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| CHEM AND LUBE | | MATERIAL SAFETY DATA SHEET | | | | ADDRESS: 1901 S. 12 TH ST ALLENTOWN, PA 18103 | |
| PRODUCT IDENTIFICATION | PRODUCT NAME R & O | | | Code No. | | Emergency Phone Number(s) Business: (610) 798-9222 Other: | |
| | SYNONYMS | | | | | 12/04 | |
| | | | | | | Chemical Family HYDRAULIC OIL | |
| INGREDIENTS | MATERIALS OR COMPONENTS | | | %W | CAS NUMBER | | CARCINOGEN OSHA OR IARC |
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| SHIPPING INFORMATION | | | | | | | |
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| PHYSICAL PROPERTIES | Boiling Point/Range °C 700 °F | | Melting Point °C °F | | Freezing Point °C °F | | Molecular weight (Calculated) |
| | Specific Gravity (H ₂ O=1) 0.885 | | Vapor Pressure (mm Hg) °C <0.01 °F | | Vapor Density (Air=1) N/A | | |
| | Solubility in H ₂ O NIL | | % Volatiles by Volume | | Evaporation Rate SLOW <input type="checkbox"/> Either = 1 <input type="checkbox"/> Water = 1 <input type="checkbox"/> Butylacetate =1 | | |
| | Appearance and Odor AMBER LIQUID, SLIGHT ODOR | | | | Other | | |
| FIRE AND EXPLOSION DATA | Flash Point Base Oil °C 450 °F | | Test Method | | Flammable Limits Lower NA % Upper % | | Autoignition Temperature/Fire Point °C °F |
| | EXTINGUISHING MEDIA <input type="checkbox"/> Water-spray <input checked="" type="checkbox"/> Water-fog <input type="checkbox"/> Water-stream <input checked="" type="checkbox"/> CO ₂ <input checked="" type="checkbox"/> Dry chemical <input type="checkbox"/> Alcohol foam <input type="checkbox"/> Foam <input type="checkbox"/> Earth or sand | | | | | | |
| | SPECIAL FIRE FIGHTING PROCEDURES <input type="checkbox"/> Do not enter Building <input type="checkbox"/> Allow fire to burn <input type="checkbox"/> Water may cause frothing <input type="checkbox"/> Do not use water | | | | | | |
| | UNUSUAL FIRE AND EXPLOSION HAZARDS <input type="checkbox"/> Dust explosion Hazard <input type="checkbox"/> Sensitive to shock <input type="checkbox"/> Contamination <input type="checkbox"/> Temperature <input type="checkbox"/> Other (Specify): NONE | | | | | | |
| REACTIVITY DATA | STABILITY <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable | | CONDITIONS CONTRIBUTING TO INSTABILITY <input type="checkbox"/> Thermal decomposition <input type="checkbox"/> Photo degradation <input type="checkbox"/> Polymerization <input type="checkbox"/> Contamination | | | | |
| | INCOMPATIBILITY - Avoid contact with <input type="checkbox"/> Strong Acids <input type="checkbox"/> Strong Alkalis <input checked="" type="checkbox"/> Strong Oxidizers <input type="checkbox"/> Other (Specify): | | | | | | |
| | HAZARDOUS DECOMPOSITION PRODUCTS - THERMAL AND OTHER (list) CO, CO ₂ , AND ASPHYXIANTS | | | | | | |
| | CONDITIONS TO AVOID <input type="checkbox"/> Heat <input type="checkbox"/> Open Flames <input type="checkbox"/> Sparks <input type="checkbox"/> Ignition sources <input type="checkbox"/> Other (specify): | | | | | | |
| SPILL OR LEAK | STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED <input type="checkbox"/> Flush with Water <input checked="" type="checkbox"/> Absorb with sand or inert material <input type="checkbox"/> Neutralize <input type="checkbox"/> Sweep or scoop up and remove <input type="checkbox"/> Keep upwind Evacuate enclosed spaces. <input type="checkbox"/> Prevent Spread or spill | | | | | | |
| | WASTE DISPOSAL METHOD - Consult federal, state, or local authorities for proper disposal procedures. ALL DISPOSALS MUST COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS. | | | | | | |

NA - Not Applicable

CONTINUED ON
REVERSE SIDE

Before using product, read and follow directions and precautions on product label and bulletins.

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| TOXICITY INFORMATION | CONDITIONS TO AVOID NONE KNOWN | | | | | | |
| | PRIMARY ROUTES OF ENTRY <input checked="" type="checkbox"/> INHALATION <input checked="" type="checkbox"/> SKIN CONTACT <input checked="" type="checkbox"/> OTHER (Specify) INGESTION | | | | | | |
| | This product has been used for years with no known ill effects. It contains no known carcinogens or mutagens as defined by OSHA or IARC. | | | | | | |
| | This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372): | | | | | | |
| | <table style="width:100%; border-collapse: collapse;"> <tr> <td style="border-bottom: 1px solid black; width: 20%;"></td> <td style="border-bottom: 1px solid black; width: 60%;"></td> <td style="border-bottom: 1px solid black; width: 20%;"></td> </tr> <tr> <td style="text-align: center;"><u>CAS#</u></td> <td style="text-align: center;"><u>Chemical Name</u></td> <td style="text-align: center;"><u>Percent by Weight</u></td> </tr> </table> | | | | <u>CAS#</u> | <u>Chemical Name</u> | <u>Percent by Weight</u> |
| | | | | | | | |
| <u>CAS#</u> | <u>Chemical Name</u> | <u>Percent by Weight</u> | | | | | |

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| HEALTH HAZARD INFORMATION | <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> Health 0 Flammability..... 1 Reactivity..... 0 Protective Equipment..... B </td> <td style="width: 50%; vertical-align: top; text-align: center;"> NFPA HAZARD RATING CODES Least..... 0 High..... 3 Slight..... 1 Extreme..... 4 Moderate..... 2 </td> </tr> </table> | Health 0 Flammability..... 1 Reactivity..... 0 Protective Equipment..... B | NFPA HAZARD RATING CODES Least..... 0 High..... 3 Slight..... 1 Extreme..... 4 Moderate..... 2 |
| | Health 0 Flammability..... 1 Reactivity..... 0 Protective Equipment..... B | NFPA HAZARD RATING CODES Least..... 0 High..... 3 Slight..... 1 Extreme..... 4 Moderate..... 2 | |
| | PERMISSIBLE EXPOSURE LIMIT (Specify if TLV/TWA or Ceiling [c]) | | |
| | IRRITATION <input checked="" type="checkbox"/> Skin <input type="checkbox"/> Severe <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Mild (Transient) <input checked="" type="checkbox"/> Eye <input type="checkbox"/> Severe <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Mild (Transient) | | |
| | CORROSIVITY <input type="checkbox"/> Skin <input type="checkbox"/> 4 hrs. (DOT) <input type="checkbox"/> 24 hrs (CPSC) <input type="checkbox"/> Eye <input type="checkbox"/> May cause blindness <input checked="" type="checkbox"/> Not Corrosive | | |
| | SENSITIZATION <input checked="" type="checkbox"/> Skin <input type="checkbox"/> Respiratory <input type="checkbox"/> None | | |
| | INHALATION EFFECTS <input type="checkbox"/> Narcotic effect <input type="checkbox"/> Cyanosis <input type="checkbox"/> Asphyxiant | | |
| | LUNG EFFECTS (Specify): NONE | | |
| | OTHER (Specify): <input type="checkbox"/> Repeated contact-skin defatter <input type="checkbox"/> Other (Specify) | | |
| | EMERGENCY FIRST AID INGESTION <input type="checkbox"/> Induce vomiting <input checked="" type="checkbox"/> DO NOT induce vomiting <input type="checkbox"/> Give plenty of water <input checked="" type="checkbox"/> Get medical attention <input type="checkbox"/> Other (Specify): | | |
| DERMAL <input checked="" type="checkbox"/> Flush with soap and water <input type="checkbox"/> Get medical attention <input type="checkbox"/> Contaminated clothing- remove & launder <input type="checkbox"/> Contaminated shoes – destroy <input type="checkbox"/> Other (Specify) | | | |
| EYE CONTACT <input checked="" type="checkbox"/> Flush with plenty of water for at least 15 minutes <input checked="" type="checkbox"/> Get medical attention <input type="checkbox"/> Other (Specify): | | | |
| INHALATION <input checked="" type="checkbox"/> Remove to fresh air <input type="checkbox"/> If not breathing give artificial respiration <input type="checkbox"/> Give oxygen <input type="checkbox"/> Get medical attention <input type="checkbox"/> Other (Specify): | | | |

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| SPECIAL PROTECTION INFORMATION | VENTILATION REQUIREMENTS - Always maintain exposure below permissible exposure limits <input type="checkbox"/> Consult an industrial hygienist or environmental health specialist <input checked="" type="checkbox"/> Local exhaust <input type="checkbox"/> Use with adequate ventilation <input type="checkbox"/> Check for air contamination and oxygen deficiency <input type="checkbox"/> Other (Specify): |
| | EYE <input checked="" type="checkbox"/> Safety glasses <input type="checkbox"/> Face Shield <input checked="" type="checkbox"/> Goggles |
| | HAND (GLOVE TYPE) <input type="checkbox"/> Polyvinyl chloride <input checked="" type="checkbox"/> Neoprene <input type="checkbox"/> Butyl Rubber <input type="checkbox"/> Polyvinyl alcohol <input type="checkbox"/> Other (Specify): <input type="checkbox"/> Natural rubber <input type="checkbox"/> Polyethylene |
| | RESPIRATOR TYPE - Use only NIOSH / MESA approved equipment <input type="checkbox"/> Self-contained <input type="checkbox"/> Supplied air <input type="checkbox"/> Can or cartridge gas or vapor <input type="checkbox"/> Filter-dust, fume, mist <input type="checkbox"/> Other (Specify): |
| OTHER PROTECTIVE EQUIPMENT <input type="checkbox"/> Rubber boots <input type="checkbox"/> Apron <input type="checkbox"/> Other (specify): | |

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| SPECIAL PRECAUTIONS | PRECAUTIONARY NOTES <input checked="" type="checkbox"/> Wash Thoroughly after handling <input type="checkbox"/> Do not get in eyes, or on clothing <input checked="" type="checkbox"/> Do not breathe dust, vapor, mist, gas <input checked="" type="checkbox"/> Keep container closed <input checked="" type="checkbox"/> Keep away from sparks, and open flames <input type="checkbox"/> store in tightly closed containers <input type="checkbox"/> Do not store near Combustibles <input type="checkbox"/> Keep from contact with clothing and other combustible materials <input checked="" type="checkbox"/> Empty container may contain hazardous residues <input type="checkbox"/> Use explosion proof equipment <input type="checkbox"/> Other (Specify): |
| | Other handling and storage conditions Do Not Transfer The Material To Unmarked Containers/ |

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|-------------|-------|--|----------------|
| Prepared by | Date | Address | Phone |
| | 12/04 | 1901 S. 12 TH ST, ALLENTOWN, PA 18103 | (610) 798-9222 |

PLEASE NOTE "The above information is accurate to the best of our knowledge. However, since data, safety standards and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control, CHEM AND LUBE MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. User should satisfy himself that he has all current data relevant to his particular use."