MATERIAL SAFETY DATA SHEET

SECTION 1 ◆ PRODUCT AND COMPANY IDENTIFICATION

Explorer Pipeline Company
6846 South Canton
P.O. Box 2650
Tulsa, Oklahoma 74101

FOR EMERGENCY SOURCE INFORMATION CONTACT:
- (918) 493-5100
- CHEMTREC: (800) 424-9300 (24 hour contact)
- CANUTEC: (613) 996-6666
- SETIQ: 91-800-00214

TRADE NAMES/SYNONYMS:
- Light Cat Cracked Distillate
- Light Cat Gasoline

CHEMICAL FAMILY:
- Petroleum Middle Distillate

EPL Code: 80

This material safety data sheet represents the composite characteristics and properties of fungible petroleum hydrocarbons and other related substances transported by Explorer Pipeline Company. The information presented was compiled from one or more product shipper sources and is intended to provide health and safety guidance for these fungible products. Individual shipper and manufacturer MSDSs are available at Explorer Pipeline Company’s, Tulsa, Oklahoma, offices.

SECTION 2 ◆ HAZARDS IDENTIFICATION

Warning Combustible Liquid!!

- Yellow liquid with kerosene odor;
- Harmful or fatal if swallowed, inhaled or absorbed through skin.
- May cause CNS depression.
- Can produce skin irritation upon prolonged or repeated contact.
- Keep away from heat, sparks and open flame;
- Wash thoroughly after handling;
- Contains petroleum distillates! If swallowed, do not induce vomiting since aspiration into the lungs will cause chemical pneumonia;
- Avoid breathing vapors or mist;
- Use only with adequate ventilation; and
- Obtain prompt medical attention. Keep Out of Reach of Children!

SECTION 3 ▼ COMPOSITION/INFORMATION OF INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>CAS NUMBER</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complex mixture of paraffinic, cyclopaphaffinic, olefinic, and aromatic hydrocarbons (predominately C9 - C25) produced by the distillation of products from a catalytic cracking process. This stream is likely to contain a relatively large portion of bicyclical aromatic hydrocarbons.</td>
<td>64741-59-9</td>
<td>Varies</td>
</tr>
</tbody>
</table>

ACUTE

SUMMARY OF ACUTE HAZARDS: May cause transient irritation to eyes and skin. Extreme exposure or aspiration into the lungs may cause chemical pneumonia. Overexposure may cause weakness, headache, nausea, confusion, blurred vision or other CNS effects.

GETTING IT IN YOUR EYE...
- May cause irritation.
### MATERIAL NAME: Light Cycle Oil

**MSDS # EPL-14**

<table>
<thead>
<tr>
<th><strong>GETTING IT ON YOUR SKIN...</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ May cause irritation.</td>
</tr>
<tr>
<td>➢ Prolonged or repeated liquid contact can defat the skin and lead to irritation and/or dermatitis.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>SWALLOWING IT...</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ May be harmful or fatal if swallowed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>BREATHING IT...</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Extreme overexposure or aspiration into the lungs may cause pneumonia. Overexposure may cause weakness, headache, nausea, confusion, blurred vision, drowsiness, and other nervous system effects.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>CHRONIC</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Similar in nature to acute effects above. Chronic human health effects would not be expected as long as good personal hygiene and proper safety precautions are practiced.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>CANCER, REPRODUCTIVE AND GENETIC EFFECTS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Some components of naphtha, i.e., paraffins and olefins, have been shown to produce a species specific, sex hormonal dependent kidney lesion in male rats from repeated oral or inhalation exposure. The exact relationship between these results and human health is not known.</td>
</tr>
</tbody>
</table>

See Toxicological Information (Section 11) For More Information

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### SECTION 4 ☆ FIRST AID MEASURES

**EMERGENCY MEDICAL TREATMENT PROCEDURES:** Activated charcoal slurry may be administered. To prepare activated charcoal slurry, suspend 50 grams activated charcoal in 400 mL water and mix thoroughly. Administer 5mL/kg, or 350 mL for an average adult.

**EYES:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

**SKIN:** In case of contact, immediately wash skin with soap and water. Wash contaminated clothing before reuse. If irritation develops, consult a physician.

**INGESTION:** If swallowed, do not induce vomiting. Immediately give two glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

**INHALATION:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**NOTE TO PHYSICIAN:** TREAT SYMPTOMATICALLY AND SUPPORTIVELY

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### SECTION 5 ☆ FIRE FIGHTING MEASURES

**Combustible Liquid.** Products of combustion may contain carbon monoxide, carbon dioxide and other toxic materials. Do not enter enclosed or confined space without proper protective equipment including respiratory protection.

**FLASH POINT:** (Method Used) 160°F

**FLAMMABLE LIMITS:**
- LEL: No Data
- UEL: No Data

**AUTOIGNITION TEMPERATURE:** No Data

**EXTINGUISHING MEDIA:** Fight fire with dry chemical, carbon dioxide, foam, water spray, or fog.

**HAZARDOUS REACTIONS/DECOMPOSITION:** Material is stable at 70°F and 760 mmHg. Incompatible with strong oxidizers. Carbon monoxide, carbon dioxide, aldehydes, aromatics, and other hydrocarbons.

**SPECIAL INSTRUCTIONS:** Do not enter any enclosed or confined fire space without proper protective equipment. Wear full firefighting turn out gear and respirator (SCBA) operated in pressure demand or other positive pressure mode.

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### SECTION 6 ☆ ACCIDENTAL RELEASE MEASURES

- Review FIRE AND EXPLOSION HAZARDS and SAFETY PRECAUTIONS before proceeding with clean up.
- Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean up.
- Dike spill.
- Prevent liquid from entering sewers, waterways or low areas.
- Recover free liquid for reuse or reclamation.
- Soak up with sawdust, sand, oil dry or other absorbent material.
SECTION 7 Handling and Storage

Prior to working with this product workers should be trained on its proper handling and storage.

- Store in accordance with National Fire Protection Association regulations.
- Protect against physical damage to containers.
- Separate from oxidizing materials.
- Store in cool, well ventilated area of non-combustible construction away from possible sources of ignition.

SECTION 8 Exposure Controls / Personal Protection

**Engineering Controls:** Both local exhaust and general room ventilation are usually required in enclosed areas.

**Other Hygienic and Work Practices:** Emergency eyewash fountains and safety showers should be available in the immediate vicinity of any potential direct exposure. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using the toilet facilities. Promptly remove soiled clothing. Wash thoroughly before reuse. Shower after work using plenty of soap and water.

**Exposure Limits**

<table>
<thead>
<tr>
<th>OSHA PEL</th>
<th>ACGIH TLV (2005)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWA</td>
<td>STEL</td>
</tr>
<tr>
<td>Naphtha Hydrocarbons (Aromatic &amp; Paraffinic)</td>
<td></td>
</tr>
<tr>
<td>100 ppm</td>
<td>Not Applicable (N.A.)</td>
</tr>
<tr>
<td>(Coal Tar Naphtha)</td>
<td>400 ppm</td>
</tr>
<tr>
<td></td>
<td>(Rubber Solvent)</td>
</tr>
<tr>
<td>STEL</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

**Personal Protective Equipment**

- **Eyes:** Where the possibility of splashing exists, chemical goggles are recommended.
- **Skin:** Neoprene or NBR recommended protective gloves, coveralls, sleeves, and/or splash aprons.
- **Respiratory Protection:** If exposure may or does exceed occupational exposure limits, use a NIOSH approved respirator to prevent overexposure. In accordance with 29 CFR 1910.134, use either a full-face, air-supplied or air-purifying respirator with organic vapor filters.

SECTION 9 Physical and Chemical Properties

**Boiling Point (760 MM Hg):** 300-752°F

**Specific Gravity (H₂O = 1 at 39.2 °F):** 0.96

**Evaporation Rate (BuAc = 1):** Unavailable

**Viscosity Units, Temp:** No Data

**Vapor Pressure:** 1 - 10 mm Hg

**Vapor Density (Air = 1):** >1.0

**Solubility in Water:** Negligible

**Appearance and Odor:** Yellow liquid with kerosene odor.

SECTION 10 Stability and Reactivity

**Chemical Stability:** Stable

**Conditions to Avoid:** Heat, flame, sparks, strong oxidizing conditions.

**Other Physical and Chemical Properties:** No Data

**Materials to Avoid:** Oxidizing agents such as oxygen, chlorine, nitric acid.

**Hazardous Polymerization:** Has not been reported.

SECTION 11 Toxicological Information

**Acute Effects:** No data available on product.

**Chronic Effects:** No data available on product.

**Distribution and Persistence in the Environment:** No Data available.
SECTION 13 ♦ DISPOSAL CONSIDERATIONS

Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface water or sanitary sewer system. By itself, the liquid is expected to be a RCRA ignitable hazardous waste, when disposed.

SECTION 14 ★ TRANSPORTATION INFORMATION

Not Meant To Be All Inclusive - Check Local, State, And Federal Laws And Regulations

<table>
<thead>
<tr>
<th>Agency</th>
<th>Shipping Name</th>
<th>Packing Group</th>
<th>Hazard Class</th>
<th>UN/NA #</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. DOT</td>
<td>Combustible Liquid N. O. S</td>
<td>III</td>
<td>Combustible Liquid</td>
<td>1993</td>
</tr>
</tbody>
</table>

SECTION 15 ♦ REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>CERCLA RQ’s (40 CFR Part 302)</th>
<th>No Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCRA</td>
<td>No Data</td>
</tr>
<tr>
<td>SARA (40 CFR Part 355) TPQ’s</td>
<td>No Data</td>
</tr>
<tr>
<td>SARA Title III Section 313</td>
<td>No Data</td>
</tr>
<tr>
<td>California’s Prop 65</td>
<td>No Data</td>
</tr>
<tr>
<td>OSHA</td>
<td>All ingredients are listed as hazardous under 29 CFR 1910.1200</td>
</tr>
</tbody>
</table>

SECTION 16 ☒ OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA 704 LABEL:</th>
<th>HMIS LABEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2-2-1</td>
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<tr>
<td>1</td>
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</table>

MSDS REVISIONS: Change in Format and update of Information

MSDS CREATION DATE: July 1997 | REVISION #1: 07/01/05

DISCLAIMER

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This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, such as refined petroleum hydrocarbon mixtures, this MSDS information may not be applicable.

MSDS DEVELOPER: Cass Willard, CIH

DATE: 07/01/05