



# Product Data

## ASI 510 Anti-Mildew Silicone Sealant/Adhesive

### DESCRIPTION

ASI 510 Anti-Mildew Silicone Sealant/Adhesive is a white, one-part, mildew resistant sealant for ceramic tile, showers, tubs, rimless sinks and plumbing fixtures where high humidity and temperatures will dry out, crack or discolor non-silicone sealants. ASI 510 Anti-Mildew Silicone Sealant/Adhesive remains flexible for years, won't sag or slump in joints, and can be applied overhead or vertically. It will not shrink, crack, crumble, or dry out and in any applications eliminates the need for periodic resealing.

Because ASI 510 is a 100% silicone sealant, it has excellent resistance to weathering including ozone, ultraviolet radiation, freeze-thaw conditions and airborne chemicals.

ASI 510 can be applied to surface temperatures from -18° to +50° (0° to +120°F) and after curing, withstands constant operating temperatures from -50° to +200°C (-58° to +392°F).

### EXCELLENT MILDEW RESISTANCE

The mildew resistant property of ASI 510 prevents spotting and color change, which makes the sealant ideal for bathroom and other plumbing related applications. The sealant also withstands hot and humid environments. A neat and clean appearance can be maintained with normal cleaning.

### TYPICAL USES

ASI 510 is widely used for nonporous surface applications in new construction, mobile homes

and recreational vehicles, and maintenance, such as:

- Showers, tubs, rimless sinks.
- Kitchen and bathroom fixtures.
- Commercial and institutional lavatories.

### General Sealing:

- Ceramic tile grouting.
- Bedding tile accessories.

It may also be used in exterior locations where conditions support mildew growth, although some color change may occur under continued exposure to ultra-violet light.

### DIRECTIONS

ASI 510 is ready to use and requires no mixing or additives. The cure mechanism begins as soon as the sealant comes in contact with the air.

At conditions of 25°C (77°F) and 50% relative humidity, the sealant will skin' in 10 minutes and cure in 24 hours (1/8" bead) and reaches its maximum adhesion in 7 days.

Higher humidity accelerates cure. Tooling, if necessary, should be done before 'skinning' takes place. (Caution: Do not use fingers for tooling.)

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.

### SURFACE PREPARATION

All surfaces should be clean and dry. It is recommended that bonding surfaces be solvent wiped with naphthas, ketones or chlorinated solvents. Specific solvents would include xylol, toluol, and mineral spirits.

In case of plastics, determine suitability of solvent prior to use. Allow surface to dry thoroughly before applying sealant. Do not solvent wipe with alcohols or oil-containing solvents such as Varsol.

### PRIMING

Priming for ASI 510 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.

### PAINTING

ASI 510 sealant shouldn't be applied to surfaces which will be painted. Painting over sealant is not recommended because the paint film does not stretch with the extension of the sealant.

### PACKAGING

ASI 510 is supplied in: (10.2 fl. oz.) Caulking Cartridge, (40 lb.) Pail and (440 lb.) Drum. Special packaging is available upon request.

### CONSTRUCTION SPECIFICATIONS

ASI 510 meets Federal Specifications TT-S-001 543A and TTS-0230C.

### STORAGE

ASI 510, when stored in original, unopened container at or below 32°C (90°F), has a shelf life of 12 months from date of shipment.

## TYPICAL PHYSICAL PROPERTIES

<u>CHARACTERISTIC</u>	<u>TEST METHOD</u>	<u>RESULTS</u>
Shore A Hardness	ASTM D2240	28±2
Tensile @ Break	ASTM D412	420±25 psi
Elongation @ Break	ASTM D412	400±25%
Modulus @ 100% Elongation	ASTM D412	70±10 psi
Tear Strength .	ASTM 624 (Die B)	45±10 ppi
Adhesion Strength (Peel)	TT-S-001543, 3.5.9	
Glass		24±2 ppi
Aluminum (Primed)		24±2 ppi
Sag, or Slump	TT-S-001543, 3.5.2	NIL
Shrinkage (Weight Loss)	TT-S-001543, 3.5.5	< 5%
Extrusion Rate	1/8" orifice @ 90 psi	130±5 gm/min
Service Temperature	----	-50°C to +200°C -58° F to +392° F
Tack Free Time	TT-S-001543, 3.5.6	10 Minutes
Time to Full Cure (1/8" Bead)	----	24 Hours
Ultimate Cure	----	7 Days
Joint Movement Capability	4 : 1 Safety Factor	±25%
Chemical Resistance	List Available	Excellent
Color Retention	----	Excellent
Weatherability	----	Excellent
Electrical Properties @ 72° F (22° C):		
Dissipation Factor	ASTM D150	50 Hz - 0.0010 1 Hz - 0.0008 1 MHz - 0.0002
Dielectric Constant	ASTM D150	50 Hz - 2.7 1 kHz - 2.7 1 MHz - 2.7
Volume Resistivity, Ω .cm	ASTM D257	6x 10 <sup>14</sup>
Surface Resistivity,	ASTM D257	1 x 10 <sup>16</sup>
Dielectric Strength, KV/mm	ASTM D149	25

### SAFETY PRECAUTIONS

ASI 510 releases small amounts of acetic acid during cure. Adequate ventilation should be provided with extensive use of this sealant. On direct contact, uncured sealant may irritate eyes. Flush eyes well with water and call a physician. Avoid prolonged contact with skin.

### WARRANTY LIMITATIONS

ASI warrants only that its products will meet its specifications. ASI shall in no event be liable for incidental or consequential damages. Except as expressly stipulated, ASI's liability, expressed or implied is limited to the stated selling price of any defective goods.