

Product Description

DM-TIM-15065 is a one part, non-silicone high thermal conductivity paste. The materials are supplied in a syringe for use on automated dispensing equipment or can be manually processed depending on packaging option. Materials do not require a cure/dry process. As a non-silicone paste, this material does not suffer from silicone oil leach or migration effects.

Product Benefits

- Non-silicone (no migration, leach-out or contamination)
- Excellent stability for devices operating at high temperature
- High Thermal Conductivity (6.5 W/m.K)
- No cure
- · Tacky/thixotropic paste

Applications

Interface for semiconductors requiring low pressure or spring clamp mounting. Consumer electronics, Set-top boxes, IP routers, ECUs Memory and Power modules. CPU to Heat sink, Transistors, Diodes, IGBTs, Rectifiers, LED. TEC modules, Telecommunication hardware and as a gap filler for battery systems.

Physical Properties

| Test | Properties |
|---|-----------------------|
| Viscosity after mixing (Pa.s) (Brookfield, Spindle RV-7, 10 rpm, 25.5°C) | 15 - 25 |
| Density (ASTM D792) | 2.7 g/cm ² |
| Colour | Grey |
| Flow Rate (30cc syringe with no tip attachment, 0.100" orifice, 90ps | 20 - 40 g/min) |

Thermal/Electrical Properties

| Parameter | Properties |
|---|--|
| Thermal Conductivity (ASTM D5470) | 6.5 W/m.K |
| Thermal Contact Resistance (ASTM D5470) | 4 x 10 ⁻⁵ m ² .K/W |
| Dielectric Strength (ASTM D149 MOD) | >5 kV/mm |
| Volume Resistivity (ASTM D257) | >1 x 10 ¹⁰ Ω.cm |
| Dielectric Constant (ASTM D150) | 16.1 (1 MHz) |

Durability Performance

| Parameter | Properties |
|--|---------------|
| Operating Temperature Range | -40 to +125°C |
| Thermal Stability (125°C, JESD22-A103) | 1000 hours |

RoSH Compliant



Storage and shelf-life

The paste shelf-life is 24 months from date of shipment. Dycotec Materials cannot assume responsibility for a paste that has not been stored in appropriate conditions or where the pastes have been contaminated following use.

Safety and Handling

For safe use of this product, please review relevant material and safety datasheet (MSDS).

Packaging

Available for manual use with manual plunger DM-TIM-15065-SYP-10 (10cc) or 30cc, 50cc syringes eg DM-TIM-15065-SY-XX (where XX = 30 or 50).

Larger syringe sizes eg 70cc, 180cc, 360cc and 600cc or pot packaging 250g and 1Kg (DM-TIM-15065-P) available on request

For more information, please contact:

Dycotec Materials Ltd Unit 6, Stainer Road Porte Marsh Industrial Estate Calne, Wiltshire, SN119PX, UK Email: Info@dycotecmaterials.com

Tel: +44 (0)1793 422598 www.dycotecmaterials.com

All information reported in the datasheet is for experimental work undertaken in our laboratories and illustrates typical values only. Processing conditions may vary depending on customers' experience and their application requirements and manufacturing process equipment set-up.

Note: The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Dycotec Materials specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale of use of Dycotec Material's products. Dycotec Materials specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Dycotec Material patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one of or more UK or foreign patents or patent applications.