Material Safety Data Sheet

Material Name: ECOPOWER EP INDUSTRIAL GEAR OIL ISO 220 (OEM)
ID: 820110

*** Section 1 - Chemical Product and Company Identification ***

Product Code: Prefix 32
Chemical Name: ECOPOWER EP INDUSTRIAL GEAR OIL ISO 220 (OEM)
Product Use: For lubricating industrial gears.
If this product is used in combination with other products, refer to the Material Safety Data Sheets for those products.

Synonyms: Petroleum oil; Lube oil; Petroleum hydrocarbon; Lubricant.

Safety-Kleen Systems, Inc. Phone: 1-800-669-5740
5360 Legacy Drive
Building 2, Suite 100
Plano, TX 75024
Emergency # 1-800-468-1760

Issue Date: January 4, 2012

Supersedes Issue Date
New Issue MSDS

Original Issue Date
New Issue MSDS

PREPARED BY: Product MSDS Coordinator APPROVED BY: MSDS Task Force

*** Section 2 - Hazardous Identification ***

EMERGENCY OVERVIEW

Appearance
Amber liquid, petroleum odor.

Signal Word
CAUTION!

Health Hazards
May be harmful if swallowed.
May irritate eyes and skin.

POTENTIAL HEALTH EFFECTS

Inhalation (Breathing)
This product is not likely to present an inhalation hazard at normal temperatures and pressures. However, when aerosolizing, misting, or heating this product, high concentrations of generated vapor or mist may irritate the respiratory tract (nose, throat, and lungs).

Eyes
May cause irritation.

Skin
May cause irritation. A single prolonged exposure is not likely to be absorbed through the skin in harmful amounts.

Ingestion (Swallowing)
May be harmful if swallowed. May cause throat irritation, nausea, vomiting, and diarrhea. Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

Medical Conditions Aggravated by Exposure
Individuals with pre-existing respiratory tract (nose, throat, and lungs), eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

Chronic
Prolonged or repeated inhalation of oil mist may cause oil pneumonia, lung tissue inflammation, and/or fibrous tissue formation. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis).
Cancer Information
No known carcinogenicity. For more information, see SECTION 11: MUTAGENICITY AND CARCINOGENICITY.
Also see SECTION 15: CALIFORNIA.

Environmental Hazards
Not available. Also see SECTION 12: ECOLOGICAL INFORMATION.

*** Section 3 - Composition / Information on Ingredients ***

<table>
<thead>
<tr>
<th>CAS</th>
<th>Component</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>72623-83-7</td>
<td>Lubricating oils (petroleum), C&gt;25, hydrotreated bright stock</td>
<td>66-71*</td>
</tr>
<tr>
<td>64742-62-7</td>
<td>Residual oils (petroleum), solvent dewaxed</td>
<td>66-71*</td>
</tr>
<tr>
<td>64742-01-4</td>
<td>Residual oils (petroleum), solvent refined</td>
<td>66-71*</td>
</tr>
<tr>
<td>64742-58-1</td>
<td>Lubricating oils, petroleum, hydrotreated spent</td>
<td>27-32*</td>
</tr>
<tr>
<td>Not Available</td>
<td>Alkyl sulfide***</td>
<td>0.1-2**</td>
</tr>
</tbody>
</table>

Component Related Regulatory Information
*Only one of the above listed Bright Stocks will be present at anytime at the indicated WT%. **Even though the concentration range does not fall under the range prescribed by WHMIS, this is the actual range which varies with each batch of the product. ***Supplier and/or Safety Kleen advises that this is a trade secret.

*** Section 4 - First Aid Measures ***

Inhalation (Breathing)
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.

Eyes
If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.

Skin
Remove affected clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain develops or persists. If product is injected under pressure into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, a physician should immediately evaluate the individual as a medical emergency.

Ingestion (Swallowing)
Do NOT induce vomiting. Immediately get medical attention. Call 1-800-468-1760 for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything by mouth to an unconscious person.

Notes to Physicians
Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident. Call 1-800-468-1760 for additional information.

*** Section 5 - Fire Fighting Measures ***

Hazardous Combustion Products
Decomposition and combustion materials may be toxic. Burning may produce carbon monoxide and unidentified organic compounds.

Conditions of Flammability
Sparks or flame. Product may burn, but does not ignite readily.

Extinguishing Media
Carbon dioxide, regular foam, dry chemical, water spray, or water fog. Water or foam may cause frothing.

Protective Equipment For Firefighting
A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Fire Fighting Equipment/Instructions
Keep storage containers cool with water spray.
Material Safety Data Sheet

Material Name: ECOPOWER EP INDUSTRIAL GEAR OIL ISO 220 (OEM) ID: 820110

NFPA Ratings:
- Health: 1
- Fire: 1
- Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**Fire and Explosion Hazards**

Heated containers may rupture. "Empty" containers may retain residue and can be dangerous. Product is not sensitive to mechanical impact or static discharge.

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**Section 6 - Accidental Release Measures**

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or absorb with compatible sorbent material and shovel with a clean, spark proof tool into a sealable container for disposal.

Additionally, for large spills: Dike far ahead of liquid spill for collection and later disposal.

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**Section 7 - Handling and Storage**

**Handling Procedures**

Keep away from sparks or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean tools and explosion-proof equipment. When transferring large volumes of product, metal containers, including trucks and tank cars, should be grounded and bonded. These products have a low vapor pressure and are not expected to present an inhalation hazard under normal temperatures and pressures. However, when aerosolizing, misting, or heating these products, do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes.

**Shipping and Storing**

Keep container tightly closed when not in use and during transport. Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous.

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**Section 8 - Exposure Controls / Personal Protection**

**Exposure Guidelines**

**Component Exposure Limits**

**Lubricating oils (petroleum), C>25, hydrotreated bright stock (72623-83-7)**
- ACGIH: 5 mg/m³ TWA (excluding metal working fluids, highly & severely refined, inhalable fraction, related to Oil mist, mineral)
- OSHA Final: 5 mg/m³ TWA (related to Oil mist, mineral)
- OSHA Vacated: 5 mg/m³ TWA (related to Oil mist, mineral)
- NIOSH: 5 mg/m³ TWA (related to Oil mist, mineral)
- 10 mg/m³ STEL (related to Oil mist, mineral)

**Residual oils (petroleum), solvent dewaxed (64742-62-7)**
- ACGIH: 5 mg/m³ TWA (excluding metal working fluids, highly & severely refined, inhalable fraction, related to Oil mist, mineral)
- OSHA Final: 5 mg/m³ TWA (related to Oil mist, mineral)
- OSHA Vacated: 5 mg/m³ TWA (related to Oil mist, mineral)
- NIOSH: 5 mg/m³ TWA (related to Oil mist, mineral)
- 10 mg/m³ STEL (related to Oil mist, mineral)

**Lubricating oils, petroleum, hydrotreated spent (64742-58-1)**
- ACGIH: 5 mg/m³ TWA (excluding metal working fluids, highly & severely refined, inhalable fraction, related to Oil mist, mineral)
- OSHA Final: 5 mg/m³ TWA (related to Oil mist, mineral)
- OSHA Vacated: 5 mg/m³ TWA (related to Oil mist, mineral)
- NIOSH: 5 mg/m³ TWA (related to Oil mist, mineral)
- 10 mg/m³ STEL (related to Oil mist, mineral)

**Engineering Controls**

Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits.
Personal Protective Equipment: Respiratory
Use NIOSH-certified P- or R-series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

Personal Protective Equipment: Eyes/Face
Where eye contact is likely, wear safety glasses; contact lens use is not recommended.

Personal Protective Equipment: Skin
Where skin contact is likely, wear neoprene, nitrile, or equivalent protective gloves; use of natural rubber or equivalent gloves is not recommended.

When product is heated and skin contact is likely, wear heat-resistant gloves, boots, and other protective clothing.
To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, coveralls, long sleeve shirts, or other protective clothing.

Personal Protective Equipment: Personal Hygiene
Use good personal hygiene. Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse. Discard leather articles, such as shoes, saturated with this product.

Other Personal Protective Equipment
Where spills and splashes are likely, facilities storing or using this product should be equipped with an emergency eyewash and shower, both equipped with clean water, in the immediate work area.

*** Section 9 - Physical & Chemical Properties ***

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance/Odor</td>
<td>Amber liquid, petroleum odor.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>475°F (246°C) (minimum)</td>
</tr>
<tr>
<td>Solubility (H2O)</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Density</td>
<td>7.4 LB/US gal (890 g/L)</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>LFL</td>
<td>Not available</td>
</tr>
<tr>
<td>UFL</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Less than 0.1 mm Hg @ 68°F</td>
</tr>
<tr>
<td></td>
<td>(20°C)</td>
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<tr>
<td>pH</td>
<td>Not applicable</td>
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<tr>
<td>Melting Point</td>
<td>Not available [pour point 16°F</td>
</tr>
<tr>
<td></td>
<td>(-9°C) (maximum)]</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.89 (water = 1)</td>
</tr>
<tr>
<td></td>
<td>(approximately)</td>
</tr>
<tr>
<td>Octanol/H2O Coeff.</td>
<td>Not available</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>Not applicable</td>
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<tr>
<td>Auto Ignition</td>
<td>Not Available</td>
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<tr>
<td>Flash Point</td>
<td>457°F (236°C) (minimum)</td>
</tr>
<tr>
<td></td>
<td>(Cleveland Open Cup)</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Greater than 100 SUS</td>
</tr>
</tbody>
</table>

*** Section 10 - Chemical Stability & Reactivity Information ***

Stability
Stable under normal temperatures and pressures.

Incompatibility
Avoid oxidizing agents.

Reactivity
Polymerization is not known to occur under normal temperature and pressures. Not reactive with water.

Hazardous Decomposition Products
None under normal temperatures and pressures. See also SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.

Conditions To Avoid
Sparks, flame and incompatible materials.
Component Analysis - LD50/LC50
Residual oils (petroleum), solvent dewaxed (64742-62-7)
Inhalation LC50 Rat 2.18 mg/L 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg
Lubricating oils (petroleum), C>25, hydrotreated bright stock (72623-83-7)
Oral LD50 Rat >5000 mg/kg
Residual oils (petroleum), solvent refined (64742-01-4)
Inhalation LC50 Rat 2.18 mg/L 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg
Lubricating oils, petroleum, hydrotreated spent (64742-58-1)
Oral LD50 Rat >2000 mg/kg; Dermal LD50 Rabbit >4480 mg/kg

Acute Effects
May irritate eyes and skin. May be harmful if swallowed. May cause throat irritation, nausea, vomiting, and diarrhea. Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

Carcinogenicity

Component Carcinogenicity
Residual oils (petroleum), solvent dewaxed (64742-62-7)
ACGIH: A4 - Not Classifiable as a Human Carcinogen (highly & severely refined); A2 - Suspected Human Carcinogen (poorly & mildly refined, related to Oil mist, mineral)
Lubricating oils (petroleum), C>25, hydrotreated bright stock (72623-83-7)
ACGIH: A4 - Not Classifiable as a Human Carcinogen (highly & severely refined); A2 - Suspected Human Carcinogen (poorly & mildly refined, related to Oil mist, mineral)
Lubricating oils, petroleum, hydrotreated spent (64742-58-1)
ACGIH: A4 - Not Classifiable as a Human Carcinogen (highly & severely refined); A2 - Suspected Human Carcinogen (poorly & mildly refined, related to Oil mist, mineral)

Target Organ Effects
Prolonged or repeated inhalation of oil mist may cause oil pneumonia, lung tissue inflammation, and/or fibrous tissue formation.

Sensitization
Based on best current information, there is no known human sensitization associated with these products.

Mutagenicity
Experimental evidence suggests that these products do not cause mutagenesis.

Reproductive Toxicity
Based on best current information, there is no known reproductive toxicity associated with these products. Also see SECTION 15: CALIFORNIA.

Teratogenicity
Based on best current information, there is no known teratogenicity associated with these products.

Component Analysis - Ecotoxicity - Aquatic Toxicity
Residual oils (petroleum), solvent refined (64742-01-4)
Duration/Test/Species: 96 Hr LC50 Oncorhynchus mykiss
Concentration/Conditions/Notes: >5000 mg/L
Residual oils (petroleum), solvent dewaxed (64742-62-7)
Duration/Test/Species: 96 Hr LC50 Oncorhynchus mykiss
Concentration/Conditions/Notes: >5000 mg/L
Lubricating oils (petroleum), C>25, hydrotreated bright stock (72623-83-7)
Duration/Test/Species: 96 Hr LC50 Lepomis macrochirus
Concentration/Conditions/Notes: >10000 mg/L
Lubricating oils, petroleum, hydrotreated spent (64742-58-1)
Duration/Test/Species: 96 Hr LC50 Brachydanio rerio
Concentration/Conditions/Notes: 79.6 mg/L [semi-static]
96 Hr LC50 Pimephales promelas
Concentration/Conditions/Notes: 3.2 mg/L [semi-static]
Persistence/Degradability
May cause long-term adverse effects in the aquatic environment.

Bioaccumulation/Accumulation
No data available for the product.

Mobility in Environmental Media
Product is expected to float on water and have low mobility through soil.

Other Adverse Effects
No information available for the product.

*** Section 13 - Disposal Considerations ***

Disposal Instructions
Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

US EPA Waste Number & Descriptions
These products, if discarded, are not expected to be a characteristic or listed hazardous waste. If recycled in the USA, they must be managed in accordance with 40 CFR Part 279. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of these products.

*** Section 14 - Transportation Information ***

Emergency Response Guide Number

DOT Shipping Name: Not regulated.
TDG Shipping Name: Not regulated.

*** Section 15 - Regulatory Information ***

Volatile Organic Compounds (As Regulated)
Negligible; As per 40 CFR Part 51.100(s)

SARA Sections 311/312
This product poses the following health hazard(s) as defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):
Immediate (Acute) Health Hazard
Delayed (Chronic) Health Hazard

SARA 302/304
Component Analysis
This product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA Section 313
This product does not contain "toxic" chemical(s) subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Component Analysis
This product does not contain any "toxic" chemical subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

CERCLA
Component Analysis
This product does not contain any "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

TSCA
All the components of this product are listed on, or are automatically included as "naturally occurring chemical substances" on, or are exempted from the requirement to be listed on, the TSCA Inventory.
Material Safety Data Sheet
Material Name: ECOPOWER EP INDUSTRIAL GEAR OIL ISO 220 (OEM)  ID: 820110

Component Analysis

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residual oils (petroleum), solvent refined</td>
<td>64742-01-4</td>
<td>Yes</td>
</tr>
<tr>
<td>Residual oils (petroleum), solvent dewaxed</td>
<td>64742-62-7</td>
<td>Yes</td>
</tr>
<tr>
<td>Lubricating oils (petroleum), C&gt;25, hydrotreated bright stock</td>
<td>72623-83-7</td>
<td>Yes</td>
</tr>
<tr>
<td>Lubricating oils, petroleum, hydrotreated spent</td>
<td>64742-58-1</td>
<td>Yes</td>
</tr>
</tbody>
</table>

California
This product does not contain any chemical known to the State of California to cause cancer.
This product does not contain any chemical known to the State of California to cause birth defects or other reproductive harm.

Canadian Regulations
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

Component Analysis

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>CAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residual oils (petroleum), solvent refined</td>
<td>64742-01-4</td>
<td>DSL</td>
</tr>
<tr>
<td>Residual oils (petroleum), solvent dewaxed</td>
<td>64742-62-7</td>
<td>DSL</td>
</tr>
<tr>
<td>Lubricating oils (petroleum), C&gt;25, hydrotreated bright stock</td>
<td>72623-83-7</td>
<td>DSL</td>
</tr>
<tr>
<td>Lubricating oils, petroleum, hydrotreated spent</td>
<td>64742-58-1</td>
<td>DSL</td>
</tr>
</tbody>
</table>

Canadian WHMIS Information
Not regulated.

Canadian Environmental Protection Act (CEPA)
All the components of these products are listed on, or are automatically included as "substance occurring in nature" on, or are exempted from the requirements to be listed on, the Canadian Domestic Substances List (DSL).

*** Section 16 - Other Information ***

Label/Other Information
Not available.

Revision Information
New issue MSDS.

Disclaimer
User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either expressed or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to the information or the product to which the information refers. The data contained on this sheet apply to the product as supplier to the user.

End of Sheet 820110