MCS
Moisture Cure Silicone Conformal Coating

MCS is a 100% solids silicone conformal coating, specifically designed for the protection of electronic circuitry. The coating does not contain any solvents and can cure at room temperature for ease of processing. MCS is soft, flexible low stress conformal coating, ideally suited for applications with delicate components.

- 100% solids coating, no volatile solvent; operator and environmentally friendly
- Soft conformal coating; ideal for applications with delicate components
- Room temperature cure and fast touch dry time; aids efficient application processes
- Very wide operating temperature range; particularly suited to high temperature applications

Approvals	**RoHS Compliant (2015/863/EU):**	**Yes**
	REACH Compliant:	**Yes**
	IPC-CC-830:	**Meets Requirements**
	MIL-I-46058C:	**Meets Requirements**
Liquid Properties	Appearance:	Translucent liquid
	Density @ 20°C:	1.0 g/ml
	Flash Point:	None
	Solids content:	100%
	Viscosity @ 20°C (mPa s):	500
	Touch Dry Time at 20°C:	<10 minutes
	Recommended Drying Time:	24 Hours @ 20°C
	UV Trace:	Yes
Dry Film Coating	Colour:	Clear
	Temperature Range:	-65 to 200ºC
	Flammability:	Meets UL94 V-0
	Shore Hardness	A20
	Moisture Resistance:	2×10^{10} Ω
	Dielectric Strength:	90 kV/mm
	Surface Insulation Resistance:	1×10^{15} Ω
	Dielectric Constant:	2.5 @ 1 MHz
	Coefficient of Expansion:	313 ppm/ºC
	Dissipation Factor:	0.01

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Certificate No. FM 32082

Description	Packaging	Order Code	Shelf Life
Moisture Cure Silicone	4 Litre Bulk	EMCS04L	12 Months

Directions for Use

Substrates should be thoroughly cleaned before coating. This is required to ensure that satisfactory adhesion to the substrate is achieved. Also, all flux residues must be removed as they may become corrosive if left on the PCB. Electrolube manufacture a range of cleaning products using both hydrocarbon solvent and aqueous technology. Electrolube cleaning products produce results within Military specification.

MCS can be sprayed or brushed, the thickness of the coating depends on the application (typically 25-200 microns).

MCS requires atmospheric moisture to cure, a minimum of 30% RH is recommended to ensure the coating fully cures after 24 hours. The time required to cure is dependent on the method of application, film thickness temperature and humidity. The cure time can be accelerated with heat. During storage, containers should be kept tightly sealed and the head space purged with dry nitrogen to avoid moisture contamination.

Inspection

MCS contains a UV trace, which allows inspection of the PCB after coating to ensure complete and even coverage; the stronger the reflected UV light, the thicker the coating layer is.

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