

MATERIAL SAFETY DATA SHEET

This MSDS Complies With 29 CFR 1910.1200 (The Hazard Communication Standard)
This material safety data sheet conforms to the requirements of ANSI Z400.1

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

R&O220 – R & O 220

Manufacturer/Supplier:

American Chemical Technologies, Inc.
485 E. Van Riper Road, Fowlerville, MI 48836
Office: 517-223-0300 Fax: 517-223-1703

Emergency Spill Information:

INFOTRAC 1-800-535-5053
24 HOURS/DAY, 7 DAYS/WEEK

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS#</u>	<u>Range % by wt.</u>
Highly refined mineral oil (C15 - C50) ACGIH TWA 5 mg/m ³ ; STEL 10 mg/m ³ OSHA Z-1 TWA 5 mg/m ³	Mixture	90% - 100%

SECTION 3 – HAZARDS IDENTIFICATION

Emergency Overview: This product has been evaluated and does not require any hazard warning on the label under OSHA criteria.

Potential Health Effects:

Eye Contact: Not expected to cause prolonged or significant eye irritation.

Skin Contact: Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin. High-Pressure Equipment Information: Accidental high-velocity injection under the skin of materials of this type may result in serious injury. Seek medical attention at once should an accident like this occur. The initial wound at the injection site may not appear to be serious at first; but, if left untreated, could result in disfigurement or amputation of the affected part.

Inhalation: Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

Ingestion: Not expected to be harmful if swallowed.

HMIS Code: (Health:1) (Flammability:1) (Reactivity:0) (Protection:)

NFPA Code: (Health:0) (Flammability:1) (Reactivity:0)

SECTION 4 – FIRST AID MEASURES

Eye: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

Skin: No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

Ingestion: No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

Note to Physicians: In an accident involving high-pressure equipment, this product may be injected under the skin. Such an accident may result in a small, sometimes bloodless, puncture wound. However, because of its driving force, material injected into a fingertip can be deposited into the palm of the hand. Within 24 hours, there is usually a great deal of swelling, discoloration, and intense throbbing pain. Immediate treatment at a surgical emergency center is recommended.

SECTION 5 – FIRE FIGHTING MEASURES

Flashpoint: 374 °F (190 °C) **Method:** C.O.C.

UEL: Not determined.

LEL: Not determined.

Autoignition Temperature: Not determined.

Flammability Classification: Not Flammable.

Extinguishing Media: Agents approved for Class B (e.g., dry chemical, carbon dioxide, foam, steam) or water fog.

Unusual Fire and Explosion Hazards: Leaks/ruptures in high pressure system using materials of this type can create a fire hazard when in the vicinity of ignition sources (eg. open flame, pilot lights, sparks, or electric arcs).

Fire Fighting Equipment: This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Hazardous Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Protective Measures: Eliminate all sources of ignition in vicinity of spilled material.

Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

Reporting: Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required..

SECTION 7 – HANDLING AND STORAGE

Precautionary Measures: DO NOT USE IN HIGH PRESSURE SYSTEMS in the vicinity of flames, sparks and hot surfaces. Use only in well ventilated areas. Keep container closed. General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, 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. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye: No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

Skin: No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: 4H (PE/EVAL), Nitrile Rubber, Silver Shield, Viton..

Inhalation: No respiratory protection is normally required. If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

Engineering Controls: Control airborne concentrations below the exposure guidelines.

Other Protective Equipment: Standard work clothes, shoes, apron, etc.

SECTION 9 – CHEMICAL AND PHYSICAL PROPERTIES

Appearance and Odor	: Colorless liquid with petroleum odor
pH	: Not Applicable
Vapor Pressure	: <0.01 mmHg @ 37.8 °C (100 °F)
Vapor Density	: >1
Boiling Point	: >260°C (500°F)
Melting Point	: Not Applicable
Solubility in water	: Nil
Specific Gravity	: 0.86 - 0.9 @ 15.6°C (60.1°F) / 15.6°C (60.1°F)
Evaporation Rate	: Not determined
Percent Volatiles	: Not determined

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable.

Conditions to Avoid: Extreme heat.

Materials to Avoid: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc..

Hazardous Decomposition: None identified.

SECTION 11 – TOXICOLOGICAL INFORMATION

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B). These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen

(A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

SECTION 12 – ECOLOGICAL INFORMATION

Ecological testing has not been conducted on this product.

SECTION 13 – DISPOSAL INFORMATION

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods..

SECTION 14 – TRANSPORTATION INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and modespecific or quantity-specific shipping requirements.

DOT Shipping Description: PETROLEUM LUBRICATING OIL, NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

Additional Information: NOT HAZARDOUS BY U.S. DOT. ADR/RID HAZARD CLASS NOT APPLICABLE.

IMO/IMDG Shipping Description: PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE

ICAO/IATA Shipping Description: PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO

SECTION 15 – REGULATORY INFORMATION

All components of this product are on the U.S. TSCA inventory.

Superfund Amendments and Reauthorization Act of 1986 Title 111(Emergency Planning and Community Rights to Know Act) section 313: To the best of our Knowledge this product does not contain chemicals at levels which require reporting under this statute.

Sections 311 and 312

Delayed(Chronic) Health Hazard :	NO
Fire Hazard :	NO
Immediate(Acute) Health Hazard :	NO
Reactive Hazard :	Check Section 10.
Sudden Release of Pressure Hazard :	NO

CHEMICAL INVENTORIES:

All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), EINECS (European Union), ENCS (Japan), IECSC (China), KECI (Korea), PICCS (Philippines), TSCA (United States).

NEW JERSEY RTK CLASSIFICATION:

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows: PETROLEUM OIL (Lubricating oil)

WHMIS CLASSIFICATION:

This product is not considered a controlled product according to the criteria of the Canadian Controlled Products Regulations.

SECTION 16 – SPECIAL PRECAUTIONS

Keep containers closed until ready for use. Keep out of the reach of children! Store away from open flames and strong oxidizers

Prepared By: Mark D. Latunski
Date Revised: 04/19/2011
Supersedes: 11/14/2001
Date Prepared: 02/18/1998

The information provided herein is believed to be accurate to the best of the company's knowledge as of the date of its issue. We do not warrant or guarantee the information provided and will not be held liable for any loss or damage from its use.