



MULTI-COOL

MATERIAL SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard (29CFR 1910.1200)

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SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME	MULTI-COOL (Bulk)	PROPER SHIPPING NAME	OIL N.O.S.
PRODUCT NUMBER	1074	DATE PREPARED	05/12/2003
PRODUCT DESCRIPTION	All Purpose Soluble Oil	PREPARED BY	WARREN SQUYRES
Information Phone	(800) 334-7071	24-Hour Emergency Phone No.	(800) 255-3924

NFPA - HMIS CODES

Health	2	Flammability	1	Corrosive	0	Reactivity	0	Personal Protection	C
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SECTION II - MATERIAL IDENTIFICATION AND INFORMATION

Description	CAS Number	SARA III LIST/CARCINOGEN	OSHA PEL/TWA	ACGIH TLV/TWA	ACGIH TLV/STEL
May contain one or more of the following			5mg/m3 (Oil Mist)	5mg/m3 (Oil Mist)	10mg/m3 (Oil Mist)
Lubricating Base Stocks	64742-53-6	NO/NO			
Aliphatic Gloycol Ether	Trade Secret	NO/NO			
Proprietary Additives	Mixture	NO/NO			

Please note that the chemical identity of some or all of the above hazardous ingredients is confidential information and may be withheld as permitted by 29CFR 1910.1200 and various State Right to Know Laws.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Initial Boiling Point, °F	N/E	Evaporation Rate (n-Bu-Ac=1.0)	N/E
Vapor Pressure for Product	N/E	Melting Point, °F	N/A
Vapor Density for Product (Air = 1.0)	N/E	Molecular Weight, Avg.	N/E
Specific Gravity (H2O=1 @ 15.6°C)	0.92 - 0.94	Viscosity, Typical (cp)	N/E
VOC (Grams/Liter @ 25°C)	N/E	Appearance and Color	Amber Liquid
Volatiles, % by Volume @ 100°C	N/E	Odor	Petroleum Oil
Total VOC %	N/E	Water Solubility (Wt %)	Soluble

The above data are appropriate or typical values and should not be used for precise design purposes.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (ASTM D92) C.O.C.	270°F (Min.)
Auto Ignition Temperatures	N/E
Flammability Limits in Air	
Lower Explosive Limit Estimated	N/E
Upper Explosive Limit Estimated	N/E
Extinguishing Media	Carbon Dioxide, Dry Chemical, Foam, or water-fog. Water spray can be used to cool and protect containers exposed to heat and flame.
Unusual Fire and Explosion Hazards	Toxic fumes, gases or vapors may evolve on burning. Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back if exposed to ignition. Exposing product to intense heat could cause drums to rupture.
Special Fire Fighting Procedures	Wear positive pressure self-contained breathing apparatus. Do not enter confined fire-space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots). Move container from fire area if you can do so without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out.



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SECTION V - HEALTH HAZARD DATA AND EMERGENCY FIRST AID PROCEDURES

ENTRY ROUTES	ADVERSE/CHRONIC EFFECTS	FIRST AID PROCEDURES
EYES	May cause severe eye irritation. Symptoms may include stinging, tearing and redness. Based on data from components or similar materials.	Immediately flush eyes with large amounts of water for at least 15 minutes while holding eyelids open. Get prompt medical attention if irritation occurs.
INGESTION	Product may be harmful or fatal if swallowed. Ingestion may cause irritation of the digestive tract, nausea and vomiting. Aspiration into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possible death. Based on data from components or similar materials.	DO NOT INDUCE VOMITING, because material can enter the lungs and cause severe damage. If vomiting occurs, or if comatose or lethargic, place on the left side with the head down. Get prompt medical attention.
INHALATION	Breathing high concentrations of vapors or mists may cause irritation of the mucous membranes and upper respiratory tract. Based on data from components or similar materials.	If adverse effects are observed, remove to fresh air. If symptoms persist, seek medical attention. If victim is not breathing, immediately begin artificial respiration. Seek immediate medical attention.
SKIN	May cause severe skin irritation, allergic reaction, and/or skin sensitization. May be harmful or fatal if absorbed through the skin. Based on data from components or similar materials.	In case of skin contact, remove contaminated clothing and wipe excess off. Wash skin with soap and water or a waterless hand cleaner followed by soap and water. Get medical attention if irritation persists or develops. Launder or dry-clean clothing before reuse. Discard shoes and other leather articles saturated with the material.
VARIABLE AMONG INDIVIDUALS	Health studies have shown that many petroleum hydrocarbons and synthetic lubricants pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.	

SECTION VI - REACTIVITY DATA

STABILITY	Stable under normal conditions of storage and handling.
HAZARDOUS POLYMERIZATION	Will not occur - No conditions known.
INCOMPATIBILITY	Strong Oxidizing Agents, reducing agents, strong alkali, and acids.
HAZARDOUS DECOMPOSITION	Fumes, smoke, carbon monoxide, aldehydes and other products of incomplete combustion. Combustion products will include oxides of sulfur and nitrogen.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED - Remove all sources of ignition. Personal protective equipment must be worn (see Section VIII). Minimize contact with skin and clothing. Ventilate spill area if confined or poorly ventilated area. Pick-up free liquid with explosion proof or hand pump for recycle and/or disposal. Residual material can be absorbed on inert material. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses, or extensive land areas. Assure conformity with governmental regulations. Contact the Coast Guard National Response Center (300) 424-8802 if a spill of any amount is made into or upon U.S. navigable waters, the contiguous zone or adjoining shorelines.	
WASTE DISPOSAL	Waste disposal should be in compliance with all Federal, State, and Local laws. Determine at time of disposal whether the product meets RCRA criteria for a hazardous waste.
HANDLING & STORAGE	Store in a cool, dry location. Keep containers closed when not in use. Keep away from potential sources of ignition. Keep away from incompatible materials. Open container in a well-ventilated area. Avoid generating mists when handling. Avoid breathing vapors, or prolonged or repeated skin contact. Wash thoroughly after handling. Remove any contaminated clothing and launder before reuse.
OTHER PRECAUTIONS	KEEP OUT OF REACH OF CHILDREN. Read and follow label directions. For Industrial/Institutional use only.
"EMPTY" CONTAINERS	"EMPTY" containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death. Do not attempt to clean since residue is difficult to remove. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION	Use NIOSH/MSHA Approved air-purifying respirator for organic vapors and particulates if the recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space or for other poorly ventilated areas and for large spill clean-up sites.
VENTILATION	Use local exhaust to capture vapor, mists or fumes, if necessary. Provide ventilation sufficient to prevent exceeding recommended exposure limit or build-up of explosive concentrations, or vapors in air. No smoking, flame or other ignition sources.
PROTECTIVE GLOVES	Use chemical resistant gloves to avoid prolonged or repeated skin contact. Nitrile are recommended.
EYE PROTECTION	Use chemical proof splash goggles or face shield when eye contact may occur.
OTHER PROTECTIVE CLOTHING/EQUIPMENT	Use chemical resistant apron or other impervious clothing, if needed, to avoid contamination of regular clothing. Long sleeves should be worn.
WORK HYGIENIC PRACTICES	Minimize breathing vapor, mists or fumes. Avoid prolonged or repeated contact with skin. Employees must practice good personal hygiene; washing exposed areas of skin several times daily and before eating, drinking or smoking. Launder contaminated clothing before reuse. Remove contaminated shoes and thoroughly clean before reuse; discard if oil-soaked.

SECTION IX - TRANSPORTATION DATA

PROPER SHIPPING NAME	OIL N.O.S.
DOT ID NUMBER	N/A
DOT HAZARD CLASS	NOT REGULATED

The information and recommendations set forth herein are presented in good faith and believed to be correct and reliable. RAMCO SPECIALTY PRODUCTS, Inc. makes no representation as to the completeness or accuracy thereof and supplies information upon the condition that the persons receiving same will make their own determination as to its suitability for their purpose prior to use.