

## Section 1 – PRODUCT AND COMPANY INFORMATION

<b>Manufacturer</b>	IMS Company 10373 Stafford Road Chagrin Falls, OH 44023-5296 E-mail <a href="mailto:sales@imscompany.com">sales@imscompany.com</a> IMS Website: <a href="http://www.imscompany.com">http://www.imscompany.com</a>	Emergency Phone 800-424-9300 Information Phone 440-543-1615 Prepared by Product Safety Advisor Prepared/Revised December 13, 2007
---------------------	---	--

<b>Item Number</b> 130787	<b>Size</b> 12 Ounces, brush top jar	<b>Former Item Number</b> New
------------------------------	---	----------------------------------

**Product use** Heat transfer paste for temperatures up to 600° F (316° C) in absence of air, or 500° F (258° C) in presence of air, especially for electric heating bands and cartridges. Will fill air gaps and not dry out.

## Hazardous Material Information System

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

\* 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
Silicone	63148-62-9	40 to 60	(1)	(1)
Copper, as dust (2)	7440-50-8	25 to 45	1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>

(1) None Established

(2) SARA III listed chemical

## Section 3 – HAZARDS IDENTIFICATION

Slippery; can cause falls if walked on.

**EMERGENCY OVERVIEW** Product is a very thick paste. Will cause mechanical eye, skin, and respiratory tract irritation. Collect spilled product and place in container.

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

**HEALTH EFFECTS** (Acute and Chronic)

**Nose** Essentially no odor and no vapors. If using in high temperatures where thermal decomposition is likely, use a local exhaust to remove fumes.

**Mouth** Not expected to cause an acute reaction. Might 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** As a precaution, exposure to liquids, vapors, mists, or fumes should be minimized. The product is not known to be a carcinogen or suspected carcinogen.

**ROUTE OF ENTRY** Ingestion, skin, transfer to eyes from fingers.

**TARGET ORGANS, MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE** Skin contact may aggravate an existing dermatitis condition.

## Section 4 – FIRST AID MEASURES

**Breathing** Remove to fresh air if dizziness or irritation occurs. If breathing has stopped, give artificial respiration. If breathing is difficult, administer oxygen. Keep patient warm and quiet.

**Eating** Aspiration into lungs during vomiting can cause chemical pneumonitis. Small amounts that accidentally enter mouth should be rinsed out until taste of product is gone. Use a gastric lavage, and call a poison control center or a physician.

**Eye Contact** Flush eyes with large amounts of water for 15 minutes. If material is hot, treat for thermal burns, also. If irritation persists, get medical attention.

**Skin Contact** Wash with soap and water, using a nail brush – pay attention to nails and open wounds. Wash clothing before re-use. Get medical attention if irritation persists. If product is injected into the skin, regardless of the appearance of the wound, the individual should be evaluated immediately by a physician as a surgical emergency.

## Section 5 – FIRE FIGHTING MEASURES

Flash Point (COC) .....>550° F (>288° C)

Flammable Limits .....LEL = ND

UEL = ND

Autoignition temperature.....ND

Decomposition Temperature ND

**Extinguishing Media** Carbon dioxide, alcohol foam, dry chemical, water fog. Using water to cool exposed containers may be useful.

**Special Fire Fighting Procedures** Will not burn unless pre-heated. 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.

**Sensitivity to mechanical impact** None

**Sensitivity to static discharge (ESD)** Not sensitive to ignition from ESD.

**Unusual Fire and Explosion Hazards** Will give off flammable gases if heated above 550° F (>288° C). Will not flash spontaneously on its own, but vapors may ignite with spark. Stable at ambient temperatures and pressures. 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

### Steps to be Taken in Case Material is Released or Spilled

Viscous nature makes spills unlikely. Place residue into metal containers for proper disposal. If not contaminated with foreign materials, may be re-used, or returned to original container, as acceptable to users needs.

**Waste Disposal Methods:** Consult changing Federal, State and Local regulations. Incineration or mix with clay absorbent material until completely dry and dispose of at permitted waste facility. Do not discharge into sewers or waterways.

## Section 7 – HANDLING AND STORAGE

**Precautions to be Taken in Storage** Good general storage conditions – no open flames, no 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. Use good housekeeping and engineering practices to prevent spills. 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. Do not transfer to unmarked containers. Keep away from children.

**Other Precautions** Not tested for oxygen systems. Avoid temperatures over decomposition. Keep this conductive heat transfer compound off exposed wires and terminals. Decomposition vapor is heavier than air and can collect in low areas. Product can cause slippery surfaces. Clean up spills promptly. Monitor floors for spillage or splashed areas; clean as needed. Never use welding or cutting torch on or near containers (even empty) because product can burn at such high temperatures.

**Work Practices** Ventilation should maintain the concentration of the product or its components below the TLV/PEL value.

## Section 8 – EXPOSURE CONTROLS – PERSONAL PROTECTION

**GENERAL** Apron or body covering is recommended where there is a possibility of regular work clothing becoming contaminated with the product. All soiled or dirty clothing and personal protective equipment should be thoroughly cleaned before re-use.

**Ventilation** General ventilation, local exhaust, or mechanical or special ventilation to maintain product and its components below their exposure limits.

**Respiratory Protection** Generally not required if adequate ventilation is provided. If the exposure limit of the product or any of its components are exceeded, an approved fume mask should be used (consult your safety equipment supplier).

**Protective Gloves** Normally not required. Protect person with open wounds or with skin sensitivity. If prolonged or repeated skin contact is expected, wear solvent-resistant gloves such as Viton, polyvinyl alcohol or equivalent.

**Other Protective Equipment.** If eye contact with the splash, spill, vapors, or spray is possible, eye protection is recommended. Chemical Monogoggles or safety glasses with side shields, and a face shield will provide protection in most situations.

**Other Engineering Controls** Monitor for decomposition vapors if the product will be used at temperatures above 550° F (288° C).

**Work Practices** Avoid long-term or repeated contact. Stained clothing should be removed and laundered before re-use. Sudden release of hot vapor or mist from elevated temperature and pressure, or sudden ingress into hot equipment, may result in decomposition without other source of heat. Any use of this product in elevated-temperature processes must be thoroughly evaluated to establish and maintain safe operating conditions.

**Hygienic Practices** As with using 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). Place contaminated clothing in closed, metal container until it can be washed or disposed of. Inform cleaner or disposer of contents of materials.

**Section 9 – PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance and Odor Information:** very thick paste, almost odorless, distinct copper color.

Boiling Point.....	>550° F (>288° C)	Specific Gravity (Water=1) .....	1.6
Vapor Pressure at 77° F (25° C) .....	0	Percent Volatile by Volume (%) .....	0%
Vapor Density (Air=1) .....	0	Evaporation Rate (ether=1) .....	0
VOC.....	0%	Pour point .....	ND
Solubility in Water .....	0%	pH.....	Neutral
Melting point .....	ND	Odor threshold.....	ND
Viscosity .....	> 300,000 cST		

**Section 10 – STABILITY AND REACTIVITY**

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

**Product Chemically Stable?** Yes

**Conditions to keep** 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.

**Stability** or onto red hot surfaces, which may cause decomposition.

**Decomposition Products** Silicone and copper oxides would be expected.

**Will Hazardous Polymerization Occur?** Hazardous polymerization will not occur.

**Section 11 – TOXICOLOGICAL INFORMATION**

LD <sub>50</sub> , LC <sub>50</sub>	ND
Reproductive Toxicity	ND
Irritancy, sensitivity	ND

**Section 12 – ECOLOGICAL INFORMATION**

Treat as a silicone product.

**Section 13 – DISPOSAL CONSIDERATIONS**

**Waste Disposal Methods** Give leaking containers to a disposal service equipped to handle such containers. Observe all warnings and precautions listed for the product. As prepared, product is not considered hazardous. Do not allow empty containers to be used for any purpose except to store and ship product. Recovered material may be re-used if compatible with user's processes. Contaminated material may be disposed of in a permitted waste management facility suitable for the contamination. Do not puncture or burn containers. Reclamation and recycling are encouraged where possible. Where reclamation is not practical, this product may be incinerated where permitted by Federal, State, County/Provincial, and Local regulations. Never dispose by means of public sewers or drainage.

**Section 14 – TRANSPORT INFORMATION**

DOT Ground ..... Not Regulated  
 Class - Packing -  
 ERG -

Air (IATA) ..... Not Regulated  
 Class -  
 UN/ID No. -  
 Packing -  
 Authorization -

Vessel.....Not Regulated  
 Class -  
 UN No: -  
 EmS No. -  
 ERG -

**Section 15 – REGULATORY INFORMATION**

	Product	Component	Component		
		1	2		
ACGIH	N	N	N		
AIHA	N	N	N		
ANSI	N	N	N		
Canada – DSL	N	N	N		
CFC	N	N	N		
EINECS listed	N	N	N		
EPA - CAA, CWA	N	N	N		
EU risk phrase #'s	N	N	N		
HCFC	N	N	N		
IDLH	N	N	N		
ODS-Ozone Dep. Sub.	N	N	N		
OSHA listed	N	N	N		
PROP 65 listed	N	N	N		
RCRA listed	N	N	N		
SARA 313 list	N	N	N		
TSCA listed	Y	Y	Y		
USDA H-1, -2	H-1	H-1	H-1		
WHMIS-class	N	N	N		

This product has been classified in accordance with hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**Section 16 – OTHER INFORMATION**

**CAUTION** Intentional misuse of this chemical product, as with any industrial chemical in contact with the body, can be harmful or fatal. This includes such things as deliberately breathing, placing in mouth, swallowing, placing on skin, or any other body contact, or repeated, or continuous contact.

IMS provides this information in good faith, but makes no representation as to its comprehensiveness or its accuracy. This document is offered as a guide to a trained person, for appropriate precautionary handling. Persons using the product and receiving the information must exercise independent judgment in determining the appropriateness of the use and the safety information for their particular purpose. IMS MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THIS INFORMATION OR TO THE PRODUCT. ACCORDINGLY, IMS WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE ON THIS INFORMATION.

ACGIH	American Conference of Governmental Hygienists	NA	Not Applicable, Not Available
AKA	Also Known As, Synonym	ND	Not Determined
CAS	Chemical Abstract Service	NIL	Not measurable, significant, noticeable, or an affect
GRAS	Generally Recognized As Safe by FDA rule or listing	NTP	National Toxicology Program
H-1, -2	USDA, plant process chemicals that do not touch food stuff	OSHA	Occupational Safety and Health Administration
IARC	International Agency for Research of Cancer	ppm	parts per million
IDLH	Immediately Dangerous to Life or Health, exposure rate/volume	USDA	U S Department of Agriculture
mg/m <sup>3</sup>	milligrams per Cubic Meter	Y	Yes, Does Exists, Is Listed,
N	No, None, Not listed, Not Known		