American Sealants, Inc.

"High Performance Silicones, Sealants, and Adhesives"

1987-2017 CELEBRATING 30 YEARS

TECHNICAL DATA SHEET

ASI 57 Hybrid Performance Sealant

Innovative ASI Hybrid Technology

Features

- Cures To Wet Substrates Without Negative Effects
- 100% Solids, Will Not Shrink
- Resistant To UV Degradation and Weathering
- Excellent Adhesion Range
- 25% Joint Movement Capability
- Paintable Within 24 Hours Of Application

Additional Features

- Contains No Solvents Or Isocyanates Which Makes ASI 57 VOC Compliant
- Easy to Dispense And Tool At A Variety of Temperatures
- Will Not Wash Off With Rain Or Moisture
- Non-Slump, Can Use On Overhead & Vertical Applications
- Will Cure When Water Or Moisture Is Present
- Low Odor, Eco-Friendly Formulation

Conforms, Meets & Exceeds

- ASTM C920 Class 25, Type S, Grade NS, Use NT, A, M, G & O
- TT-S-00230-C Type II, Class B
- Conforms To California Proposition 65
- Conforms To USDA Requirements For Non-Food Contact
- Meets Requirements Of CARB & SCAQMD
- VOC Compliant (10 grams/liter ASTM D2369)

Description

ASI 57 Hybrid Performance Sealant is a one-part, polyether sealant that uses ASI's innovative hybrid technology to produce a material that is ideal for a wide range of applications where a long-term, durable seal or bond is required. It bonds to a wide array of substrates with aggressive adhesion and resists UV degradation and weathering long-term. ASI 57 is a non-slump sealant and can be applied to vertical or overhead surfaces without flowing or sagging. ASI 57 can be applied to in a variety of environments while remaining easy to apply and tool. It is also able to withstand moisture before complete cure which makes it ideal for damp and wet environments. ASI 57 is 100% solids and has a very low odor which makes it ideal for confined or occupied work spaces. ASI 57 is ideal for most industrial and construction applications because of its broad adhesion profile, characteristics & properties.

Physical Properties	Test Method	Result
Viscosity	ASI Test Method	650,000 cps (Spindle 7, 4rpm)
Skin Formation Time	ASI Test Method	30 minutes (70°F, 50% RH)
Density	ASTM D1475	13.8 lbs./gal
Hardness	ASTM C661	27 (Shore A)
Modulus 100%	ASTM D412	0.6 MPa
Tensile Strength	ASTM D412	1.4 MPa
Elongation at Break	ASTM D412	430%
Lap Shear	ASTM D412	1.94 MPa
Gun Grade	ASI Test Method	Pass (Non-Slump)
QUV Testing	ASTM G26	Pass (4,000 hrs)
Service Temperature	ASI Test Method	-50°F to 220°F
Cure In Depth After 7 Days	ASI Test Method	12mm (70°F, 50% RH)

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 57 suggested application temperature range: 32°F to 150°F. ASI 57 can be applied lower than 32°F. However, it will slow down curing. In general lower temperature & humidity will slow skin and cure times.

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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.

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Common Applications:

ASI 57 is an excellent sealant/adhesive for many Commercial, Industrial and Construction applications. Such applications include:

- Joint Sealant Applications
- Trailer & RV Manufacturing
- Walk-In Freezer Manufacturing & Installation
- General Construction Applications
- Industrial Manufacturing Applications
- Roofing Applications
- Pre-cast Concrete Applications
- Window & Door Installation
- Weather Sealing Applications
- HVAC Applications
- Appliance Manufacturing
- Masonry Applications
- ***Can be used for additional applications not listed. ASI recommends testing prior to use.***

Directions

ASI 57 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 alcohol or 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 57 is available in white, black & grey. Additional colors can be available for purchase. Inquire to ASI sales staff for additional information.

Packaging

ASI 57 is stocked in 10.2 oz. caulking cartridges. It can also be packaged into quart cartridges, sausage packs, pails and drums. 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 (32°F and below will be most significant). Do not use on olefins such as polyethylene, polypropylene or TPO prior to testing. Test all paints before application. Allow treated wood & asphalt to cure 6 months before application. Long-term submersion under water can cause loss of adhesion on some substrates.

Common Bonding Substrates:

ASI 57 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:

- Kynar ® Coated Substrates
- Ceramics
- Fiberglass
- Glass
- Granite
- Marble
- Aluminum & Galvanized Metal
- Wood
- EPDM
- EPS or Styrofoam Insulation
- Porcelain
- PVC & Other Plastics
- Porous Surfaces (Concrete, Brick, Etc.)
- ***Can be used on additional substrates not listed. ASI recommends testing prior to use.***

Surface Preparation

All surfaces should be clean. Alcohol can be used to clean the surface. DO NOT USE petroleum based solvents. Priming for ASI 57 is not normally required for applications to nonporous surfaces. 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 57 has a shelf-life of 12 months in cartridges. When stored at 70F and 50% RH, ASI 57 has shelf-life of 6 months in pails and 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.