

SAFETY DATA SHEET

1. Identification

| Product name | RENOLIT H EP 0 |
|-------------------------------|---------------------|
| Other means of identification | No data available. |
| Recommended use: | Lubricating grease |
| Restrictions on use: | Industrial use only |

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer

| Company Name: | Fuchs Lubricants Co. |
|-----------------|------------------------|
| Address: | 17050 Lathrop Avenue |
| | Harvey, Illinois 60426 |
| Telephone: | 708-333-8900 |
| Fax: | 708-333-9180 |
| | |
| Contact Person: | EHS Department |
| E-mail: | sds@fuchsus.com |

Emergency telephone number: 708-333-8900 (Bus. hrs) 800-255-3924 (24 hrs)

2. Hazard(s) identification

Hazard Classification

Not classified as hazardous under GHS

Label Elements

| Hazard Symbol: | No symbol |
|-----------------------------|-----------------|
| Signal Word: | No signal word. |
| Hazard Statement: | Not applicable |
| Precautionary Statements | Not applicable |

None.



3. Composition/information on ingredients

Hazardous Component(s):

| Chemical name | CAS-No. | Concentration |
|-----------------------|--------------|---------------|
| Mineral oil | Confidential | 50 - <100% |
| Potassium tetraborate | Confidential | 0.1 - <1% |
| Glycerin | 56-81-5 | 0.1 - <1% |
| Olefin sulfide | Confidential | 0.1 - <1% |

Specific chemical identities and/or exact percentages have been withheld as trade secrets.

| 4. First-aid measures | | |
|---|--|--|
| Ingestion: | Rinse mouth thoroughly. Call a POISON CENTER/doctor/ if you feel unwell. Do NOT induce vomiting. | |
| Inhalation: | Move to fresh air. Call a POISON CENTER/doctor/ if you feel unwell. | |
| Skin Contact: | Remove contaminated clothing and shoes. Wash contact areas with soap and water. If skin irritation occurs: Get medical advice/attention. | |
| Eye contact: | Flush thoroughly with water. If irritation occurs, get medical assistance. Continue to rinse for at least 15 minutes. | |
| Most important symptoms/effect | cts, acute and delayed | |
| Symptoms: | No data available. | |
| Indication of immediate medical | attention and special treatment needed | |
| Treatment: | Get medical attention if symptoms occur. | |
| 5. Fire-fighting measures | | |
| General Fire Hazards: | No unusual fire or explosion hazards noted. | |
| Suitable (and unsuitable) exting | juishing media | |
| Suitable extinguishing media: | Water spray, fog, CO2, dry chemical, or regular foam. Use fire- extinguishing media appropriate for surrounding materials. | |
| Unsuitable extinguishing media: | Do not use water jet as an extinguisher, as this will spread the fire. | |
| Specific hazards arising from the chemical: | Heat may cause the containers to explode. During fire, gases hazardous to health may be formed. | |
| Creation protoctive equipment of | nd measurisms for fireficktors | |

Special protective equipment and precautions for firefighters



| Special fire fighting procedures: | No data available. | |
|--|--|--|
| Special protective equipment for fire-fighters: | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. | |
| 6. Accidental release measures | 8 | |
| Personal precautions, protective equipment and emergency procedures: | See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. Ensure adequate ventilation. | |
| Methods and material for containment and cleaning up: | Absorb with sand or other inert absorbent. Stop the flow of material, if this is without risk. | |
| Environmental Precautions: | Avoid release to the environment. Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. | |
| 7. Handling and storage | | |
| Precautions for safe handling: | Observe good industrial hygiene practices. Wear appropriate personal protective equipment. Do not expose to intense heat as product may expand and pressurize container. | |
| Conditions for safe storage, including any incompatibilities: | Store in original tightly closed container. Avoid contact with oxidizing agents. Store away from incompatible materials. | |

8. Exposure controls/personal protection

Exposure Limits

| Chemical name | Туре | Exposure Limit Values | Source |
|---|------|-----------------------|---|
| Mineral oil - Mist. | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Potassium tetraborate - Inhalable fraction. | STEL | 6 mg/m3 | US. ACGIH Threshold Limit Values (03 2012) |
| Potassium tetraborate - Inhalable fraction. | TWA | 2 mg/m3 | US. ACGIH Threshold Limit Values (03 2012) |
| Glycerin - Total dust. | PEL | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Glycerin - Respirable fraction. | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |

Protective Measures:

Use personal protective equipment as required.



| Respiratory Protection: | In case of inadequate ventilation use suitable respirator. Seek advice from supervisor on the company's respiratory protection standards. |
|---------------------------|---|
| Eye Protection: | Wear safety glasses with side shields (or goggles). |
| Skin and Body Protection: | Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information. |
| Hygiene measures: | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. |

9. Physical and chemical properties

| Physical state:solidForm:GreaseColor:BrownOdor:Mild petroleum/solventOdor threshold:No data available.pH:No data available.Melting point/freezing point:No data available.Initial boiling point and boiling range:No data available.Initial boiling point and boiling range:No data available.Flash Point:204.44 °C (399.99 °F)Evaporation rate:No data available.Flammability (solid, gas):No data available.Upper/lower limit on flammability or explosive limitsNo data available.Flammability limi - upper (%):No data available.Explosive limit - upper (%):No data available.Explosive limit - lower (%):No data available.Vapor pressure:No data available.Vapor density:No data available.Solubility(ies)No data available.Solubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Viscosity:> 22 mm2/s (40 °C) | Appearance | |
|--|---|------------------------|
| Color:BrownOdor:Mild petroleum/solventOdor threshold:No data available.pH:No data available.Melting point/freezing point:No data available.Initial boiling point and boiling range:No data available.Initial boiling point and boiling range:No data available.Flash Point:204.44 °C (399.99 °F)Evaporation rate:No data available.Flammability (solid, gas):No data available.Upper/lower limit on flammability or explosive limitsNo data available.Flammability limit - upper (%):No data available.Explosive limit - upper (%):No data available.Explosive limit - lower (%):No data available.Vapor pressure:No data available.Vapor density:0.95Solubility (ies)Solubility in water:Solubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Physical state: | solid |
| Odor:Mild petroleum/solventOdor threshold:No data available.pH:No data available.Melting point/freezing point:No data available.Initial boiling point and boiling range:No data available.Flash Point:204.44 °C (399.99 °F)Evaporation rate:No data available.Flammability (solid, gas):No data available.Upper/lower limit on flammability or explosive limitsNo data available.Flammability limit - upper (%):No data available.Flammability limit - lower (%):No data available.Explosive limit - upper (%):No data available.Explosive limit - lower (%):No data available.Vapor pressure:No data available.Vapor density:0.95Solubility (ies)No data available.Solubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Form: | Grease |
| Odor threshold:No data available.pH:No data available.Melting point/freezing point:No data available.Initial boiling point and boiling range:No data available.Flash Point:204.44 °C (399.99 °F)Evaporation rate:No data available.Flammability (solid, gas):No data available.Upper/lower limit on flammability or explosive limitsNo data available.Flammability limit - upper (%):No data available.Flammability limit - lower (%):No data available.Explosive limit - upper (%):No data available.Explosive limit - lower (%):No data available.Vapor pressure:No data available.Vapor density:No data available.Solubility (ies)InsolubleSolubility in water:InsolubleSolubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Color: | Brown |
| pH:No data available.pH:No data available.Melting point/freezing point:No data available.Initial boiling point and boiling range:No data available.Flash Point:204.44 °C (399.99 °F)Evaporation rate:No data available.Flammability (solid, gas):No data available.Upper/lower limit on flammability or explosive limitsNo data available.Flammability limit - upper (%):No data available.Flammability limit - lower (%):No data available.Explosive limit - upper (%):No data available.Explosive limit - upper (%):No data available.Explosive limit - lower (%):No data available.Vapor pressure:No data available.Vapor density:No data available.Solubility(ies)InsolubleSolubility in water:InsolubleSolubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Odor: | Mild petroleum/solvent |
| Melting point/freezing point:No data available.Initial boiling point and boiling range:No data available.Initial boiling point and boiling range:No data available.Flash Point:204.44 °C (399.99 °F)Evaporation rate:No data available.Flammability (solid, gas):No data available.Upper/lower limit on flammability or explosive limitsNo data available.Flammability limit - upper (%):No data available.Flammability limit - lower (%):No data available.Explosive limit - upper (%):No data available.Explosive limit - lower (%):No data available.Vapor pressure:No data available.Vapor density:No data available.Relative density:0.95Solubility (ies)InsolubleSolubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Odor threshold: | No data available. |
| Initial boiling point and boiling range:No data available.Flash Point:204.44 °C (399.99 °F)Evaporation rate:No data available.Flammability (solid, gas):No data available.Upper/lower limit on flammability or explosive limitsNo data available.Flammability limit - upper (%):No data available.Flammability limit - lower (%):No data available.Explosive limit - upper (%):No data available.Explosive limit - lower (%):No data available.Explosive limit - lower (%):No data available.Vapor pressure:No data available.Vapor density:No data available.Relative density:0.95Solubility in water:InsolubleSolubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | pH: | No data available. |
| Flash Point:204.44 °C (399.99 °F)Evaporation rate:No data available.Flammability (solid, gas):No data available.Upper/lower limit on flammability or explosive limitsNo data available.Flammability limit - upper (%):No data available.Flammability limit - lower (%):No data available.Explosive limit - upper (%):No data available.Explosive limit - lower (%):No data available.Explosive limit - lower (%):No data available.Vapor pressure:No data available.Vapor density:No data available.Relative density:0.95Solubility (ies)InsolubleSolubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Melting point/freezing point: | No data available. |
| Evaporation rate:No data available.Flammability (solid, gas):No data available.Upper/lower limit on flammability or explosive limitsNo data available.Flammability limit - upper (%):No data available.Flammability limit - lower (%):No data available.Explosive limit - upper (%):No data available.Explosive limit - lower (%):No data available.Explosive limit - lower (%):No data available.Explosive limit - lower (%):No data available.Vapor pressure:No data available.Vapor density:No data available.Relative density:0.95Solubility (ies)InsolubleSolubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Initial boiling point and boiling range: | No data available. |
| Flammability (solid, gas):No data available.Upper/lower limit on flammability or explosive limitsNo data available.Flammability limit - upper (%):No data available.Flammability limit - lower (%):No data available.Explosive limit - upper (%):No data available.Explosive limit - lower (%):No data available.Vapor pressure:No data available.Vapor density:No data available.Relative density:0.95Solubility (ies)InsolubleSolubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Flash Point: | 204.44 °C (399.99 °F) |
| Upper/lower limit on flammability or explosive limitsFlammability limit - upper (%):No data available.Flammability limit - lower (%):No data available.Explosive limit - upper (%):No data available.Explosive limit - lower (%):No data available.Vapor pressure:No data available.Vapor density:No data available.Relative density:0.95Solubility(ies)InsolubleSolubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Evaporation rate: | No data available. |
| Flammability limit - upper (%):No data available.Flammability limit - lower (%):No data available.Explosive limit - upper (%):No data available.Explosive limit - lower (%):No data available.Vapor pressure:No data available.Vapor density:No data available.Relative density:0.95Solubility (ies)InsolubleSolubility in water:InsolubleSolubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Flammability (solid, gas): | No data available. |
| Flammability limit - lower (%):No data available.Explosive limit - upper (%):No data available.Explosive limit - lower (%):No data available.Vapor pressure:No data available.Vapor density:No data available.Relative density:0.95Solubility(ies)InsolubleSolubility in water:InsolubleSolubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Upper/lower limit on flammability or explosive limits | |
| Explosive limit - upper (%):No data available.Explosive limit - lower (%):No data available.Vapor pressure:No data available.Vapor density:No data available.Relative density:0.95Solubility(ies)InsolubleSolubility in water:InsolubleSolubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Flammability limit - upper (%): | No data available. |
| Explosive limit - lower (%):No data available.Vapor pressure:No data available.Vapor density:No data available.Relative density:0.95Solubility(ies)InsolubleSolubility in water:InsolubleSolubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Flammability limit - lower (%): | No data available. |
| Vapor pressure:No data available.Vapor density:No data available.Relative density:0.95Solubility(ies)InsolubleSolubility in water:InsolubleSolubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Explosive limit - upper (%): | No data available. |
| Vapor density:No data available.Relative density:0.95Solubility(ies)InsolubleSolubility in water:InsolubleSolubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Explosive limit - lower (%): | No data available. |
| Relative density:0.95Solubility(ies)InsolubleSolubility in water:InsolubleSolubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Vapor pressure: | No data available. |
| Solubility(ies)InsolubleSolubility in water:InsolubleSolubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Vapor density: | No data available. |
| Solubility in water:InsolubleSolubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Relative density: | 0.95 |
| Solubility (other):No data available.Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Solubility(ies) | |
| Partition coefficient (n-octanol/water):No data available.Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Solubility in water: | Insoluble |
| Auto-ignition temperature:No data available.Decomposition temperature:No data available. | Solubility (other): | No data available. |
| Decomposition temperature: No data available. | Partition coefficient (n-octanol/water): | No data available. |
| | Auto-ignition temperature: | No data available. |
| Viscosity: > 22 mm2/s (40 °C) | Decomposition temperature: | No data available. |
| | Viscosity: | > 22 mm2/s (40 °C) |



10. Stability and reactivity **Reactivity:** Not reactive during normal use. **Chemical Stability:** Material is stable under normal conditions. Possibility of hazardous None under normal conditions. reactions: Conditions to avoid: Avoid heat or contamination. Incompatible Materials: No data available. **Hazardous Decomposition** Thermal decomposition or combustion may liberate carbon oxides and Products: other toxic gases or vapors.

11. Toxicological information

| Information | on likely routes | of exposure |
|-------------|------------------|-------------|
| 1 | | |

| Information on likely routes of ex Ingestion: | May be ingested by accident. Ingestion may cause irritation and malaise. | | |
|---|--|--|--|
| Inhalation: | Inhalation is the primary route of exposure. In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes. | | |
| Skin Contact: | Prolonged skin contact may cause redness and irritation. | | |
| Eye contact: | Eye contact is possible and should be avoided. | | |
| Symptoms related to the physica Ingestion: | II, chemical and toxicological characteristics No data available. | | |
| Inhalation: | No data available. | | |
| Skin Contact: | No data available. | | |
| Eye contact: | No data available. | | |
| Information on toxicological effects | | | |
| Acute toxicity (list all possible routes of exposure) | | | |
| Oral Product: | Not classified for acute toxicity based on available data. | | |
| Dermal Product: | ATEmix (): 2000 - 5000 mg/kg | | |
| Inhalation Product: | Not classified for acute toxicity based on available data. | | |
| SDS_US | | | |



| Repeated dose toxicity Product: | No data available. | |
|--|---|--|
| Skin Corrosion/Irritation Product: | No data available. | |
| Serious Eye Damage/Eye Irritation Product: | on No data available. | |
| Respiratory or Skin Sensitization Product: | n No data available. | |
| Carcinogenicity Product: | No data available. | |
| IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: No carcinogenic components identified | | |
| US. National Toxicology Pont No carcinogenic components | rogram (NTP) Report on Carcinogens: s identified | |
| US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): No carcinogenic components identified | | |
| Germ Cell Mutagenicity | | |
| In vitro Product: | No data available. | |
| In vivo Product: | No data available. | |
| Reproductive toxicity Product: | No data available. | |
| Specific Target Organ Toxicity - Product: | Single Exposure No data available. | |
| Specific Target Organ Toxicity - Product: | Repeated Exposure No data available. | |
| Aspiration Hazard Product: | No data available. | |
| Other effects: | No data available. | |



| 12. Ecological information | |
|-----------------------------|---|
| General information: | This product has not been evaluated for ecological toxicity or other environmental effects. |
| 13. Disposal considerations | |
| Disposal instructions: | Discharge, treatment, or disposal may be subject to national, state, or local laws. Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. It is the responsibility of the product user or owner to determine at the time of disposal, which waste regulations must be applied. |
| Contaminated Packaging: | Empty containers should be taken to an approved waste handling site for recycling or disposal. |

14. Transport information

DOT

Not regulated.

IMDG

Not regulated.

ΙΑΤΑ

Not regulated.

15. Regulatory information

US Federal Regulations

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories None

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.



| 16.Other information, including date of preparation or last revision | | |
|--|---|--|
| Issue Date: | 14.10.2017 | |
| Revision Date: | 14.10.2017 | |
| Version #: | 1.3 | |
| Further Information: | No data available. | |
| Disclaimer: | This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment. | |