

Flowable Silicone Sealant 734 Datasheet

Product Code: RC13734

Product Description

A 1 part solventless silicone elastomer for general sealing and bonding applications. 734 is a flowable liquid that is easy to use and cures on exposure to moisture in the air. Available in clear or in white.

Technical Properties

Corporate Test Method	ASTM	Property	Unit	Result
As Supplied				
0176		Appearance		Flowable Liquid
		Colours		Clear, White
0050	D1084	Viscosity at 25°C (77°F)	mPa.s	45,000
0098		Skin-over time	minutes	7
0095		Tack-free time	minutes	13
0208		Non-volatile content after 24hrs at 70°C (158°F)	%	95

Technical Properties

CTM	ASTM	Property	Unit	Result
Mechanical properties, cured 7 days in air at 25°C (77°F) and 50% relative humidity				
0022	D792	Specific gravity		1.03
0099	D2240	Durometer Hardness Shore A		27
0137A	D412	Tensile Strength	MPa	1.5
0137A	D412	Elongation at Break	%	315
0159A	D624	Tear Strength - die B	kN/m	3.0
0057		Brittle Point	°C / °F	-65 / -85
Electrical properties, cured 7 days in air at 25°C (77°F) and 50% relative humidity				
0114	D149	Dielectric Strength	kV/mm	17
0249	D257	Volume resistivity	Ohm.cm	1x10 ¹⁵
0112	D150	Permittivity at 100 Hz		2.7
0112	D150	Permittivity at 100 kHz		2.7
0112	D150	Dissipation Factor at 100 Hz		0.00034
0112	D150	Dissipation Factor at 100 kHz		0.00019

How To Use: Substrate Preparation

All surfaces must be clean and dry. Degrease and wash off any contaminants that could impair adhesion. Suitable solvents include isopropyl alcohol, acetone or methyl ethyl ketone.

Unprimed adhesion may be obtained on many substrates such as glass, metals and most common engineering plastics. Substrates to which good adhesion is normally not obtained include PTFE, polyethylene, polypropylene and related materials.

For maximum adhesion, the use of 1200 OS Primer is recommended. After solvent cleaning, a thin coat of 1200 OS Primer is applied by dipping, brushing or spraying. Allow primer to dry for 15 to 90 minutes at room temperature and a relative humidity of 50% or higher.

How To Apply:

Apply 734 Flowable Sealant to the prepared surfaces in a uniform thickness of 0.25 to 0.75mm. If the adhesive is to be used to bond two surfaces, apply it only to one surface and allow it to establish a uniform contact before putting the other surface in place.

When placing the second, use enough pressure to spread the adhesive and displace any trapped air.

On exposure to moisture, the freshly applied material will "skin-over" in about 7 minutes at room temperature and 50% relative humidity. Any tooling should be completed before this skin forms.

Cure Time:

After skin formation, cure continues inward from the surface. In 24 hours (at room temperature and 50% relative humidity) 734 Flowable Sealant will cure to a depth of about 3 mm. Very deep sections, especially when access to atmospheric moisture is restricted, will take longer to cure completely. Cure time is extended at lower humidity levels.

Before handling and packaging bonded components, users are advised to wait a sufficiently long time to ensure that the integrity of the adhesive seal is not affected. This will depend on many factors and should be determined by the user for each specific application.

Compatibility

734 Flowable Sealant releases a small amount of acetic acid during cure. This may cause corrosion on some metallic parts or substrates, especially in direct contact or when the cure is carried out in a totally enclosed configuration which would not allow cure by-products to escape.

The information contained on this product information sheet is to be used as guidance. The advice is given in good faith and does not constitute any guarantee or recommendation for suitability. The Rubber Company cannot be held liable for any damage caused by incorrect installation. We hereby reserve the right to change the technical information herewith without notification or prior agreement.