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Product Data

ASI 335 Neutral-Cure Silicone Sealant/Adhesive

DESCRIPTION

ASI 335 Neutral Cure Silicone Sealant/Adhesive is a one-part, non-slump, moisture-curing RTV (room temperature vulcanizing) that cures to form a tough, high modulus rubber with long-term flexibility and durability.

The neutral curing mechanism of ASI 335 is ideally suited for use in confined work areas since no objectionable odors are evolved.

The non-slump characteristics of ASI 335 allow application to vertical or horizontal joints without flowing or sagging. ASI 335 has excellent resistance to weathering including ozone, ultraviolet radiation, freeze-thaw conditions and airborne chemicals.

After cure, the wide heat stability range of ASI 335 is from -57°C to +204°C (-70°F to +400°F) and the sealant can be applied to surface temperatures from -18°C to +50°C (0°F to +120°F).

TYPICAL USES

ASI 335 can be used as a durable, general-purpose sealant/adhesive in a wide range of industrial applications.

Unprimed adhesion to a wide range of substrates is available with the use of ASI 335. For example, ASI 335 adheres to unprimed chrome and stainless steel, which other high modulus silicone sealants would require to be primed.

As a formed-in-place gasket, ASI 335 exhibits low swell, low compression set and good oil resistance. These characteristics impart an unusual balance of properties to ASI 335 to prevent leakage in harsh environments such as engines, transmissions, water pumps, rear axles and oil pans. ASI 335 is not recommended to be used in cylinder heads, exhaust manifolds or in contact with fuels.

DIRECTIONS

ASI 335 is ready to use and requires no mixing or additives.

The cure mechanism begins as soon as the sealant comes in contact with air. At conditions of 25°C (77°F) and 50% relative humidity, the sealant will skin in 10-20 minutes and cure in 24 hours (1/8" bead), with full cure strength in 7 days. Higher humidity accelerates cure. Tooling 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.

SURFACE PREPARATION

Providing that all bonding surfaces are clean and dry. ASI 335 has excellent unprimed adhesion to most substrates. If there is any doubt about contamination, surfaces should be solvent wiped with oil-free solvents, such as xylol, toluol, naphtha or non-flammable chlorinated solvents. Do not solvent-wipe with oil-based solvents such as Varsol.

PRIMING

Priming of ASI 335 is normally not required for application to most substrates. Unprimed adhesion can be readily tested by applying a small trial bead and allowing 7 days for maximum adhesion to occur. ASI 335 has excellent unprimed adhesion to many substrates as shown in the adhesion chart.

PAINTING

ASI 335 should not be applied to surfaces that will be painted. Painting over the sealant is not recommended because the paint film does not stretch with the extension of the sealant and the adhesion of paint to the sealant is not adequate.

COLORS

ASI 335 is available in clear, white and black. Special colors are available upon request. Call for price and availability.

MILITARY SPECIFICATIONS

ASI 335 meets the requirements of MIL 46106 Type 1.

FDA STATUS

ASI 335 is permitted under regulations of the Food and Drug Administration where incidental food contact might be involved. FDA Regulation number is 175.105.

PACKAGING

ASI 335 is supplied in (10.2 fl. oz.) caulking cartridge; (40 lb.) pail, (440 lb.) drum.

TYPICAL PHYSICAL PROPERTIES

Characteristics	Test Method	Results
Shore A Hardness	ASTM D2240	30±2
Tensile @ Break	ASTM D412	250±25 psi
Elongation @ Break	ASTM D412	400±25 %
Modulus @ 100% Elongation	ASTM D412	90±10 psi
Tear Strength	ASTM 624 (Die B)	30 ±10 psi
Adhesion Strength (Peel)	TT-S-001 543, 3.5.9.	
Glass		10±2 ppi
Aluminum Primed		8±2 ppi
Mortar (Primed)		12±2 ppi
Sag, or Slump	TT-S-001 543, 3.5.2	Nil
Shrinkage (Weight Loss)	TT-S-001 543, 3.5.5	<5%
Extrusion Rate	1/8" orifice, @ 50 psi	130±5 gm/mm
Service Temperature Range	- - -	-18°C to +50°C 0°F to +120°F
Tack Free Time	TT-S-001 543, 3.5.6	10-20 minutes
Cure Time (1/8" Bead)	- - -	24 Hours
Cure Time –Ultimate Strength		7 Days
Joint Movement Capability	4:1 Safety Factor	±25%
Chemical Resistance	List Available	Excellent
Color Retention	- - -	Excellent
Weatherability	- - -	Excellent
Reactivity of Byproducts		Non-Corrosive to
Electrical Properties @72°F (22°C)		Most substrates
Dissipation Factor	ASTM D150	50 Hz – 0.0009 1kHz-0.0004 1 MHz – 0.0002
Dielectric Constant	ASTM D150	50 Hz – 2.7 1 kHz-2.7 1 MHz – 2.7
Volume Resistivity, .cm	ASTM D257	2 x 10 ¹⁴
Surface Resistivity,	ASTM D257	3 X 10 ¹⁶
Dielectric Strength, KV/mm	ASTM D149	18

STORAGE

Since ASI 335, when stored in original unopened container at or below 32°C (90°F), has a shelf life of 12 months from date of shipment

WARRANTY AND LIMITATIONS

ASI warrants 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.