

## Safety Data Sheet (SDS)

[www.chipquik.com](http://www.chipquik.com)

To comply with European CLP Regulation 1272/2008, US 29CFR 1910.1200 OSHA's Hazard Communication Standard, and Australian NOHSC: 1008 [2004] and ADG Code 7.4

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Chip Quik Thermal Paste: TC2, TC3  
**SYNONYMS:** Heat Sink Compound  
**PART NUMBERS:** TC2-10G, TC2-20G, TC2-50G, TC3-1G, TC3-3.5G, TC3-10G, TC3-600G

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**REVISION DATE:** 2023/03/03  
**REVISION NUMBER:** 1.6  
**REVISED BY:** Chip Quik Product Safety

**PRODUCT USE:** Mounting heat sinks, fills gaps and imperfections to improve thermal transfer.

### 2. HAZARD IDENTIFICATION

Classified in accordance with European CLP Regulation 1272/2008

Not a hazardous substance or mixture.

**CHEMICAL NAME:** NA  
**CHEMICAL FAMILY:** Mixture  
**CHEMICAL FORMULA:** Proprietary

**ROUTES OF ENTRY:** Inhalation, Ingestion, Skin/Eye Contact

**TARGET ORGANS:** NA

**GHS/CLP:**  
 Not a hazardous substance or mixture.

#### GHS/CLP LABEL ELEMENTS:

Not a hazardous substance or mixture.

**OTHER HAZARDS:**  
 None known.

**SECTION 2 NOTES:**  
 Chip Quik Inc. does not recommend, manufacture, market, or endorse any of its products for human consumption.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Classified in accordance with European CLP Regulation 1272/2008

| Hazardous Ingredients <sup>(1)</sup> | C.A.S. Number | Weight Percent | OSHA PEL<br>mg/m <sup>3</sup> | ACGIH TLV TWA<br>mg/m <sup>3</sup> | LD 50 Ingested<br>g/Kg | LD 50 Inhaled<br>g/m <sup>3</sup> |
|--------------------------------------|---------------|----------------|-------------------------------|------------------------------------|------------------------|-----------------------------------|
|--------------------------------------|---------------|----------------|-------------------------------|------------------------------------|------------------------|-----------------------------------|

No hazardous ingredients

| Non-Hazardous Ingredients | C.A.S. Number | Weight Percent | OSHA PEL<br>mg/m <sup>3</sup> | ACGIH TLV TWA<br>mg/m <sup>3</sup> | LD 50 Ingested<br>g/Kg | LD 50 Inhaled<br>g/m <sup>3</sup> |
|---------------------------|---------------|----------------|-------------------------------|------------------------------------|------------------------|-----------------------------------|
| Methyl Silicone           | 63148-62-9    | 40-50          | NE                            | NE                                 | NE                     | NE                                |
| Alumina Oxide             | 1344-28-1     | 50-75          | NE                            | NE                                 | NE                     | NE                                |
| Monocrystalline Diamond   | 7782-40-3     | 0-10           | NE                            | NE                                 | NE                     | NE                                |

#### SECTION 3 NOTES:

(1) Per 29 CFR 1910 the mixture has not been tested as a whole. All hazardous components, which comprise 1% of the mixture (0.1% carcinogenic), are listed. Percentages of individual components are not listed as this information is considered a trade secret.

#### 4. FIRST-AID MEASURES

##### Emergency first aid procedures:

**EYES:** Flush with plenty of water, contact a physician. If contact lenses can be removed easily, flush eyes without contact lenses.

**SKIN:** Wash affected area with plenty of warm, soapy water. If irritation persists, seek medical attention.

**INGESTION:** Call a physician or Poison Control Center immediately. Do not induce vomiting. Drink large amounts of water. Never give anything by mouth to an unconscious person

**INHALATION:** Remove to fresh air. Support respiration if required. If not breathing, seek immediate medical attention.

#### 5. FIREFIGHTING MEASURES

**EXTINGUISHING MEDIA:** Dry chemical, foam  
Alcohol-resistant foam  
Carbon Dioxide (CO<sub>2</sub>)  
Water Spray

**SPECIAL FIRE FIGHTING PROCEDURES:** Use NIOSH-approved self-contained Breathing Apparatus and full protective clothing if involved in a fire.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** May release toxic metal oxides, carbon oxides, silicon oxides and formaldehyde.

#### 6. ACCIDENTAL RELEASE MEASURES

**PRECAUTIONS AND EQUIPMENT:** Material is extremely thick and will not flow out.

**ACCIDENTAL RELEASE MEASURES:** If material spills or leaks use a spatula to collect and place it in a plastic or glass jar. Remove traces of residue using cloth rags or paper towels. Follow on-site personal protective equipment recommendations.

**ENVIRONMENTAL PRECAUTIONS:** Avoid release to the environment. Collect spillage.

##### SECTION 6 NOTES:

See Sections 2, 4, and 7 for additional information.

#### 7. HANDLING AND STORAGE

**HANDLING/STORAGE:** Keep containers tightly closed when not in use. Use care to avoid spills. Avoid inhalation of fumes or dust. Avoid contact with eyes, skin, and clothing. Store in a closed corrosive resistant container, with corrosive resistant liner, in cool dry place. Wear appropriate personal protective equipment when working with or handling. Always wash hands thoroughly after handling this product. Dispose of following Federal, State/Provincial, and Local regulations.

**OTHER PRECAUTIONS:** Empty containers may retain product residues in vapor, liquid, and/or solid form. All labeled hazard precautions should be observed.

**WORK HYGIENIC PRACTICES:** Cosmetics/Food/Drink/Tobacco should not be consumed or used in work areas. Always wash hands after handling material and before applying or using cosmetics/food/drink/tobacco.

##### SECTION 7 NOTES:

Keep out of reach of children.  
Not for internal consumption.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

##### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

| Substance Name | End Use | Exposure Route | Potential Health Effects | Value |
|----------------|---------|----------------|--------------------------|-------|
| NA             |         |                |                          |       |

##### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

| Substance Name | Environmental Compartment | Value |
|----------------|---------------------------|-------|
| NA             |                           |       |

Also see section 3.

**ENGINEERING CONTROLS:** Use only with production equipment designed for use with thermal paste.

**VENTILATION:** Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLVs.

**RESPIRATORY PROTECTION:** A (US: NIOSH; EU: EN 140:1998, EN 14387:2004 A) approved air-purifying respirator with fume/organic chemical cartridge should be worn when airborne concentrations may be exceeded. General and local exhaust ventilation is the preferred means of protection.

**EYE PROTECTION:** Use with appropriate eye protection: Goggles or face shield (EU: EN 166-S 3 9).

**SKIN PROTECTION:** Protective gloves should be worn when the possibility of skin contact exists (EU: EN 374-1:2003).

**PROTECTIVE CLOTHING OR EQUIPMENT:** Work clothes should be worn and laundered in accordance with current standards (US: OSHA).

**WORK HYGIENIC PRACTICES:** Cosmetics/Food/Drink/Tobacco should not be consumed or used in areas where solder products may be used. Always wash hands after handling soldering products and before applying or using cosmetics/food/drink/tobacco.

**OTHER:** Maintain eye wash stations in work areas. Avoid the use of contact lenses in high fume areas. Clean protective equipment regularly. Clean up spills immediately.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Grey paste  
**ODOR:** Odorless  
**ODOR THRESHOLD:** NE  
**pH as SUPPLIED:** NA  
**MELTING POINT:** NA  
**FREEZING POINT:** NA  
**INITIAL BOILING POINT:** NA  
**BOILING RANGE:** NA  
**FLASH POINT:** 265°C  
**EVAPORATION RATE:** NA  
**FLAMMABILITY (solid):** NE  
**UPPER/LOWER FLAMMABILITY:** NE  
**UPPER/LOWER EXPLOSIVE LIMITS:** NE  
**VAPOR PRESSURE (mmHg):** NA  
**VAPOR DENSITY (AIR = 1):** NA  
**RELATIVE DENSITY:** 2.5  
**SOLUBILITY IN WATER:** NA  
**PARTITION COEFFICIENT (n-octanol/water):** NE  
**AUTOIGNITION TEMPERATURE:** NE  
**DECOMPOSITION TEMPERATURE:** NE  
**VISCOSITY:** NA

## 10. STABILITY AND REACTIVITY

**STABILITY:** Stable under normal conditions  
**CONDITIONS TO AVOID (STABILITY):** NE  
**INCOMPATIBILITY (MATERIAL TO AVOID):** Oxidizing materials, acids, hydrogen peroxide, bases  
**HAZARDOUS DECOMPOSITION/BY-PRODUCTS:** Harmful organic fumes and toxic oxide fumes may form at elevated temperatures. Formaldehyde.  
**POSSIBILITY OF HAZARDOUS REACTIONS:** Use at elevated temperatures may form highly hazardous compounds. Can react with strong oxidizing agents. Hazardous decomposition products will be formed at elevated temperatures.

## 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Skin Contact  
Ingestion  
Eye Contact

**ACUTE TOXICITY:** NE  
**SKIN CORROSION/IRRITATION:** NE  
**SERIOUS EYE DAMAGE/IRRITATION:** NA  
**RESPIRATORY OR SKIN SENSITIZATION:** NE  
**GERM CELL MUTAGENICITY:** NA  
**CARCINOGENICITY:** NA

|                 |                  |                |                 |
|-----------------|------------------|----------------|-----------------|
| <b>OSHA:</b> NA | <b>ACGIH:</b> NA | <b>NTP:</b> NA | <b>IARC:</b> NA |
|-----------------|------------------|----------------|-----------------|

**REPRODUCTIVE TOXICITY:** NA  
**STOT-SINGLE EXPOSURE:** NA  
**STOT-REPEATED EXPOSURE:** NA  
**ASPIRATION HAZARD:** NA

### SECTION 11 NOTES:

This product has not been tested as a whole to determine its hazards. Synergistic or additive effects of the above chemicals are unknown, as are the effects of exposure to these chemicals in addition to others present in the work place. See Section 2 for additional health hazards.

## 12. ECOLOGICAL INFORMATION

**TOXICITY:** NE  
**PERSISTENCE AND DEGRADIBILITY:** NE  
**BIOACCUMULATIVE POTENTIAL:** NA

| Product/Ingredient Name | LogP <sub>ow</sub> | BCF | Potential |
|-------------------------|--------------------|-----|-----------|
|-------------------------|--------------------|-----|-----------|

NA

**MOBILITY IN SOIL:** NE  
**RESULT OF PBT and vPvB ASSESSMENT:** NA  
**OTHER ADVERSE EFFECTS:** NE

## 13. DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:** Scrap and waste should be recycled or stored in a dry, sealed container for later disposal. Disposal must be in accordance with Federal, State/Provincial, and Local Regulations.

**OTHER PRECAUTIONS:** Avoid skin & eye contact, inhalation & ingestion of fumes and material. Wash contaminated clothing before reuse. Keep away from children.

#### 14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements.

|                                 |                |
|---------------------------------|----------------|
| <b>UN Number:</b>               | Not available  |
| <b>UN Proper Shipping Name:</b> | Not available  |
| <b>Packaging Group:</b>         | Not applicable |
| <b>Environmental Hazards:</b>   | None           |

#### TRANSPORT HAZARD CLASSES:

|   |               |
|---|---------------|
| US DOT Hazardous Material Classification: | Non-Hazardous |
| Water Transportation:                     | Non-Hazardous |
| IATA Hazardous Material Classification:   | Non-Hazardous |
| ADR Road Regulations                      | Not regulated |
| IMDG Sea Regulations                      | Not regulated |
| ADG Land Transportation                   | Not regulated |

#### 15. REGULATORY INFORMATION

All ingredients used to manufacture this product are listed on the EPA TSCA Inventory. Finished product is not listed on the EPA TSCA Inventory.

|                                   |               |
|-----------------------------------|---------------|
| <b>U.S. FEDERAL REGULATIONS:</b>  | Not regulated |
| <b>STATE REGULATIONS:</b>         | Not regulated |
| <b>INTERNATIONAL REGULATIONS:</b> | Not regulated |
| <b>AUSTRALIAN REGULATIONS:</b>    | Not regulated |

#### 16. OTHER INFORMATION

##### LEGEND:

|                       |   |
|-----------------------|---|
| <b>ACGIH</b>          | American Conference of Governmental Industrial Hygienists                           |
| <b>ADG</b>            | Australian Dangerous Goods Code   |
| <b>ADR</b>            | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| <b>AICS</b>           | Australian Inventory of Chemical Substances   |
| <b>BCF</b>            | Bioconcentration factor   |
| <b>C.A.S.</b>         | Chemical Abstract Service   |
| <b>CLP</b>            | Classification, Labeling and Packaging  |
| <b>DOT</b>            | Department of Transportation  |
| <b>EC</b>             | Effective Concentration   |
| <b>EPA</b>            | Environmental Protection Agency   |
| <b>GHS</b>            | Global Harmonized System  |
| <b>HMIS</b>           | Hazardous Material Identification System  |
| <b>IARC</b>           | International Agency for Research on Cancer   |
| <b>IATA</b>           | International Air Transport Association   |
| <b>IMDG</b>           | International Maritime Dangerous Goods Code   |
| <b>LC</b>             | Lethal Concentration  |
| <b>LD</b>             | Lethal Dose   |
| <b>NA</b>             | Not available   |
| <b>NE</b>             | Not established   |
| <b>NIOSH</b>          | National Institute for Occupational Safety & Health                                 |
| <b>NOEC</b>           | No observed effective concentration   |
| <b>NOHSC</b>          | National Occupational Health and Safety Commission (Australia)                      |
| <b>NTP</b>            | National Toxicology Program   |
| <b>OSHA</b>           | Occupational Safety and Health Administration                                       |
| <b>PEL</b>            | Permissible Exposure Limit  |
| <b>P<sub>ow</sub></b> | Octanol water partition coefficient   |
| <b>SDS</b>            | Safety Data Sheet   |
| <b>STEL</b>           | Short-Term Exposure Limit   |
| <b>STOT</b>           | Specific target organ toxicity  |
| <b>TLV</b>            | Threshold Limit Value   |
| <b>TSCA</b>           | Toxic Substance Control Act   |
| <b>TWA:</b>           | Time Weighted Average   |
| <b>US DOT:</b>        | United States Department of Transportation  |

##### PREPARATION INFORMATION:

This update supersedes all previously released documents.

##### DISCLAIMER:

The information and recommendations contained within this publication have been compiled from sources believed to be reliable and to represent the best information available to Chip Quik at the time of issue. No warranty, guarantee, or representation is made by Chip Quik nor does Chip Quik assume any responsibility in connection there within; nor can it be assumed that all acceptable safety measures or other safety measures may not be required under particular or exceptional conditions or circumstances. The data on this Safety Data Sheet relates only to this product and does not relate to use with any other material or in any process. All chemical products should be used only by, or under the direction of, technically qualified personnel who are aware of

the hazards involved and necessity for reasonable care in handling. Hazard communication regulations require that employees must be trained on how to use a Safety Data Sheet as a source for hazard information.

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