

SCALE MARKINGS IN FAHRENHEIT ONLY. M4523

Fig. 12. Setting stop in position to restrict low limit setting to 180°F (82°C) or lower.

## Startup



Explosion Hazard. Can cause severe injury, death or property damage.

Be sure combustion chamber is free of oil or vapor.

- 1. Push red reset button and release.
- 2. Open hand valve on oil supply line.
- 3. Set thermostat to call for heat.
- 4. Close line switch; burner will start.
- Under normal conditions, burner operates until thermostat is satisfied or line switch is opened.

## MATERIAL SAFETY DATA SHEET (MSDS)

# 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.

Make certain the system operates as described in the OPERATION section. Use the following procedure to verify that the Protectorelay<sup>a</sup> control is controlling properly.

## Flame Failure Check

Shut off the oil supply hand valve while the burner is on. After 45 seconds, the safety switch locks out, the motor stops, and the oil valve closes. Allow five minutes for the burner to cool, then manually reset the safety switch.

## **Ignition Failure Check**

Test by closing the oil supply while the burner is off. Run through the starting procedure, but do not open the oil supply line hand valve. The safety switch locks out as in flame failure. Then turn the oil back on, and reset the safety switch.

## **Power Failure Check**

Turn off the power supply while the burner is on. When the burner goes out, restore power and the burner will restart.

NOTE: If operation is not as described, see cover insert for additional information and check the wiring.

## Aquastat Replacement

The Aquastat controller section of the Protectorelay control is field replaceable. When ordering a replacement assembly, specify the complete model number of the R8182.

To replace the Aquastat Controller:

- 1. Disconnect power supply.
- 2. Note position of connecting wires.
- 3. Remove fastening screws and wires.
- Remove Aquastat controller and install new assembly.

Manufacturer: Honeywell Inc., 1985 Douglas Drive North, Minneapolis, MN 55422.

Date Released: October 8, 1999.

Emergency Telephone Information: 1-888-809-3787.

NFPA Ratings:

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

## Section 2. Composition, Information on Ingredients (Table 1).

#### Table 1. Ingredients of Heat Conductive Compound<sup>a</sup>.

Ingredients	CAS Number	Percent	PEL	TLV
No. 2 Lithium Complex Grease (70%):				
Mineral Oil	64742-65-0	35-50	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Mineral Oil	64742-62-7	20-25	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
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 <sup>3</sup>	10 mg/m <sup>3</sup>
Aliphatic Petroleum Distillates	8052-41-3	10-15	2900 mg/m <sup>3</sup>	525 mg/m <sup>3</sup>
Stearic Acid	57-11-4	1-2	_	—
Aromatic Petroleum Distillates	64742-95-6	1-2	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>

<sup>a</sup> 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.

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#### 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.

#### Prepared By:

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