

Rev-13, 2024-06-04

Data Sheet Compatherm Filler 9344

Compatherm filler 9344 is a thermally conductive two-part addition cured compound from Nolato. Compatherm filler 9344 is delivered as A and B component.

Compatherm filler key properties 9344

- 4 W/(mK) thermal conductivity
- Operating temperature -40 to +200° C
- Ultra-conforming
- Very good wetting
- Two-part material gives high mechanical stability after curing
- customized option available for adding glass beads with PN 9344GB

1. Applications

The product is used to transfer heat from heat sources, such as components on a PCB, to a heat sink. Compatherm filler 9344 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 | 9344 |
|-------------------------------|---------------------------|-------------------|-----------------------|
| Base material | | | Silicone |
| Colour | Visual | | Green/Pink |
| Hardness | ASTM D2240 | Shore00 | 50 |
| Density | ASTM D792 | g/cm ³ | 3.1 |
| Thermal conductivity | ISO 22007-2 (Hot Disk) | W/(mK) | 4 |
| | ASTM D5470 | W/(mK) | 4 |
| Volume resistivity | ASTM D 257 | Ωcm | 2.16*10 ¹⁴ |
| Breakdown voltage | ASTM D149 | VAC/mm | 8000 |
| Dielectric constant at 1MHz | ASTM D150 | | 8.31 |
| Outgassing, TML ¹⁾ | ASTM E595 (modified) | % | 0.1 |
| Flammability ²⁾ | UL94 | | V-0 |

1) Outgassing 24h at 150 °C under ambient pressure. 2) 2) UL file number QMFZ2.E483565.



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2.2. Uncured Material Properties

| | Test procedure | Unit | 9344 |
|--------------------|--------------------|-------|-------|
| Mix ratio | | | 1:1 |
| Colour component A | Visual | | White |
| Colour component B | Visual | | Green |
| Viscosity (mixed) | Brookfield 10rpm | Pas | 300 |
| Flow rate | 50psi, 2mm orifice | g/min | 36 |

2.3. Design Notes

| Curing | Test procedure | Unit | 9344 |
|-----------------------|----------------|------|------|
| Pot life at 25 ° C | Nolato | h | 2.5 |
| Curing time at 18° C | Nolato | h | 16 |
| Curing time at 25° C | Nolato | h | 12 |
| Curing time at 100° C | Nolato | min | 15 |

3. Glass beads size

| | D10 | D50 | D90 |
|----------------------------------|-----|-----|-----|
| Glass beads size distribution/µm | 90 | 190 | 370 |

4. Ordering

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

5. Storage

Compatherm filler 9344 can be stored 6 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.

6. RoHS Information

Compatherm filler 9344 fulfils the requirements set by the EU Directive 2011/65 (RoHS).

7. Safety Instructions

Compatherm filler 9344 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.

8. 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.

