Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Dyna-Plex 21C Calzon with Moly NLGI #2
Grease
Heavy Duty Petroleum Lubricant
Product Code: G921

Universal Lubricants, A PetroChoice Company
2824 N Ohio Street
Wichita, Kansas 67219
Website: www.petrochoice.com

1-800-444-6457  Telephone
1-316-832-3627  Product Information telephone
1-800-633-8253  US, Canada, Puerto Rico, Virgin Island - Emergency telephone (PERS)
+1-801-629-0667 International / Maritime Emergency telephone (PERS)

2. HAZARDS IDENTIFICATION

OSHA/HCS Status:

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of this product.

Physical Hazards:  Not classified
Health Hazards:    Not Classified
Environmental Hazards: Not classified
Signal Word:  No signal word
Hazard Statement: No known significant effects or critical hazards
GHS Symbol:     No Symbol
Precautionary Statements

General: Read label before use. Keep out of reach of children. If medical advice is needed, have product information at hand.

Prevention: Not applicable

Response: Not applicable

Storage: Not applicable

Disposal: Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Heavy Duty Petroleum Lubricant, Grease

Formula: Mixture

Molecular Weight: Variable

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>Concentration %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Lubricating Oils Mixture</td>
<td></td>
<td>70-90</td>
</tr>
<tr>
<td>Calcium Sulfonate Thickener</td>
<td>Trade Secret</td>
<td>10-30</td>
</tr>
<tr>
<td>Molybdenum Disulfide</td>
<td>Trade Secret</td>
<td>1-5</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Eyes

Immediately flush eyes with large amounts of fresh water and continue flushing until irritation subsides. Remove contact lenses, if present, and easy to do. Continue rinsing. Seek medical attention if irritation develops.

Inhalation

If breathing difficulty exists, remove individual away from exposure and into fresh air. Seek medical attention.

Skin

Remove contaminated clothing. Wash contaminated area repeatedly with soap and water. Seek medical attention if irritation develops.

Ingestion

Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
5. FIREFIGHTING MEASURES

Suitable extinguishing media

Use dry chemical, foam, carbon dioxide (CO₂) or water spray or water fog.

Unsuitable extinguishing media

Do not direct a solid stream of water or foam into hot, burning pools of oil liquid since this may spread fire.

Specific hazards from combustion

Carbon monoxide, carbon dioxide and other oxides may be generated as products of combustion.

Special protective equipment for fire-fighters

Wear full firefighting turn-out gear (full bunker gear), and respiratory protection (SCBA).

Firefighting instructions

Cool fire exposed containers with water spray and avoid spreading burning material with water used for cooling purposes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions and Protective equipment

Personal Protection, see section 8. Evacuate surrounding area. Keep unnecessary personnel from entering. Any individual not wearing protective equipment should not enter spill or contaminated area until all clean-up has been completed.

Emergency procedures

For personal emergency procedures see section 4. For fire emergency procedures see section 5. Contain spilled oil liquid if possible without posing any risk or personal injury.

Environmental precautions

Prevent spreading over a wide area. Contain spill immediately. Contact appropriate authorities of spill. Do not allow spill to enter sewer system, drains of any kind, surface water or water courses. Avoid flushing to such areas as well.

Methods and materials for containment and cleaning up

Soak up or absorb with appropriate inert materials such as, sand, clay, silica gel, acid binder, universal binder, sawdust, paper fiber etc. Large spills may be picked up using vacuum pumps, shovels, buckets or other means of transfer and place into drums or any other approved and suitable containers.
7. HANDLING AND STORAGE

Precautions for safe handling

Conditions for safe storage

Store in only approved and marked containers. Keep containers closed when not in use and during transportation. Keep containers away from flame or other ignition sources.

Incompatibilities

May react strongly with oxidizing agents, such as hydrogen peroxide, bromine, and chromic acid.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Methylpentane-2,4-diol</td>
<td>ACGIH TLV (United States, 3/2015). C: 121 mg/m³</td>
</tr>
<tr>
<td></td>
<td>C: 25 ppm</td>
</tr>
<tr>
<td></td>
<td>NIOSH REL (United States, 10/2013).</td>
</tr>
<tr>
<td></td>
<td>CEIL: 125 mg/m³</td>
</tr>
<tr>
<td></td>
<td>CEIL: 25 ppm</td>
</tr>
<tr>
<td></td>
<td>CEIL: 25 ppm</td>
</tr>
<tr>
<td></td>
<td>CEIL: 125 mg/m³</td>
</tr>
</tbody>
</table>

Respiratory protection

If vapor mist is generated when the material is heated or handled, use approved respiratory protection. All respirators must be NIOSH certified. Fit testing may be required before use. Do not use compressed oxygen in hydrocarbon atmospheres. Adequate ventilation in accordance with good engineering practices must be provided to maintain concentrations below the specified exposure or flammable limits.

Hand protection

If handling hot material, use proper insulated gloves.

Eye protection

Not required under normal conditions of use. If material is handled such that it could be splashed or misted into eyes, wear plastic face shield or splash resistant safety goggles or glasses with side shields.

Skin and body protection

For prolonged or repeated exposures, use impervious clothing (boots, gloves, aprons, bibs, etc.) over parts of the body subject to exposure. Contact your facility safety department or safety supplier to determine the proper protective equipment for your use.

Hygiene measures

Thoroughly wash contaminated areas of the body which may have been exposed with soap and water. Do not use contaminated clothing, launder clothing before reuse. Properly dispose of contaminated clothing or articles that cannot be laundered such as leather gloves, boots, etc. Wash thoroughly before handling food and beverages. Food and beverage consumption should be avoided in work areas where hydrocarbons are present.
9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Semi-solid, Greenish-Grey

**Physical state:** Solid

**Odor:** Mild, bland petroleum odor

**Specific gravity (H₂O=1):** 0.9500

**Melting point/freezing point:** No data available

**Initial boiling point and boiling range:** No data available

**Flash point (Cleveland Open Cup):** 224°C, (435°F)

**Upper/lower flammability or explosive limits:** No data available

**Vapor pressure:** Less than 0.01 @20°C

**Solubility in water:** Negligible, less than 0.1%

**Percent volatile:** Negligible

**Vapor density (air=1):** Greater than 5

**Evaporation rate:** Less than 0.01 (butyl acetate=1)

10. STABILITY AND REACTIVITY

**Reactivity:** No data available

**Chemical stability:** Stable under normal temperatures and pressures.

**Possibility of hazardous reactions:** Product will not undergo hazardous polymerization.

**Conditions to avoid:** Heat, open flames, oxidizing materials and mist.

**Incompatible materials:** Strong oxidizing agents.

**Hazardous decomposition products:** Carbon monoxide, carbon dioxide and other oxides may be generated as products of combustion.

11. TOXICOLOGICAL INFORMATION

**Acute oral toxicity:**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Methylpentane-2,4-diol</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3700 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

**Acute dermal toxicity:**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Methylpentane-2,4-diol</td>
<td>Skin - Mild irritant, Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>465 mg, 24 hours 500 mg</td>
<td>-</td>
</tr>
</tbody>
</table>
### 12. ECOLOGICAL INFORMATION

**Toxicity:**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Methylpentane-2,4-diol</td>
<td>Acute EC50 2800000 to 3200000 µg/L Fresh water</td>
<td>Crustaceans - Ceriodaphnia reticulata - Larvae</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 3200000 µg/L Fresh water</td>
<td>Daphnia - Daphnia magna - Larvae</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 10000000 µg/L Marine water</td>
<td>Fish - Menidia beryllina</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

**Persistence and degradability:** There is no data available.

**Bioaccumulative potential:**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP_{ow}</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Methylpentane-2,4-diol Polysulfides, di-tert-dodecyl</td>
<td>0.58</td>
<td>&gt;6.2</td>
<td>low</td>
</tr>
<tr>
<td></td>
<td>&gt;6.2</td>
<td></td>
<td>high</td>
</tr>
</tbody>
</table>

**Mobility in soil:**

- **Soil/water partition coefficient (K_{ow}):** Not available.

**Other adverse effects:** No known significant effects or critical hazards.

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal methods**

All disposals must comply with federal, state and local regulations. Spilled or discarded material may be a regulated waste. Refer to state and local regulations. If other material was used during cleanup efforts the resultant mixture may be regulated.

**Empty Containers**

Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed.

### 14. TRANSPORT INFORMATION

**U.S. DOT Road/Rail/Waterways:** Not dangerous/hazardous goods

**Transport Canada Road/Rail/Waterways:** Not dangerous/hazardous goods
15. REGULATORY INFORMATION

U.S. Federal regulations:

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act Section 112: Not listed
(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602: Not listed
Class I Substances

Clean Air Act Section 602: Not listed
Class II Substances

DEA List I Chemicals: Not listed
(Precursor Chemicals)

DEA List II Chemicals: Not listed
(Essential Chemicals)

SARA 302/304

Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>EHS</th>
<th>SARA 302 TPQ</th>
<th>SARA 304 RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>(lbs)</td>
<td>(gallons)</td>
</tr>
<tr>
<td>Ethylene oxide</td>
<td>0 - 0.01</td>
<td>Yes.</td>
<td>1000</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

SARA 304 RQ: 555555.6 lbs / 252222.2 kg

SARA 311/312

Classification: Not applicable.

Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-Methylpentane-2,4-diol</td>
<td>1 - 5</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
</tbody>
</table>

SARA 313

No products were found.

State Regulations

Massachusetts: The following components are listed: 2-Methylpentane-2, 4-diol; Molybdenum disulphide

New York: None of the components are listed.

New Jersey: The following components are listed: 2-Methylpentane-2, 4-diol; Distillates (petroleum), hydrotreated heavy paraffinic

Pennsylvania: The following components are listed: 2-Methylpentane-2, 4-diol
California Prop. 65

**WARNING:** This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

**WARNING:** This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Cancer</th>
<th>Reproductive</th>
<th>No significant risk level</th>
<th>Maximum acceptable dosage level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene oxide</td>
<td>Yes.</td>
<td>Yes.</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
</tbody>
</table>

**NFPA Hazard Classification**
- Health: 0
- Flammability: 1
- Reactivity: 0

**HMIS Classification**
- Health: 0
- Flammability: 1
- Physical Hazards: 0
- Personal Protection: B

**16. OTHER INFORMATION**

The information and recommendations contained within this document are believed by PetroChoice to be accurate and reliable as of the date prepared. The information and recommendations are offered for the user’s consideration and analysis and in no way guarantee the chemical specifications for the specified product. It is solely the responsibility of the user to determine safe conditions for use of this product and to assume liability for any loss, damage or expense arising out of the product’s improper use. The user should consider the information in this document in the context of how the selected product will be handled and used in conjunction with other products. It is the user’s responsibility to determine that the product is suitable for the intended use.

Appropriate warnings and safe-handling procedures should be provided to all handlers and users. PetroChoice assumes no responsibility for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices within this document.

Rev. Date: 5/16/2017