



57 CLASS 50 - HIGH PERFORMANCE SEALANT & ADHESIVE



TECHNICAL DATA SHEET



PAINTABLE



SOLVENT-FREE



UV RESISTANT

ASI 57 Hybrid Class 50 Hybrid Sealant and Adhesive is a one-part, low odor, no-sag 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. Not only does it aggressively bond to a wide variety of substrates, it reaches 50% joint moveability!

ASI 57 will not shrink, is 100% solids and free of isocyanates and solvents, which unlike many solvent based adhesives, makes it easy and consistent to dispense/tool at a variety of temperatures. ASI 57 offers excellent resistance to UV and yellowing for long term performance. It can be applied in damp and wet environments, which makes it's immediately rain ready and mold and mildew resistant. ASI 57 is for most industrial and construction applications because of it's broad adhesion profile, characteristics and properties. It can be painted with most consumer and industrial latex paints.

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

COMMON APPLICATIONS:

ASI 57 is an advanced Class 50 sealant/adhesive for many Commercial, Industrial and Construction applications where long-term permanently-flexible seal or bond is required. Common applications include:

- Joint Sealant Applications
- Trailer & RV Manufacturing
- Walk-In Freezer Manufacturing & Installation
- General Construction
- Industrial Manufacturing
- Solar Panel Installation
- Adhesive Applications
- Roofing
- Pre-cast Concrete
- Window & Door Installation
- Weather Sealing
- HVAC Applications
- Appliance Manufacturing
- Masonry Applications

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

FEATURES

- 50% Joint Movement Capability
- Cures To Wet Substrates Without Negative Effects
- 100% Solids, Will Not Shrink
- Resistant To UV Degradation and Weathering
- Advanced Adhesion Range
- Paintable Within 24 Hours Of Application
- Contains No Solvents or Isocyanates
- VOC Compliant (17 grams/liter ASTM D2369)
- 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, Type S, Grade NS, Class 50, Uses NT, T, M, G, A & O
- Conforms to California Proposition 65
- Meets USDA Requirements for Non-Food Contact
- Meets Requirements of CARB & SCAQMD
- ASTM E84, Class A, Flame Spread: 0, Smoke Developed: 0
- VOC Compliant



Physical Properties	Test Method	Result
Viscosity	ASI Test Method	2,000,000 cps (Spindle 7, 4rpm)
Skin Formation Time	ASI Test Method	35 minutes (70°F, 50% RH)
Density	ASTM D1475	13.5 lbs./gal
Hardness	ASTM C661	27 (Shore A)
Modulus 100%	ASTM D412	0.6 (MPa)
Tensile Strength	ASTM D412	145 (PSI)
Elongation at Break	ASTM D412	600 %
Application Temperature	ASI Test Method	32° to 120°F
Gun Grade	ASI Test Method	Pass (Non-Slump)
OUV Testing	ASTM G154	Pass (10,000 hrs)
Service Temperature*	ASI Test Method	-75°F to 220°F
Cure In-Depth After 7 Days	ASI Test Method	12mm. (70°F, 50% RH)

*Intermittent temperature up to 270°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 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. Information on this data sheet can change without notice. It is not recommended that these figures be used in spec writing. Contact manufacturer's sales and technical service department with questions.

chemical-concepts.com

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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 available in 10 oz. caulking cartridges, pails and drums. Additional packaging options may be available. 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 57 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 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 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 57 has a shelf-life of 12 months from date of shipment in cartridges and sausages. When stored at 70°F and 50% RH, ASI 57 has shelf-life of 6 months from date of shipment in pails and 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 (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.

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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