

Data Sheet Compatherm Filler 9321

Compatherm filler 9321 is a thermally conductive two-part addition cured compound from Nolato. Compatherm filler 9321 is delivered as A and B component. It is a prototype version.

Compatherm filler key properties 9321

- 2 W/(mK) thermal conductivity
- Operating temperature -40 to +200° C
- Ultra-conforming
- Very good wetting
- Two-part material gives high mechanical stability after curing

1. Applications

The product is used to transfer heat from heat sources, such as components on a PCB, to a heat sink. Compatherm filler 9321 has the ability to cover various gap heights and complex geometries with a very low closure force.

2. Typical Product Data

2.1. Cured Material Properties

	Test procedure	Unit	9321
Base material			Silicone
Colour	Visual		Yellow
Hardness	ASTM D2240	Shore00	55
Density	ASTM D792	g/cm ³	2,9
Thermal conductivity	ISO 22007-2 (Hot Disk)	W/(mK)	2
	ASTM D5470	W/(mK)	2
Breakdown voltage	ASTM D149	VAC/mm	7000
Volume resistivity	ASTM D257	Ohm•cm	2.05*10 ¹³
Dielctric constant @ 1MHz	ASTM D150		16.92
Outgassing, TML ¹⁾	ASTM E595 (modified)	%	0.14
Mass loss ²⁾	Nolato	%	0.24
Flammability ³⁾	UL94		V-0

1) Outgassing 24h at 150 °C under ambient pressure.

2) Mass loss 24h at 200 °C under ambient pressure.

3) Tested at third-party accredited laboratory & the test report available on request

2.2. Uncured Material Properties

	Test procedure	Unit	9321
Mix ratio			1:1
Colour component A	Visual		White
Colour component B	Visual		Yellow
Viscosity (mixed)	Brookfield 1rpm	Pas	1800
	Brookfield 10rpm	Pas	380
Flow rate	50psi, 2.3 mm orifice	g/min	40
Thermal resistance @40psi	ASTM D5470	°Ccm ² /W	0.65
BLT @40psi	Nolato	µm	95
200°C mass loss	Nolato	%	0.24

2.3. Design Notes

Curing	Test procedure	Unit	9321
Pot life at 25 ° C	Nolato	h	2
Curing time at 25° C	Nolato	h	18
Curing time at 100° C	Nolato	min	15

3. Ordering

When ordering Compatherm material please refer to the thermal guide (<https://thermalguide.nolato.com/>) or consult the Nolato marketing department.

4. Storage

Compatherm filler 9321 can be stored 9 months after production date at 0 to 30°C. Cartridges are recommended to be stored nozzle down. Only components A and B with the same lot number may be processed together.

Some degree of sedimentation can occur over time. If sedimentation is suspected additional stirring/mixing of the A and B components in pales is recommended to ensure homogeneous properties of the cured filler.

5. RoHS Information

Compatherm filler 9321 fulfils the requirements set by the EU Directive 2011/65 (RoHS).

6. Safety Instructions

Compatherm filler 9321 is not considered as hazardous according to EU Directive 1272/2008 (CLP) and is not subject to the directive of classification, packaging and labelling of dangerous goods. A material safety data sheet can be sent on request.

7. Warranty

The recommendations and data given are based on our experience to date, however, no liability can be assumed in connection with their usage and processing. The typical property data as shown above should not be used as a specification.