

MAPSIL 214

Low outgassing encapsulating resin



Licence n°89/CNES/6303

Coating characteristics

Polymer matrix	Two component purified silicone elastomer
Density	About 1.25
Solids content	100 %
V.O.C.	< 1 g / L
Thermal conductivity	$\lambda \cong 0.31 \text{ W/m.K}$
Outgassing	in compliance with ESA standard : ECSS-Q-70-02A
Electrical volume resistance	$R_V > 10^{14} \Omega/\text{cm}^3$
Temperature range	From - 100 °C to + 250 °C
Surface preparation	Perfect cleaning (contact us). Any sticking on the resin being absolutely prohibited, the sticking areas must be masked beforehand.
Base/hardener weight ratio	100 / 10
Viscosity	HV: $\pm 350\,000 \text{ mPa.s}$ BV: $\pm 10\,000 \text{ mPa.s}$
Pot life	2 h @ 20°C
Applying conditions	<ul style="list-style-type: none"> • Pouring (encapsulating): De-air the mixture under vacuum (20mm Hg) @ room temperature. Pour the product into the mould in stages, while de-aging, or pour the whole product under vacuum (50mm Hg). The mould must be maintained under pressure @ 20mm Hg during the whole operation.
Curing	8 h @ 65°C

Definition

Low outgassing two component encapsulating silicone resin. Two qualities are available, which can be mixed together in any ratio to obtain the required viscosity:

- HV: High viscosity
- BV: Low viscosity

Aspect: **Opaque (beige base & blue hardener)**
 AFNOR NFT 36005 classification: Family I Class 10c.

Purpose: encapsulant for electronic components & connectors used in the space industry & vacuum technologies.

In compliance with safety standards for manned flights (non-flammability and non-toxicity).

Properties

Test carried out	CNES Qualification report
Outgassing	89/CT/DRT/TVE/TH n° 074
Electrical properties	
High tearing resistance	

Application parameters

MAPSIL 214 is delivered in two components that must be mixed thoroughly before use.

MAPSIL 214 must be applied by pouring (encapsulating).

Good adhesion to glass.

*The application of **PSX primer** is prerequisite on composites and metallic alloys.*

Packaging

150 g (130 g Base + 20 g Hardener)

300 g (270 g Base + 30 g Hardener)

550 g (500 g Base + 50 g Hardener)

Storage

Up to 6 months in original unopened packaging between 5°C & 25°C. Keep away from humidity, without altering the properties.

Safety data

Labelling ➤ This preparation was classified in compliance with the directives in effect.

Precautions & Transport ➤ Please refer to our latest safety datasheet.

*Non-contractual technical data: for your information only.
 For further information, please contact us.*

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