



# **TECHINCAL DATA SHEET**

# **ASI 5900 Fast Grab Hybrid Adhesive**



#### **Features**

- No Solvents Or Water, Will Not Shrink
- 100% Solids, VOC Compliant
- Offers Immediate Green Strength
- Adheres To A Wide Variety Of Substrates
- Remains Easy To Dispense From 0-150F
- Will Cure To Wet Substrates Or When Moisture Is Present
- Remains Flexible, Allows For Vibration & Movement

# **Conforms, Meets & Exceeds**

- Conforms to California Proposition 65
- Conforms to USDA Requirements For Non-Food Contact
- Meets Requirements of CARB & SCAQMD
- VOC Compliant (9.55 grams/liter ASTM D2369)

# Description

ASI 5900 Fast Grab Hybrid Adhesive uses ASI's innovative hybrid technology to develop immediate green strength to fixture substrates while the adhesive cures and provides a long-term, durable bond. ASI 5900 is 100% solids. It will not shrink and is free of isocyanates and solvents which make it easy and friendly to work with at a variety of temperatures. ASI 5900 will remain consistent to dispense and tool whether it is cold or hot outside unlike many solvent based adhesives. It will bond to wet substrates and is able to be applied when water or moisture is present without washing off (water based adhesives) or outgassing and bubbling (polyurethanes). ASI 5900 has a very broad adhesion range and can be used for a variety of industrial or construction applications.

# Why Use ASI 5900 vs. Your Current Adhesive?

- The solvent in solvent based adhesives flashes off during curing and water based adhesives also have water loss during cure. This can often leave behind just 60% of what you applied. With the ASI 5900, what you apply stays. Therefore, you can often reduce adhesive usage just by using our technology alone.
- The ASI 5900 has excellent green strength and fixturing properties. It not only bonds well to a variety of substrates but it also grabs and holds which helps reduce assembly time, brace usages, fastener usage, etc.
- A lot of adhesives that are eco-friendly do not have the strength required for the job. The ASI 5900 offers an eco-friendly option that is made to perform.

Physical Properties	Test Method	Result
Viscosity	ASI Test Method	1,800,000 cps (Spindle 7, 4rpm)
Skin Formation Time	ASI Test Method	10 minutes (70°F, 50% RH)
Density	ASTM D1475	14.8 lbs./gal
Hardness	ASTM C661	45 (Shore A)
Modulus 100%	ASTM D412	1.42 MPa
Tensile Strength	ASTM D412	1.58 MPa
Elongation at Break	ASTM D412	150 %
Lap Shear	ASTM D412	2.15 MPa
Gun Grade	ASI Test Method	Pass (Non-Slump)
QUV Testing	ASTM G26	Pass (2,000 hrs)
Service Temperature	ASI Test Method	-50°F to 220°F
Cure In Depth After 7 Days	ASI Test Method	13mm (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 5900 suggested application temperature range: 32°F to 150°F. ASI 5900 can be applied lower than 32°F. However, it will slow down the curing speed. In general lower temperature & humidity will slow skin and cure times.

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.





# **Common Applications:**

ASI 5900 is an excellent adhesive for many Commercial, Industrial and Construction applications. Such applications include:

- Roof Bow Adhesive
- Trailer & RV Manufacturing
- · Shower Panels & Installation
- Panel Assembly Adhesive
- Subfloor Adhesive
- Roofing Applications
- Landscape Block Applications
- Mirror Installations
- Countertop & Solid Surface Installation
- Wall Stone Applications
- HVAC Applications
- General Construction Applications
- Industrial Manufacturing Applications
- Can be used for additional applications not listed. ASI recommends testing prior to use.

#### **Directions**

ASI 5900 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 5900 is available in white. Colors can be purchased in batch volumes. Inquire to ASI sales staff for additional information.

#### Packaging

ASI 5900 can be packaged into caulking 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 5900 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:

- Ceramics
- Fiberglass
- Glass
- Granite
- Marble
- Aluminum & Galvanized Metal
- Wood
- Stone
- 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 5900 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 5900 has a shelf-life of 12 months in cartridges. When stored at 70°F and 50% RH, ASI 5900 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.