# Silicone-Free Thermal Grease

FT_TGR_080_AB_63

Our Thermal Greases, also known as Thermal Grease, are silicone-based thermo-conductive materials that solve heat dissipation problems. The TGR_080_AB is a one-component grease specially developed for applications where a very high cooling requirement is required. Indeed, it is an excellent thermal conductor of 8W/ mK, thus facilitating the transfer of heat. A thin layer is enough, the finer the layer is mastered, the faster and more efficient the heat transfer.

**Application areas**: Electronic components - Electric Vehicles, 5G, Autopilot System, Mobile Phone, AIOT, HPC (High Performance Computing), Server, IC, CPU, MOS, LED ,Mother Board, Power Supply, Heat Sink, LCD-TV, Notebook, PC, Telecom Device,Wireless Hub, DDR ll Module, etc.

## Technical characteristics

| Features | TGR_080_AB | Unit | Tolerance | Test Method |
|---|---|---|---|---|
| **Color** | Gray | - | - | Visual |
| **Density** | 3.2 | g/cm³ | +/- 10% | ASTM D792 |
| **Packaging** | Jar/Syringe | Jar/30g | - | Visual |
| **Thermal Conductivity** | 8 | W/mK | +/- 10% | ASTM D5470 |
| **Weight loss** | < 0.1 | wt% | - | ASTM E595 |
| **Oil dispersion** | < 0.1 | wt% | - | 24h @ 150°C |
| **Volume resistance** | $>10^{13}$ | Ohm-m | - | ASTM D257 |
| **Use Temperature** | -40 to 120 | °C | - | - |
| **Viscosity** | 350 | Pas | +/- 100 | ASTM D2196 |
| **Shelf life not open** | 12 | Months | Manufacturing date | à 25°C |
| **Open Shelf Life** | 6 | Months | Fridge or freezer | Between -15°C à +5 °C |

**Directions for use**: If a layer of oil is visible on top of the thermal grease, this is quite normal. We suggest you stir the whole thing evenly before use (using an electric mixer). Please avoid any dust or impurities sticking to the thermal grease. Indeed, it will degrade the thermal performance of the mattress. We recommend using this grease in a clean room ideally...

The results were obtained under laboratory conditions and should be considered only as an indication. As AB2E has no control over its customers' equipment and many other factors, it is the user's responsibility to carry out its own tests to ensure that the product corresponds to its needs.