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SilCoat SC8022

Silicone Coating and Potting Gel

Typical Properties			
Property	**Unit**	**Value**	**Test Method**
Color / Component A		Transparent	Visual
Color / Component B		Transparent	Visual
Mixing Ratio	Vol. / Wt	1 : 1	
Density (as mixed)	Gram /cc	0.98	ASTM D792
Viscosity at 25°C (mixed)	cP.s	2,000	ASTM D2196
Property as Cured			
Color		Transparent	Visual
Hardness	Shore A	35	ASTM D2240
Dielectric Constant	@100Hz	2.60	ASTM D150
Dielectric Constant	@100 KHz	2.66	ASTM D150
Dissipation Factor	@100 Hz	< 0.003	ASTM D150
Dissipation Factor	@100 KHz	< 0.001	ASTM D150
Dielectric Strength	Volt/mil AC	> 450	ASTM D149
Volume Resistivity	Ohm-cm	> 10E+14	ASTM D257
Coefficient of Thermal Expansion	ppm/°C	280	IPC-TM-650
Tg	°C	-120	TGA
Useful Temperature Range	°C	-55 to 200	TGA
Shelf Life at 23°C	Month	> 6	Viscosity double
Cure Profile			
Cure at 25°C	Hours	~ 6	DSC
Cure at 125°C	Minutes	10	DSC
Weight loss in cure	Weight %	< 0.5%	TGA
Pot / Work Life at 25°C	Minutes	60	Viscosity double

These figures are only intended as a guide and should not be used in preparing specifications.

Characteristics

SilCoat SC8022 is a two-part transparent coating and potting gel. It is a flowable, addition-curing, silicone that cures at elevated temperature to a very firm rubbery gel with excellent adhesion to various plastics and metals. It is non-corrosive and self-priming adhesion, and can be automated to dispense from pails or hand extruded from cartridge.

Special Features and Benefits

- Very soft for stress compliance
- Excellent dielectric properties
- Mechanical shock and vibration damping
- Low bleeding, low volatile
- Broad range of temperature stability

Typical Applications

- Coat or pot parts and cavities
- Seal lids, covers, housings, connectors
- Automotive electronics
- Semiconductor and Telecommunications
- Vibration dampening
- Thermal stress coupling

For the non-sag (thixotropic) version of this coating gel, please select the United Adhesives' product SilCoat SC8026.

Processing Instruction

Important! SilCoat SC8022 is platinum cure system. Please keep applied surface / housing clean and avoid using this material on any place that contains sulfur, amine, phosphorous, organo-metals, acid, etc. because these contaminants could inhibit the cure the material.

We recommend running preliminary tests to optimize conditions for the particular application. Comprehensive processing instructions can be obtained by contacting directly to United Adhesives Inc.

Storage

SilCoat SC8022 has a shelf life of at least 12 months when stored at < 24°C in the originally sealed container. Storage beyond the date specified does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety information

SilCoat SC8022 silicone contains neither toxic nor corrosive substances that might require special handling precautions. General hygiene regulations should be observed. Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from United Adhesives Inc.