TECHNICAL DATA SHEET



QSil 58 Condensation cure potting material

Description	aratura calf lavaling	tuo component cilicono	Property	Test Method	Value
material primarily used for potting applications. The two applicable catalysts are 0.5% DBT by weight and 10% Deep Section Catalyst by weight. The 0.5% catalyst level can be increased or decreased to obtain desired cure speed. Cure speed can be accelerated by adding DBT catalyst in increments of 0.1%. This can be catalyzed with 10% Deep Section Catalyst for application requiring a deeper cure.			Cure Profile Cure Type Gel Time at 25°C/77°F Mix Ratio By Weight Rheology Specific Gravity Viscosity	Brookfield	24 hrs at 25°C Condensation 50 minutes 100:0.5 or 10:1 Liquid 1.48 9,000 cP
to increase cure speed.			Cured Product		
Excellent thermal stability			24 hours at 25°C		Pod
 Self-levelling Variable cure speed Useful temper range of -54°C (-65°F) - 260°C (500°F) 			Hardnoss Shore A	ASTM D 2240- 95	58
			May Warking Temp		
continuously and up to 316°C (600°F) intermittently			Max working Temp		-54 °C / 500 °F
CATALYSTS			Thermal Conductivity		0.31 W/mK
TEST	DBT Catalyst	QSil Deep Section Catalyst	Electrical Properties Dielectric Constant	ASTM D-150	~4.4
Appearance	Clear/light yellow	Beige	Dielectric Strength (V/mil)		450 V/mil
Viscosity	N/A	6,500 cps	Dielectric Strength kV/mm	ASTM D-149	13.9 kV/mm / 353 V/mil
Specific Gravity	1.04	1.47	Dissipation Factor ASTM D-150 0.03	0.03	
MIXING			Volume Resistivity (Ohms cm)	ASTM D-257	2E+14 ohms cm
If using QSil Deep be thoroughly mixe	Section Catalyst as ed prior to use.	the curing agent, it should	Storago		
The base should b amount of curing a 10% QSil Deep Se	e catalyzed by weig agent. A concentratio action Catalyst will pr	nt with the appropriate n of 0.5% DBT catalyst or ovide a gel time of one	Max Storage Temperature Shelf Life		4.4 °C / 40 °F 12 mths

Material should be mixed in a clean, compatible metal or plastic container. The volume of the container should be 4 - 5 times the volume of the material to be catalyzed. Thoroughly mix using clean tools, scraping the bottom and the side of the container to produce a homogeneous mixture.

DE-AERATION

Air trapped during mixing should be removed to eliminate voids in the cured product. Vacuum de-airing may be necessary to completely remove all entrapped air bubbles. To ensure proper de-airing, subject the mixed material to 29 inches of mercury. When using this material for potting, a de-aeration step may be necessary after pouring to avoid capturing air in complex assemblies.

DEEP SECTION CURE

Cured material should be properly conditioned prior to service if it is to be used in deep sections at temperatures over 150°C (32°F). Following room temperature cure of 1 - 3 days, a typical program would be eight hours at 50°C intervals from 100°C (212°F) to the service temperature. Longer times at each temperature will be required for larger parts of very deep sections.

BONDING

These rubber compounds require a primer to bond to non-silicone surfaces. Thoroughly clean the substrate with a non-oily solvent such as naphtha or methyl ethyl ketone (MEK) and let the surface dry. Then apply a uniform thin film of a suitable silicone primer to air dry for one hour or more.

Revision Date	12 Oct 2021
Revision No	5
Download Date	18 May 2024

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hour and a cure time of 24 hours. Cure speed can be accelerated

by adding DBT catalyst in increments of 0.1%.

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