

Section 1 – PRODUCT AND COMPANY INFORMATION

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|---------------------|--|--|--|
| Manufacturer | IMS Company 10373 Stafford Road Chagrin Falls, OH 44023-5296 WEB imscompany.com | Emergency Phone Prepared by Prepared/Revised E-mail | 800-424-9300 Product Safety Advisor Aug 10, 2011 sales@imscompany.com |
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| | | |
|--------------------|--------------------------|--------------------|
| Item Number | Size | Former Item Number |
| 103781 | 16 ounce | HBXX-IKB16 |
| 107264 | 2 ounce | HBXX-IKB2 |
| 157684 | 5 Gal – (per GRY) | N/A |

Product use Minimizes air gaps between electric heaters and the metal they are heating, thus improving heat transfer.

Hazardous Material Information System

| | | | |
|-----------------------------|------------------------------|----------------------------|----------------------------|
| Health 1 | Flammability 1 | Reactivity 0 | Protection X |
| 0 Normal use Material | 0 Will Not Burn | 0 Stable | X = Consult the |
| 1 Slight Hazard (temporary) | 1 Possible to Burn | 1 Unstable if Heated | MSDS and |
| 2 Health Affected (lengthy) | 2 Burns if Heated | 2 Violent Chemical Change | your supervisor |
| 3 Extreme Danger | 3 Easily Burns | 3 Shock and Heat Sensitive | for your special |
| 4 Severe or Fatal | 4 Very Easily Burns | 4 May Explode | workplace need |
| * Chronic (Accumulates) | | | |

NOTE The HMIS may not be enough hazard information for this chemical in all workplaces. The HMIS system requires employee training about the system and about information in this MSDS.

Section 2 – INGREDIENTS INFORMATION

| Chemical/Common Name | CAS-Number | % | PEL-OSHA | TLV-ACGIH |
|-----------------------------------|--------------|-----------|--------------------------------------|--------------------------------------|
| Petroleum Grease ⁽¹⁾ | 64742-62-7 | 20 to 50 | 5 mg/m ³ ⁽²⁾ | 5 mg/m ³ ⁽²⁾ |
| Graphite | 7782-42-5 | 10 to 25 | 2.5 mg/m ³ ⁽⁴⁾ | 2.5 mg/m ³ ⁽⁴⁾ |
| Copper ⁽³⁾ | 7440-50-8 | 5 to 25 | 0.1 mg/m ³ ⁽⁴⁾ | 0.2 mg/m ³ ⁽⁴⁾ |
| Aluminum, ⁽³⁾ | 7429-90-5 | 0.1 to 10 | 5 mg/m ³ ⁽⁴⁾ | 5 mg/m ³ ⁽⁴⁾ |
| Corrosion Inhibitor (no Nitrates) | Trade Secret | 0.1 to 10 | ⁽⁵⁾ | ⁽⁵⁾ |

⁽¹⁾ Severely hydrotreated and refined.

⁽²⁾ As oil mist

⁽³⁾ Subject to SARA Title III Sec. 313 reporting requirements

⁽⁴⁾ As Fume

⁽⁵⁾ Not Established

Section 3 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW Product is a dark color, petroleum odor, thick liquid. May cause mechanical eye, skin, and respiratory tract irritation. For large spills, wear appropriate personal protective equipment. Collect released product by adsorption or mechanically scooping it up.

CAUTION Product is not easy to clean up entirely. It will not harm surfaces, but the surface will be slippery. This could cause an unsafe walking surface, even after normal cleanup. To use safely, prevent spillage and prepare to control spills.

HEALTH EFFECTS (Acute and Chronic)

Nose Not likely under normal conditions. Decomposition fumes may cause dizziness or irritation. Fumes from fire can be toxic. Dust from cleaning threads may contain metal powders, etc.; inhalation of the dust may cause lung injury or other harm.

Mouth DO NOT take internally. Not expected to cause an acute reaction. Aspiration into lungs during vomiting can cause chemical pneumonitis, which may be fatal. Copper can exhibit slightly toxic effects if ingested. Could cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Eyes May cause mechanical irritation if rubbed into eyes. Prolonged contact with eyes may cause severe irritation, redness, tearing, and blurred vision.

Skin Prolonged contact with skin may cause irritation or skin dermatitis. Chronic exposure is not likely, but prolonged contact could result in skin dermatitis or oil acne. Minimal irritation is expected

Chronic The product is **not** known to be a carcinogen or suspected carcinogen.

ROUTE OF ENTRY Transfer to eyes from fingers. Skin.

TARGET ORGANS, MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE None in original condition.

Section 4 – FIRST AID MEASURES

NOTE If irritation persists after any kind of body exposure, get medical help.

- Breathing** Exposure not likely in original condition. Remove to fresh air if exposed to decomposition fumes. If dizziness occurs or symptoms persist, ****Get Medical Help at once****
- Eating** If ingested, this product is not expected to cause an acute reaction. This product contains petroleum oil; do not induce vomiting because the oil may be aspirated into the lungs, ****Get Medical Help at once****, use a gastric lavage. Small amounts that accidentally enter mouth should be rinsed out until taste of product is gone. May act as a laxative.
- Eye Contact** Flush eyes with large amounts of water for 15 minutes. If material is hot, treat for thermal burns, also. Get medical attention.
- Skin Contact** Wash with soap and water. If material is hot, submerge injured area in cold water. If victim is severely burned, get medical help at once. Wash hands prior to smoking or eating. Wash contaminated clothing before re-use.

Section 5 – FIRE FIGHTING MEASURES

Flash Point (COC)>350° F (>176° C) Flammable LimitsLEL = ND UEL = ND
Autoignition temperature.....ND Decomposition Temperature >750° F (>399° C)

Extinguishing Media Carbon dioxide (CO₂), foam, dry chemical, water fog.

Special Fire Fighting Procedures Will not burn unless preheated. Water fog may be used to cool the containers but do not spray directly into large containers of burning liquids as frothing may occur. Firefighters should wear self-contained, positive-pressure breathing apparatus, protective clothing, and avoid skin contact, due to thermal decomposition products. Use equipment or shielding to protect personnel against rupturing or venting containers.

Sensitivity to mechanical impact None

Sensitivity to static discharge (ESD) Not expected to be a source of ESD.

Unusual Fire and Explosion Hazards At or above decomposition temperatures, will give off flammable gases until only solids remain. Stable at ambient temperatures and pressures. Combustion (fire condition) may result in toxic fumes, (oxides of carbon, nitrogen, sulfur, phosphorus, aluminum, copper). Dense smoke may be generated. Spilled material may cause slippery floors. Wear SCBA. Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, pilot lights, other flames and ignition sources at locations distant from material handling point. Sealed containers may rupture when heated in a fire condition.

Additional Comments Water or foam may cause frothing which can be violent and possibly endanger the life of the firefighter, especially if sprayed into containers of hot, burning liquid.

Section 6 – ACCIDENTAL RELEASE MEASURES

Waste Disposal Methods: Consult Federal, State and Local regulations. Contains a petroleum oil, the preferred method of disposal is incineration. Do not discharge into sewers or waterways.

Steps to be Taken in Case Material is Released or Spilled Because of the viscous nature, spills are unlikely. If not contaminated with foreign materials, scrape up into original container and use. Absorb residue. Place in airtight containers for disposal. Use light solvent to clean floors, but do not let contaminated liquid get to drains, sewers, public water source, or rainfall. Do not puncture or burn containers.

Section 7 – HANDLING AND STORAGE

Precautions to be Taken in Storage Eliminate open flames, strong oxidizers, and other sources of ignition from the storage area. Keep containers closed to avoid contamination from airborne dust, etc. Observe applicable fire codes. Store in tightly closed, original container. Product is a slip hazard on walkways. Store in cool, dry area, out of direct sunlight. Do not puncture, burn, or heat above 120° F (49° C) either full or empty containers.

Handling Thoroughly wash after handling, and before eating, drinking, or using tobacco products.

Maintenance Precautions Do not remove or deface label. Keep container closed.

Other Precautions **Do not use for or around oxygen systems;** Keep this conductive heat transfer compound off exposed wires and terminals. DO NOT use on insulated ceramic (open coil) type heater bands. The aluminum, conductive paste will cause band to short out. Clean exposed wires and terminals to prevent electrical conduction. Decomposition vapor is heavier than air and can collect in low areas. Product can cause slippery surfaces. Clean up spills promptly.

Work Practices Do not use in confined or closed space. Ventilation should maintain the concentration of the product or its components below the TLV/PEL value.

Section 8 – EXPOSURE CONTROLS – PERSONAL PROTECTION

GENERAL If product is used extensively, wear sufficient covering to protect skin and to protect clothing from becoming contaminated. All soiled or dirty clothing and personal protective equipment should be cleaned before reuse.

Ventilation Usually not specifically required. In decomposition conditions, the product may generate irritating smoke. In that case, use a local exhaust or ventilate the area to maintain air quality, or use an approved organic vapor respirator.

Respiratory Protection Usually none. Dust from cleaning severely dried material, may contain metal powders. Inhalation of respirable particles may cause lung injury or other harm. When grinding or wire brushing, use dust mask and safety goggles as a minimum. If used above decomposition temperatures where the product smokes, use local exhaust, or ventilate the air, or wear organic vapor respirator.

Protective Gloves Normally not required. For prolonged use, or where there are open wounds or with skin sensitivity, wear solvent-resistant gloves such as Viton, polyvinyl alcohol or equivalent.

Other Engineering Controls Eye bath and safety shower station should be available. To determine exposure levels, monitoring should be performed. Monitor for decomposition vapors if the product will be used at temperatures above 350° F.

Work Practices Avoid long-term or repeated contact. Stained clothing should be removed and laundered before re-use. Any use of this product in elevated-temperature processes must maintain safe operating conditions.

Hygienic Practices As with any chemical product, avoid contact with skin and avoid breathing vapors, do not eat, drink, or smoke in work area; wash hands prior to eating, drinking or using restroom after handling or using. Any chemical product can contaminate tobacco, causing illness (from inhaling components heated in tobacco smoke or ingested from handling tobacco and/or food products).

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

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|--------------------------------------|------------------|-------------------------------------|-----|
| Boiling Point..... | >490° F (254° C) | Specific Gravity (Water=1)..... | 1.3 |
| Vapor Pressure at 77° F (25° C)..... | ND | Percent Volatile by Volume (%)..... | 0 |
| Vapor Density (Air=1) | ND | Evaporation Rate (ether=1) | 0 |
| VOC..... | NONE | Pour point | ND |
| Solubility in Water | NIL | pH..... | ND |
| Melting point | ND | Odor threshold..... | ND |
| Viscosity | ND | | |

NOTE Product has a flash point lower than the boiling point.

Appearance and Odor Information Silver/Gray Paste, grease-like odor

Section 10 – STABILITY AND REACTIVITY

Incompatibility (Materials to Avoid): Strong oxidizers

Hazardous Decomposition Products: Heat above 750° F may release un-reacted fumes of each of the ingredients. Exposure level for oil mist, as listed in section two, would then apply. Exposure levels for the other ingredients would apply as listed, at different temperatures, starting at 1200° F

Incompatibility (reactivity, materials to avoid) Strong oxidizers, strong caustics, strong alkalizes.

Product Chemically Stable? Yes

Conditions to keep Stability Avoid heat sufficient to burst container (see special fire fighting procedure above) and exposure to flame or onto red hot surfaces, which may cause decomposition.

Decomposition Products Carbon monoxide, carbon dioxide, various hydrocarbons, and metal oxides. Product is stable to 350° F (177° C). Higher temperature can produce unknown decomposition products.

Will Hazardous Polymerization Occur? Hazardous polymerization will not occur.

Section 11 – TOXICOLOGICAL INFORMATION

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|-------------------------------------|----|
| LD ₅₀ , LC ₅₀ | NA |
| Reproductive Toxicity | NA |
| Irritancy, sensitivity | ND |

