SERVICE DATA

MATERIAL SAFETY DATA SHEET (MSDS)
FOR HEAT-CONDUCTIVE COMPOUND

Heat Conductive Compound

Directions

Completely coat temperature sensing bulb with liberal film of compound before inserting into well. Seat bulb in well completely.

WARNING! Do not use above 300 °F.
MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Heat Conductive Compound
Synonyms: MS1699
PRODUCT USE: Heat conductive material used to enhance contact and heat transfer in temperature sensor applications.
MANUFACTURER: Honeywell Inc., 1985 Douglas Drive North, Minneapolis, MN 55422
DATE RELEASED: April 16, 1999
MSDS ID: MBH039

NFPA Ratings:
Health 0
Flammability 1
Reactivity 0
Personal Protection B

SECTION 2. COMPOSITION, INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No.</th>
<th>Percent</th>
<th>PEL</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 2 Lithium Complex Grease (70%):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mineral Oil</td>
<td>64742-65-0</td>
<td>35-50</td>
<td>5 mg/m³</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>Mineral Oil</td>
<td>64742-62-7</td>
<td>20-25</td>
<td>5 mg/m³</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>Lithium Hydrostearate/Sebacate Complex</td>
<td>68815-49-6</td>
<td>4-9</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Zinc Alkyldithiophosphate</td>
<td>68649-42-3</td>
<td>0-2</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Aluminum Paste (30%):
<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No.</th>
<th>Percent</th>
<th>PEL</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum, as Al</td>
<td>7429-90-5</td>
<td>20-25</td>
<td>15 mg/m³</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Aliphatic Petroleum</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Distillates</td>
<td>8052-41-3</td>
<td>10-15</td>
<td>2900 mg/m³</td>
<td>525 mg/m³</td>
</tr>
<tr>
<td>Stearic Acid</td>
<td>57-11-4</td>
<td>1-2</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Aromatic Petroleum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distillates</td>
<td>64742-95-6</td>
<td>1-2</td>
<td>5 mg/m³</td>
<td>5 mg/m³</td>
</tr>
</tbody>
</table>

Additional Information: Part No. 120650 (0.5 oz tube); Part No. 107408 (4 oz can); Part No. 197007 (5 gal container). May also contain minute amounts of lithium and molybdenum lubricant compounds.

SECTION 3. HAZARD IDENTIFICATION

ACUTE HEALTH EFFECTS:
Skin: Excessive contact may cause skin irritation and dermatitis.
Eye: Direct contact with eye will cause irritation.
Inhalation: No adverse effects are expected.
Ingestion: Ingestion of product may cause nausea, vomiting and diarrhea.
CHRONIC HEALTH EFFECTS: Existing skin rash or dermatitis may be aggravated by repeated contact.
OSHA HAZARD CLASSIFICATIONS: None.
CARCINOGENICITY: Not considered to be a carcinogen by either OSHA, NTP, IARC, or ACGIH.
TARGET ORGANS: None known.

SECTION 4. FIRST AID MEASURES

EYE CONTACT: Flush eyes with water for 15 minutes. Remove any contact lenses and continue to flush. Obtain medical attention if irritation develops and persists.
SKIN CONTACT: Remove excess with cloth or paper. Wash thoroughly with mild soap and water. Obtain medical attention if irritation develops and persists.
INGESTION: Contact physician or local poison control center immediately.
INHALATION: Remove patient to fresh air and obtain medical attention if symptoms develop.

SECTION 5. FIRE FIGHTING MEASURES

FLASH POINT: >383 F (COC) Will burn if exposed to flame.
EXTINGUISHING MEDIA: Carbon dioxide, dry chemical or foam.
SPECIAL FIRE FIGHTING PROCEDURES: None.
EXPLOSION HAZARDS: None. Aluminum powder can react with water to release flammable hydrogen gas. In the form of this product, this reaction is not expected.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Scrape up and dispose as solid waste in accordance with state and federal regulations.

SECTION 7. HANDLING AND STORAGE

Store in dry place. Keep container closed when not in use.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

VENTILATION: No special ventilation is required when working with this product.
RESPIRATORY PROTECTION: None.
EYE PROTECTION: Not normally required. However, use chemical safety goggles or faceshield if potential for eye contact exists, especially if material is heated.
HAND/CLOTHING PROTECTION: Not normally required. Protective gloves and clothing are recommended, as material is difficult to remove from skin and clothing.
OTHER PROTECTIVE EQUIPMENT: None.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/ODOR: Aluminum color, semi-solid material, pleasant odor.
SOLUBLE IN WATER: Negligible.
SPECIFIC GRAVITY: 0.86.
SECTION 10. STABILITY AND REACTIVITY

STABILITY: Stable.
REACTIVITY: Hazardous polymerization will not occur.
INCOMPATIBILITIES: Strong oxidizing agents and halogens.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide, carbon monoxide.

SECTION 11. TOXICOLOGY INFORMATION

No data available.

SECTION 12. ECOLOGICAL INFORMATION

CHEMICAL FATE INFORMATION: Hydrocarbon components will biodegrade in soil; relatively persistent in water.

SECTION 13. DISPOSAL CONSIDERATION

Dispose of as solid waste in accordance with Local, State and Federal regulations.

SECTION 14. TRANSPORTATION INFORMATION

DOT CLASSIFICATION: Not classified as hazardous.

SECTION 15. REGULATORY INFORMATION

SARA TITLE III SUPPLIER NOTIFICATION: Include in Section 311/312 inventory reports if amounts exceed 10,000 pounds. Aluminum compounds are subject to the reporting requirements under Section 313 of Emergency Planning and Community Right-to-Know Act of 1986 (40 CFR 372). Ingredients listed in TSCA Inventory.

SECTION 16. OTHER INFORMATION

This information is furnished without warranty, expressed or implied, except that it is accurate to the best of our knowledge.

PREPARED BY: PROSAR, 1295 Bandana Blvd, Suite 335, St Paul, MN 55108 (651-917-6100)