MATERIAL SAFETY DATA SHEET

Section 1. Product and Company Identification.

Product Name: Heat conductive compound.

MSDS ID: DS9021.

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: October 8, 1999.

NFPA Ratings:

Health 0; Flammability 1; Reactivity 0;
Personal Protection B.

Section 2. Composition, Information on Ingredients (Table 3).

Table 3. Ingredients of Heat Conductive Compound[a].

Ingredients	CAS Number	Percent	PEL	TLV
No. 2 Lithium Complex Grease (70%):				
Mineral Oil	64742-65-0	35-50	5 mg/m^3	5 mg/m^3
Mineral Oil	64742-62-7	20-25	5 mg/m^3	5 mg/m^3
Lithium Hydrostearate/Sebacate Complex	68815-49-6	4-9	—	—
Zinc Alkyldithiophosphate	68649-42-3	0-2	—	—
Aluminum Paste (30%):				
Aluminum, as Al	7429-90-5	20-25	15 mg/m^3	10 mg/m^3
Aliphatic Petroleum Distillates	8052-41-3	10-15	2900 mg/m^3	525 mg/m^3
Stearic Acid	57-11-4	1-2	—	—
Aromatic Petroleum Distillates	64742-95-6	1-2	5 mg/m^3	5 mg/m^3

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

Section 3. Hazard Identification

Acute Health Effects:
Skin—Excessive contact can 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 (195°C). 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 required.

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 required.

Section 9. Physical and Chemical Properties

Appearance/Odor:
Aluminum color, semi-solid material, pleasant odor.

Solubility 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.

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Printed in U.S.A. on recycled paper containing at least 10% post-consumer paper fibers.