MATERIAL SAFETY DATA SHEET
MC 8482ELG

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME
PARK TOOL POLYLUBE 1000 PPL-1 & PPL-2
MC 8482ELG

PRODUCT USE
Lubricating Grease

SUPPLIER
Chemtool Incorporated
8200 Ridgefield Road
P.O. Box 538
Crystal Lake, IL 60039-0538
Tel: (815) 459-1250
Fax: (815) 459-1955

EMERGENCY TELEPHONE
Infotrac
U.S. and Canada - (800) 535-5053
Outside the U.S. and Canada - 001-352-323-3500

CANADIAN PIN
N/A

2. COMPOSITION, INFORMATION ON INGREDIENTS

INGREDIENT NAME
DISTILLATES, PETROLEUM, SOLVENT-REFINED HEAVY PARAFFINIC
DISTILLATES, PETROLEUM, SEVERELY HYDROTREATED HEAVY NAPHTHENIC

CAS No.
64741-88-4
64742-52-5

WEIGHT
10-30 %
30-50 %

COMPOSITION COMMENTS
Refer to section eight for exposure limits on ingredients.
Chemical ingredients not regulated by OSHA or SARA are treated confidentially.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Exposure to vapors generated at high temperatures, may cause respiratory irritation.

ACUTE EFFECTS

CHRONIC EFFECTS

SENSITIZATION
No known information.

CARCINOGENICITY
IARC: Not listed, OSHA: Not regulated, NTP: Not listed.
* NTP (National Toxicology Program)
* IARC (International Agency for Research on Cancer)
* OSHA (Occupational Safety and Health Administration)

TERATOGENICITY
No known information.

HEALTH WARNINGS
INHALATION. Heating can generate vapors that may cause respiratory irritation, nausea and headaches. Inhalation hazard at room temperature is unlikely due to the low volatility of this product. SKIN CONTACT. Repeated or prolonged contact can result in drying of the skin. EYE CONTACT. Irritating. INGESTION. Can cause stomach ache and vomiting. Main hazard, if ingested, is aspiration into the lungs and subsequent pneumonitis.

OTHER INFORMATION

ROUTE OF ENTRY
Inhalation. Skin and/or eye contact. Ingestion.

MEDICAL SYMPTOMS
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Not determined

4. FIRST AID MEASURES

INHALATION
Vapor inhalation under ambient conditions is normally not a problem. If overcome by vapor of hot product, immediately remove from source of exposure. Move the exposed person to fresh air at once. For breathing difficulties oxygen may be necessary. Get medical attention if any discomfort continues.

EYES
Rinse the eye with water immediately. Continue to rinse for at least 15 minutes. Contact physician if discomfort continues.

SKIN
Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

INGESTION
DO NOT INDUCE VOMITING! Get medical attention immediately!

5. FIRE FIGHTING MEASURES

FLASH POINT (°C)
246 Cd OC (Cleveland open cup).

FLAMMABILITY LIMIT - LOWER(%) N/D

FLAMMABILITY LIMIT - UPPER(%) N/D

EXTINGUISHING MEDIA
Use: Carbon dioxide (CO2). Dry chemicals, sand, dolomite etc. Alcohol resistant foam. Water spray, fog or mist.

SPECIAL FIRE FIGHTING PROCEDURES
Use water to keep fire exposed containers cool and disperse vapors. Water spray may be used to flush spills away from exposures and dilute spills to non-flammable mixtures. Avoid water in straight hose stream; will scatter and spread fire. Keep run-off water out of sewers and water sources. Dike for water control.

UNUSUAL FIRE & EXPLOSION HAZARDS
Pressure will increase in over heated, closed containers.

HAZARDOUS COMBUSTION PRODUCTS
Oxides of: Carbon.

PROTECTIVE MEASURES IN CASE OF FIRE
Self-contained breathing equipment and chemical resistant clothing recommended.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Minimize skin contact.
PRECAUTIONS TO PROTECT THE ENVIRONMENT

Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas. Assure conformity with applicable government regulations.

SPILL CLEAN-UP PROCEDURES

Keep all sources of ignition and hot metal surfaces away from spill. Avoid contact with eyes or skin. Place leaking containers in well ventilated area. If fire potential exists, blanket spill with foam or use water spray to disperse vapors. Contain spill to minimize contaminated area and facilitate salvage or disposal. To clean up spill, flush area sparingly with water or use absorbent material. Avoid discharge to natural water ways.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS

Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Do not reuse container. Keep lid closed when not in use. Do not store or mix with strong oxidizers. Avoid spilling, skin and eye contact. Eye wash and emergency shower must be available at the work place.

STORAGE PRECAUTIONS

Store separate from strong acids and oxidizers. Keep away from heat, sparks and open flame.

STORAGE CRITERIA

Chemical storage.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>STD</th>
<th>TWA</th>
<th>STEL</th>
<th>TWA</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISTILLATES, PETROLEUM, SOLVENT-REFINED HEAVY PARAFFINIC</td>
<td>OSHA</td>
<td>5 mg/m³</td>
<td>N/E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>5 mg/m³</td>
<td>10 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISTILLATES, PETROLEUM, SEVERELY HYDROTREATED HEAVY NAPHTHENIC</td>
<td>OSHA</td>
<td>5 mg/m³</td>
<td>N/E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>5 mg/m³</td>
<td>10 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PROTECTIVE EQUIPMENT

ENGINEERING CONTROLS

Use engineering controls to reduce air contamination to permissible exposure level.

VENTILATION

No specific ventilation requirements noted, but forced ventilation may still be required if air contamination exceeds acceptable level.

RESPIRATORS

No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

PROTECTIVE GLOVES

Chemical resistant gloves recommended to prevent prolonged or repeated contact. Use protective gloves made of: Neoprene, nitrile, polyethylene or PVC.

EYE PROTECTION

Wear splash-proof eye goggles to prevent any possibility of eye contact.

PROTECTIVE CLOTHING

Wear appropriate clothing to prevent repeated or prolonged skin contact.
HYGIENIC WORK PRACTICES
Wash at the end of each work shift and before eating, smoking and using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE
Grease:

COLOR
Green.

ODOR
Mild (or faint). Petroleum.

SOLUBILITY DESCRIPTION
Insoluble in water.

SOLUBILITY VALUE (g/100g H2O 20°C)
< 0.1

DENSITY/SPECIFIC GRAVITY (g/ml)
0.89

Temperature (°C)
16

VAPOR DENSITY (air=1)
> 5

Temperature (°C)
20

VAPOR PRESSURE
< 0.01 mmHg

Reference
BuAc=1

EVAPORATION RATE
< 0.01

PH-VALUE, CONC. SOLUTION
N/A

10. STABILITY AND REACTIVITY

STABILITY
Normally stable.

CONDITIONS TO AVOID
Avoid contact with acids and oxidizing substances.

HAZARDOUS POLYMERIZATION
Will not occur.

POLYMERIZATION DESCRIPTION
Not applicable

HAZARDOUS DECOMPOSITION PRODUCTS
Oxides of: Carbon.

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION
No experimental toxilogical data on the preparation as such is available.

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION
There is no ecological data on the product itself.
13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS
Spilled material, unused contents and empty containers must be disposed of in accordance with local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT HAZARD CLASS
Not regulated.

IDENTIFICATION No.
N/A

U.S. DOT HAZARD LABEL
No DOT label requirement noted

SEA TRANSPORT NOTES
Not regulated.

AIR TRANSPORT NOTES
Not regulated.

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>SARA 302</th>
<th>CERCLA</th>
<th>SARA 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISTILLATES, PETROLEUM, SOLVENT-REFINED HEAVY PARAFFINIC</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>DISTILLATES, PETROLEUM, SEVERELY HYDROTREATED HEAVY NAPHTHENIC</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

REGULATORY STATUS
This Product or its components, if a mixture, is subject to following regulations (Not meant to be all inclusive - selected regulations represented):
TSCA: The ingredients of this product are on the TSCA Inventory.
SECTION 313: This product does not contain toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372. SARA 311 Categories: None.

CLEAN AIR ACT

US STATE REGULATIONS

STATE REGULATORY STATUS
This product or its components, if a mixture, is subject to following regulations (Not meant to be all inclusive - selected regulations represented):
PROPOSITION 65: This product does not contain chemicals considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 as causing cancer or reproductive toxicity, and for which warnings are now required.

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM - WHIMIS

CONTROLLED PRODUCT CLASSIFICATION
This product has been classified according to the hazard criteria of the Controlled Products Regulations, and the MSDS contains all required information.

INVENTORIES

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAN</th>
<th>US</th>
<th>EU</th>
<th>AUS</th>
<th>JAP</th>
<th>KOR</th>
<th>CHN</th>
<th>PHLP</th>
</tr>
</thead>
</table>

5/6
<table>
<thead>
<tr>
<th></th>
<th>DSL</th>
<th>Yes</th>
<th>NAV</th>
<th>NAV</th>
<th>NAV</th>
<th>NAV</th>
<th>NAV</th>
<th>NAV</th>
<th>NAV</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISTILLATES, PETROLEUM, SOLVENT-REFINED HEAVY PARAFFINIC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISTILLATES, PETROLEUM, SEVERELY HYDROTREATED HEAVY NAPHTHENIC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 16. OTHER INFORMATION

| **HEALTH** | Irritation, minor residual injury (1) |
| **FLAMMABILITY** | Burns only if pre-heated (1). |
| **REACTIVITY** | N/A (0). |
| **SPECIAL HAZARD** | N/A |
| **NPMA HIMS HAZARD INDEX** | Slight Hazard (1) |
| **NPMA HIMS PERSONNEL PROTECT. INDEX** | B |
| **PREPARED BY** | Heather Holich |
| **DATE** | March 31, 2003 |

**DISCLAIMER**

While the information and recommendations set forth herein are believed to be accurate as of the date thereof, Chemtool Incorporated makes no warranty with respect thereto and disclaims all liability from reliance therein.