

Section 1 – PRODUCT AND COMPANY INFORMATION

Manufacturer IMS Company
10373 Stafford Road
Chagrin Falls, OH 44023-5296
WEB imscompany.com

Emergency Phone 800-424-9300
Office Phone 440-543-1615
Prepared by Product Safety Advisor
Prepared/Revised December 2, 2004
E-mail sales@imscompany.com

Item Numbers	Container	Former Item Numbers
105899	1 gallon	CIFI-PG-1-1G-K
105578	5 gallon	CIFI-PG-1-5G-K
106519	50 gallon	CIFI-PG-1-55G-K

Product use Designed as a pure, undiluted, heat transfer liquid and agent. Rated for USDA-1 and will comply with FDA Good Manufacturing Practices under 172.878, 174.5 (2) (d), 178.3530, 178.3570, 178.3620, 178.3650, 178.3710 and/or 178.3660.

Hazardous Material Information System

Health 0	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
White Mineral Oil ⁽²⁾	8042-47-5	100	5mg/m ³ ⁽¹⁾	5mg/m ³ ⁽¹⁾

⁽¹⁾ None Established for the ingredient specifically, this exposure limit is for the generic catchall "As oil mist"

⁽²⁾ Listed as a FDA Food Additive in 21 CFR 172.878. FDA useable per 174.5 (2) (d) for articles that contact food. Rated USDA H-1 for use in machinery having incidental contact with food.

CARCINOGENICITY Ingredient is not listed by IARC, NTP, or regulated by OSHA as a carcinogen.

Section 3 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW Clear liquid with slight oily odor. The residue will burn. Decomposition products will include normal combustion by-products of carbon and hydrogen. Repeated overexposure may cause eye, skin, eating and breathing irritation. For large spills, wear appropriate personal protective equipment. Dike to prevent spread. Collect released product by absorption.

CAUTION Slippery; can cause falls if walked on. Breathing of mist or fumes, released upon heating may be irritating to breathing. To use safely, prevent overspray and prepare to control and prevent spills.

HEALTH EFFECTS - (Acute and Chronic):

Mouth Discomfort could be experienced with large amounts swallowed. Has laxative properties; abdominal cramps and diarrhea followed by vomiting.

Nose Coughing, choking, or breathing difficulties could occur with overexposure.

Eye: Liquid or mist may cause irritation.

Skin: Repeated or prolonged contact can cause irritation.

PRIMARY ROUTES OF ENTRY nose, mouth, skin, eyes

TARGET ORGANS, MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None expected unless there is gross overexposure.

Section 4 – FIRST AID MEASURES

NOTE If any irritation persists, get medical help.

- Breathing** Remove to fresh air. Keep person warm and quiet. Apply artificial respiration if breathing has stopped. If breathing is difficult, give oxygen, and Get Medical Help. If lung irritation, dizziness, nausea, or unconsciousness occurs, seek emergency medical immediately.
- Eating** Do Not Induce vomiting unless advised by physician. May act as a laxative. Rinse out until taste of product is gone.
- Eye** Flush thoroughly with water for at least 15 minutes. May cause temporary eye irritation. Consult a physician.
- Skin** Wash with soap and water. Launder clothes before re-use.

Section 5 – FIRE FIGHTING MEASURES

Flash Point (COC)440° F (226° C) Flammable Limits.....LEL = ND UEL = ND %
Autoignition temperature690° F (365° C) NFPA 0-1-0-NA

Extinguishing Media Carbon Dioxide, Foam, Dry Chemical, Water Fog. Using water to cool exposed containers may be useful.

Special Fire Fighting Procedures Use equipment or shielding to protect personnel against rupturing or venting containers. Cooling containers with water streams may be helpful and will knock down vapors. Wear Self Contained Breathing Apparatus (SCBA). Water or foam may cause frothing. Water spray may be used to flush spill away from exposure. Prevent runoff from entering streams, sewer, or drinking water supply.

Unusual Fire and Explosion Hazards Treat as an oil fire. Water may be ineffective and could spread the fuel source. Dense smoke may be generated.

Section 6 – ACCIDENTAL RELEASE MEASURES

Steps to be Taken in Case Material is Released or Spilled Remove sources of ignition. Use protective equipment consistent with the situation. Pick up the spill on absorbent material; store in closed containers for proper disposal. Remove residue to prevent a slippery condition developing. It is slippery on walkways. Do not let contaminated liquid get to drains, sewers, public water source, or rainfall. Do not puncture or burn containers.

Waste Disposal Methods Consult Federal, State, and Local regulations. Do not puncture or burn containers. Give empty, leaking, or full containers to a disposal service equipped to handle and dispose of such containers.

Section 7 – HANDLING AND STORAGE

Storage - Keep drum sealed at all times. Avoid pump cavitation, due to air entrapment, store in warm room one day before pumping. Store in non-hazardous area at about 70° F (20° C). Store in closed and labeled containers away from heat, sparks, open flame, or oxidizing materials. NFPA Class IIIB storage.

Precautions to be Taken in Handling and Storage Store in cool, dry area out of direct sunlight. Do not puncture, burn, or store above 120° F (49° C).

Spray Applications Where exposure exceeds the TLV, use a NIOSH/MSHA approved respirator, goggles, rubber gloves, and protective clothing.

Maintenance Precautions Do not remove or deface label.

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

Other Precautions Read and follow directions and cautions on the container label, and any accompanying literature. Spills could make floors slippery. Use housekeeping and work rules to prevent slipping. Decomposition vapors may collect in low areas. Clean up spills promptly. Monitor floors, in spill potential areas for accumulation; clean as needed.

Section 8 – EXPOSURE CONTROLS – PERSONAL PROTECTION

GENERAL Usually local exhaust is not required. General room ventilation may be adequate to maintain components below TLV/PEL, if handled at ambient temperatures, or in covered equipment. Local exhaust ventilation or other engineering controls may be required, if ambient temperatures are exceeded, or if used in operations without good air circulation. It is good practice to limit exposure to any mold release to the OSHA oil mist exposure limit of 5 mg/m³ TWA.

Maintain enough ventilation to prevent fire/flash hazard from local accumulation of vapors, especially near sources of high heat, electric arcs or static-electric sparks. NOTE vapors are heavier than air and could collect below the area where the product is sprayed, or could travel long distances along floor to be a health or safety issue elsewhere.

Apron or other 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 cleaned before reuse.

Respiratory Protection If the exposure limit is exceeded, an approved organic vapor mask should be used (consult your safety equipment supplier). If exposures exceed limits by less than a factor of ten, use a NIOSH approved, ½ mask facepiece respirator for particulate matter. If exposures exceed 10 times the recommended limits, consult a professional industrial hygienist or your respiratory protective equipment supplier for selection of the proper equipment.

Protective Gloves Where prolonged or repeated contact with the product is likely, use polymeric materials, neoprene, etc. for personal protective equipment, gloves and clothing.

Other Protective Equipment If contact with a mist or spray is likely, 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 To determine exposure levels, monitoring should be performed. Eye bath and safety shower station should be available.

Work Practices Use enough ventilation to maintain the concentration of the product and its components below their exposure limits. Avoid long-term or repeated contact. Clothing containing product should be removed and laundered before re-use. Sudden release of hot vapor or mist from process equipment operating at elevated temperature and pressure, or sudden ingress of air into hot equipment under vacuum, may result in decomposition without obvious source of heat. All uses of this product in elevated-temperature processes must be thoroughly evaluated to establish and maintain safe operating conditions.

Hygienic Practices As with using any liquid 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 liquid 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

Boiling Point.....	650° F (343° C)	Specific Gravity (Water=1)	0.862
Vapor Pressure (mm Hg at 70° F (21° C) ...	<0.001	Percent Volatile by Volume (%)	NIL
Vapor Density (Air=1)	>1	Evaporation Rate (ether=1)	0.001
VOC	NIL	Pour point.....	0° F (-18° C)
Solubility in Water	NIL	pH.....	Neutral
Melting point	NA	Odor threshold	ND
Viscosity, cSt	20.5 @ 100°F		

Appearance Clear liquid, slightly oily odor.

Section 10 – STABILITY AND REACTIVITY

Incompatibility (reactivity, materials to avoid)

Strong caustics, strong oxidizers, sources of ignition.

Product Chemically Stable?
Conditions to keep Stability

Yes
Keep below 690° F (365° C). Avoid heat sufficient to burst container (see special fire-fighting procedure above) and prevent spraying into flame or onto red-hot surfaces, which may cause decomposition and/or ignition.

Decomposition Products

Carbon monoxide, carbon dioxide, and incompletely burned hydrocarbon products would be expected.

Sensitive to mechanical impact
Sensitivity to static discharge (ESD)

None
If used as in a spray procedure, potential to being a source of ESD, as any spray.

Section 11 – TOXICOLOGICAL INFORMATION

LC₅₀ Rat 4 hrs 5200 mg/m³
LD₅₀ Rat 5000 mg/Kg; rabbit dermal 2000 mg/kg
Reproductive Toxicity ND
Irritancy, sensitivity Non-Hazardous. See other sections, 3 - Hazard Identification, 4 - First Aid, and 15 – Regulatory Information.

Section 12 – ECOLOGICAL INFORMATION

Under Section 311 (b) (4) of the Clean Water Act, any discharge of oil and petroleum products, of any kind or form, leaving the employers/owners/transporter/warehouse property or control, that can go to any waters, must immediately be reported to the National Response Center, 800-424-8802.

Section 13 – DISPOSAL CONSIDERATIONS

Waste Disposal Methods Liquid may be mixed with inert absorbent materials to point of being a non-liquid and disposed of as an oily material, unless local regulations prohibit. If any organic material is used for absorbing or cleaning, put into sealed, air tight, containers to prevent spontaneous combustion. Give leaking, or full, containers to a disposal service equipped to handle such residue containers. Observe all warnings and precautions listed for the product. Observe proper safety and handling. Do not allow empty containers to be used for any purpose except to store and ship product. Recovered liquids may be re-used if compatible with users processes. Contaminated material may be disposed of in a permitted waste management facility suitable for the contamination. Do not puncture or burn containers. Reclamation/recycling is 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

Ground (US DOT) Petroleum Oil – not regulated
Air (IATA) NON-HAZARDOUS MATERIAL -- Not Regulated
Vessel NON-HAZARDOUS MATERIAL -- Not Regulated

Section 15 – REGULATORY INFORMATION

CFC, Class 1	N	RCRA listed	N
EPA – CAA		SARA 313 list.....	N
EPA - CWA	Y	TSCA listed	Y
EU risk phrase #'s	N	USDA H-1, -2	H-1
FDA-21 CFR 174.5 (2) (d)	Y	WHMIS.....	N
IDLH	N	TDG	N
OSHA listed	N	ADR	N
PROP 65 listed	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 ³	milligrams per Cubic Meter	Y	Yes, Does Exists, Is Listed,
N	No, None, Not listed, Not Known		