Chemtools R001 Heatsink Compound/Thermal Conductive Grease

Section 1 - Identification of The Material and Supplier

Chemtools Pty Ltd
Unit 2/14-16 Lee Holm Road
St Marys NSW 2760
Phone: 1300 738 250 (business hours)
Fax: 02 9623 3670
www.chemtools.com.au

Chemical nature: Blend of ingredients.
Product Name: Chemtools R001 Heatsink Compound/Thermal Conductive Grease
Product Use: Heatsink Compound and Thermal Conductive Grease used in electronics applications.
Creation Date: August, 2015
Poisons Information Centre: Phone 13 1126 from anywhere in Australia

Section 2 - Hazards Identification

Statement of Hazardous Nature
This product is classified as: N, Dangerous to the environment. Not classified as hazardous according to the criteria of SWA.
Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.

Risk Phrases: R50/53. Very toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment.
Safety Phrases: S25, S36, S61. Avoid contact with eyes. Wear suitable protective clothing. Avoid release to the environment. Refer to special instructions/Safety Data Sheets.
SUSMP Classification: None allocated.
ADG Classification: None allocated. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.
UN Number: None allocated

GHS Signal word: NONE. Not hazardous.
HAZARD STATEMENT:
H410: Very toxic to aquatic life with long lasting effects.
PREVENTION
P102: Keep out of reach of children.
P262: Do not get in eyes, on skin, or on clothing.
P273: Avoid release to the environment.
P281: Use personal protective equipment as required.
RESPONSE
P352: Wash with plenty of soap and water.
P361+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
SAFETY DATA SHEET

Issued by: Chemtools Pty Ltd
Phone: 1300 738 250 (business hours)
Poisons Information Centre: 13 1126 from anywhere in Australia, (0800 764 766 in New Zealand)

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**Product Name:** Chemtools R001 Heatsink Compound/Thermal Conductive Grease

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**Emergency Overview**

**Physical Description & Colour:** White greasy solid.
**Odour:** Mild odour.
**Major Health Hazards:** no significant risk factors have been found for this product.

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### Potential Health Effects

**Inhalation:**
- **Short Term Exposure:** Available data indicates that this product is not harmful. In addition product is unlikely to cause any discomfort or irritation.
- **Long Term Exposure:** No data for health effects associated with long term inhalation.

**Skin Contact:**
- **Short Term Exposure:** Available data indicates that this product is not harmful. It should present no hazards in normal use. In addition product is unlikely to cause any discomfort in normal use.
- **Long Term Exposure:** No data for health effects associated with long term skin exposure.

**Eye Contact:**
- **Short Term Exposure:** This product may be mildly irritating to eyes, but is unlikely to cause anything more than mild discomfort which should disappear once product is removed.
- **Long Term Exposure:** No data for health effects associated with long term eye exposure.

**Ingestion:**
- **Short Term Exposure:** Significant oral exposure is considered to be unlikely. However, this product may be irritating to mucous membranes but is unlikely to cause anything more than transient discomfort.
- **Long Term Exposure:** No data for health effects associated with long term ingestion.

**Carcinogen Status:**
- SWA: No significant ingredient is classified as carcinogenic by SWA.
- NTP: No significant ingredient is classified as carcinogenic by NTP.
- IARC: No significant ingredient is classified as carcinogenic by IARC.

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### Section 3 - Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Conc,%</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc oxide</td>
<td>1314-13-2</td>
<td>30-60</td>
<td>10 (dust)</td>
<td>not set</td>
</tr>
<tr>
<td>Other non hazardous ingredients</td>
<td>secret</td>
<td>to 100</td>
<td>not set</td>
<td>not set</td>
</tr>
</tbody>
</table>

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak "is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

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### Section 4 - First Aid Measures

**General Information:**
You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

**Inhalation:** First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

**Skin Contact:** Gently brush away excess particles. Irritation is unlikely. However, if irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until chemical is removed.

**Eye Contact:** Quickly and gently brush particles from eyes. No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical treatment.

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**P391:** Collect spillage.
**P370+P378:** In case of fire, use carbon dioxide, dry chemical, foam, water fog.

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**STORAGE**
- P402+P404: Store in a dry place. Store in a closed container.

**DISPOSAL**
- P501: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.
advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

**Ingestion:** If product is swallowed or gets in mouth, do NOT induce vomiting; wash mouth with water and give some water to drink. If symptoms develop, or if in doubt contact a Poisons Information Centre or a doctor.

### Section 5 - Fire Fighting Measures

**Fire and Explosion Hazards:** The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

**Extinguishing Media:** In case of fire, use carbon dioxide, dry chemical, foam, water fog.

**Fire Fighting:** If a significant quantity of this product is involved in a fire, call the fire brigade.

**Flash point:** May burn.

**Upper Flammability Limit:** No data.

**Lower Flammability Limit:** No data.

**Autoignition temperature:** No data.

**Flammability Class:** No data.

### Section 6 - Accidental Release Measures

**Accidental release:** This product is sold in small packages, and the accidental release from one of these is not usually a cause for concern. For minor spills, clean up, rinsing to sewer and put empty container in garbage. Although no special protective clothing is normally necessary because of occasional minor contact with this product, it is good practice to wear impermeable gloves when handling chemical products. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services.

### Section 7 - Handling and Storage

**Handling:** Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

**Storage:** Make sure that containers of this product are kept tightly closed. Keep containers dry and away from water. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Check packaging - there may be further storage instructions on the label.

### Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:


<table>
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No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

**Ventilation:** No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that dusts are minimised.

**Eye Protection:** Eye protection is not normally necessary when this product is being used. However, if in doubt, wear suitable protective glasses or goggles.

**Skin Protection:** The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all chemical products and that you wear suitable gloves (preferably elbow-length) when skin contact is likely.

**Protective Material Types:** We suggest that protective clothing be made from the following materials: cotton, rubber.

**Respirator:** If there is a significant chance that contaminants are likely to build up in the area where this product is being used, we recommend that you use a suitable dust mask. Otherwise (usually) not normally necessary. Safety deluge showers should, if practical, be provided near to where this product is being handled commercially.
Section 9 - Physical and Chemical Properties:

Physical Description & colour: White greasy solid.
Odour: Mild odour.
Boiling Point: Not available.
Freezing/Melting Point: No specific data. Paste at normal temperatures.
Volatiles: Nil at 100°C.
Vapour Pressure: Nil at normal ambient temperatures.
Specific Gravity: No data.
Water Solubility: Insoluble.
pH: No data.
Vapour Density: Not applicable.
Specific Gravity: No data.
Water Solubility: Insoluble.

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: Keep containers tightly closed. Containers should be kept dry.

Incompatibilities: strong acids, strong bases, strong oxidising agents.

Fire Decomposition: Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. Silicon compounds.

Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

Local Effects:
Target Organs: There is no data to hand indicating any particular target organs.

Classification of Hazardous Ingredients

Ingredient Risk Phrases
No ingredient mentioned in the HSIS Database is present in this product at hazardous concentrations.

Section 12 - Ecological Information

Very toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment.

Section 13 - Disposal Considerations

Disposal: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

Section 14 - Transport Information

UN Number: This product is not classified as a Dangerous Good by ADG, IATA or IMDG/IMSBC criteria. No special transport conditions are necessary unless required by other regulations.

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.

Acronyms:
ADG Code Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)
AICS Australian Inventory of Chemical Substances

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Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document “Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice” (December 2011)