead Wire Entries
- Waterproofing Electronics
- Component Mounting
- Sealing Electronic Assemblies
- Adhering Electronics
- Sealing/Bonding Electronics
- Circuit Board Protection
- Electronic Encapsulating
- Electrical Connections
- Covering Sensitive Components Telecommunications Including Coaxial Cable Connectors, Etc.
  - Engine Components
  - General Industrial Applications

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

#### **FEATURES**

- Non-Corrosive, Electronic Grade
- Heat & Cold Resistance
- Excellent Electrical Properties
- Long-Lasting Durability
- Resistant To Some Chemicals
- Good Stress Relieving Properties
- Excellent For Bonding, Sealing Or Encapsulating
- Advanced Adhesion To Various Substrates

### **CONFORMS, MEETS & EXCEEDS**

- UL Recognized
- VOC Compliant (21 grams/ liter ASTM D2369)





Physical Properties	Test Method	Result
Viscosity	ASI Test Method	1,000,000 cps (Spindle 7, 4rpm)
Skin Formation Time	ASI Test Method	20 minutes (70°F, 50% RH)
Density	ASTM D1475	8.7 lbs./gal
Hardness	ASTM C661	30 (Shore A)
Modulus 100%	ASTM D412	0.37 (MPa)
Tensile Strength	ASTM D412	300 psi
Elongation at Break	ASTM D412	600%
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	-70 °F to 400°F
Dielectric Strength	ASTM D149	500 (Volts/Mil)
Volume Resistivity	ASTM D257	3 X 10 <sup>15</sup>
Dielectric Constant 50Hz	ASTM D150	3
Dissipation Factor 50Hz	ASTM D250	5 X 10 <sup>-3</sup>
Typical Cure Rate	ASI Test Method	24 hrs. (1/8" bead)

\*Intermittent temperature up to 450°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 388 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 388 ELECTRONIC GRADE RTV SILICONE

#### **COLORS**

ASI 388 is available in clear, white and black. Additional colors can be available for purchase. Inquire to ASI sales staff for additional information.

#### **PACKAGING**

ASI 388 is stocked in cartridges, 2.8 oz. squeeze tubes, 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 388 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 388 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 388 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.

#### **MILITARY SPECIFICATION**

ASI 388 meets the requirements of MIL 46106B Type 1.

#### LIMITATIONS

Do not store at elevated temperatures. Use only on clean surfaces free of contaminants. Cold temperature and low humidity will slow curing. ASI 388 can discolor copper around applied area or confined area.

#### 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.







TDS ASI 388 050324