

# ThermoFill TF2619

## High Thermally Conductive Interface Filling Material

| Typical Properties               |             |              |                  |
|----------------------------------|-------------|--------------|------------------|
| Property                         | Unit        | Value        | Test Method      |
| Color / Component                |             | White / Grey | Visual           |
| Density                          | Gram /cc    | 2.9          | ASTM D792        |
| Viscosity at 25°C                | Pa.s        | 260          | ASTM D2196       |
| Property as Cured                |             |              |                  |
| Color                            |             | White / Grey | Visual           |
| Hardness                         | Shore OO    | 40           | ASTM D2240       |
| Thermal Conductivity             | W/m-K       | 2.0          | ASTM D5470       |
| Heat Capacity at 25°C            | J/g-K       | 1.0          | ASTM D1269       |
| Dielectric Constant              | @1000Hz     | 4            | ASTM D150        |
| Dielectric Strength              | Volt/mil AC | > 400        | ASTM D149        |
| Volume Resistivity               | Ohm-cm      | > 10E+14     | ASTM D257        |
| Coefficient of Thermal Expansion | ppm/C       | 140          | IPC-TM-650       |
| Temperature Usage                | Degree °C   | -80 to 200   | TGA              |
| Cure Profile                     |             |              |                  |
| Cure at 125°C                    | Min         | 60           | DSC              |
| Cure at 150°C                    | Min         | 30           | DSC              |
| Cure out gassing                 | Weight %    | < 0.1%       | TGA              |
| Shelf Life at 25°C               | Day         | 15           | Viscosity double |

These figures are only intended as a guide and should not be used in preparing specifications.

### Processing Instruction

**Important!** ThermoFill TF2619 is platinum cure system. Please keep applied surface clean and avoid using this material on any surface that contains sulfur, amine, phosphorous, organo-metals, acid, etc. because these contaminants could inhibit the cure of the material.

For the package in a container (not in a cartridge), to ensure homogeneity of the material, the components must be stirred thoroughly before they are removed or processed in order to uniformly disperse any fillers that might have settled during storage.

We recommend running preliminary tests to optimize conditions for the particular application. Comprehensive processing instructions can be obtained by contacting directly to United Adhesives Inc.

### Storage

ThermoFill TF2619 has a shelf life of at least 6 months when stored between 5°C and 30 °C in the originally sealed container. The 'Best use before end' date of each batch appears on the product label. Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

### Safety information

Addition curing ThermoFill TF2619 silicone gel contains neither toxic nor corrosive substances that might require special handling precautions. General hygiene regulations should be observed. Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from United Adhesives Inc.

### Characteristics

ThermoFill TF2619 is a high thermally conductive interface gap filling material. It is a non-slump, addition-curing, one-component silicone that cures at room temperature or elevated temperature to a very soft rubber with excellent thermal conductivity. The cured material provides Very low thermal stress for thermal cycles. TF2619 is dispensable and printable.

### Special Features and Benefits

- High thermal conductivity
- Almost constant properties from -70 to 180 °C
- Very low modulus for stress compliance
- Low bleeding, low volatile
- Pre-added 7 mil glass bead for thickness control (Average distance between beads is ~34 mil)

### Typical Applications

- Automotive electronics
- Semiconductor and Telecommunications
- Between high heat power device and heat sink
- Thermally conductive vibration dampening
- Couple thermal stress while dissipating heat

ThermoFill TF2619 has a shelf life of at least 6 months when stored < 5 °C in the originally sealed container. After cure it forms a low modulus "gel-like" material that is not for structure bonding purpose.

The figures listed in this datasheet are in good faith with the present state of our knowledge, but should not be used in substitution for user's tests. We reserve the right to alter product constants within the scope of technical progress or new developments. The suggestions for use in this sheet should be checked by preliminary trials because the user's processing conditions are out of our control. The suggestions for use should not be in substitution of user from the obligation of investigating the possibility of infringement of third parties' patents or rights. This datasheet does not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose. For technical, quality, or product safety questions, please contact directly to United Adhesives Inc.