American sealants, Inc.
P.O. Box 80307
Fort Wayne, IN 46898-0307

(260) 489-0728
(260) 489-0825
Fax (260) 489-0519

Product Data

ASI 505 Industrial Self-Leveling Silicone Sealant

DESCRIPTION
ASI 505 Industrial Self-Leveling Silicone Sealant is a one-component, RTV (room temperature vulcanizing), free-flowing sealant designed for a variety of potting, coating and sealing applications and cures to form a tough high modulus rubber.
ASI 505 has excellent unprimed adhesion to a very wide range of substrates, including metals, glass, most woods, ceramics and many plastics.
Because ASI 505 is a 100% silicone sealant, it resists weathering, moisture, vibration, ozone, ultraviolet and temperature extremes. In addition, it stays flexible from -57°C to +204°C (-70 F to +400°F).

TYPICAL USES
ASI 505 is primarily used in applications where a flowable, self-leveling silicone sealant is required to fill small gaps or voids. Applications include potting electrical terminals, coating electrical devices and bonding and sealing electrical insulation.

PACKAGING
ASI 505 is supplied in (10.2 fl. oz.) caulking cartridge, (5 gal.) pail, and (440 lb.) drum.

STORAGE
ASI 505, when stored in original unopened container at or below 32 C (90°F) has a shelf life of 12 months from date of shipment.

DIRECTIONS
ASI 505 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. Uncured sealant will flow until a skin is formed.
At conditions of 25°C (77°F) and 50% relative humidity, the sealant will skin in 15 minutes and cure within 24 hours. Higher humidity accelerates cure.
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 naphtha, ketone or chlorinated solvent. Suitable solvents would include xylol, toluol and mineral spirits. Do not solvent wipe with alcohols or oil-containing solvents such as Varsol. Allow surface to dry thoroughly before applying sealant.

SAFETY PRECAUTIONS
ASI 505 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 physician. Avoid prolonged contact with skin.

PRIMING
Priming for ASI 505 is normally not required for applications to most substrates. Unprimed adhesion can be readily tested by applying a small trial bead and allowing 7 days for maximum adhesion to occur.

PAINTING
ASI 505 should not be applied to surfaces that will be painted. Painting over sealant is not recommended because the paint film does not stretch with the extension of the sealant and the adhesion of paint to the ASI 505 is not adequate.

MILITARY SPECIFICATIONS
ASI 505 meets the requirements of MIL-A-46lO6A Type II.

COLORS
Available colors for ASI 505 are clear, black and white. Special colors are available upon request. Call for price and availability.

WARRANTY AND 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.

TYPICAL PROPERTIES

UNCURED:

Type	One-part, self-levelling RTV
Appearance	Smooth thick liquid
Specific Gravity	Clear 1.02; Colors 1.04
Application Temperature Range	-18°C to +5O°C (0°F to +120°F)
Cure Method	Acetoxy, moisture cure
Skin Over Time	15 minutes
Cure Time	24 hours (1/8" thickness)
Slump/Sag	Flowable
Viscosity	Approx. 45,OOOcP

CURED:

at 25°C (77°F) and 50% R.H. for 7 days (1/8" thickness)

Durometer Hardness (Shore A) (ASTM D 2240)	30
Tensile Strength (ASTM D 412)	220 psi (1.5 MPa)
Elongation at Break (ASTM D 412)	225%
Tear Resistance (ASTM D 624, Die B)	18 ppi (3.2 kN/m)
Temperature Range After Cure	-57°C to +204°C (-70°F to +400°F)
Shrink Factor	Nil
Thermal Expansion Coefficient 0° to 100°C (32°F to 212°F)	9 x 10^4 1/K
Dielectric Strength (ASTM D 149)	500 volts/mil (215 kV/cm)
Volume Resistivity (ASTM 0 257)	1 x 10^{15} ohm/cm
Dissipation Factor (ASTM D 150)	0.002 at 100 Hz 0.002 at 10 kHz
Dielectric Constant (ASTM D 150)	2.60 at 100 kHz 2.60 at 10 kHz