Section 1: Identification

Product Identifier/Name: EDM 185

Product code: 10236

Relevant identified uses of the substance or mixture and uses advised against:

Recommended use: Dielectric machining fluid

Restrictions on use: For intended industrial use only

Details of the supplier of the safety data sheet:

Manufacturer: Commonwealth Oil Company
2080 Ferriss Rd N., P.O. Box 370
Harrow, Ontario, N0R 1G0
Canada
www.commonwealthoil.com

Telephone (General): (519) 738-3503

Emergency telephone number: CANUTEC (613) 996-6666 Collect 24 hr

Section 2: Hazard Identification

Classification of the substance or mixture:


Flammable liquid Category 4
Aspiration hazard Category 1

Label elements:

Signal word: DANGER

Hazard symbol:

Hazard statements:

H227 Combustible liquid
H304 May be fatal if swallowed or enters airways

Precautionary statements:

Prevention:
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No Smoking.
P280.3 Wear protective gloves and eye/face protection

Response:
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or physician
P331 Do NOT induce vomiting
P370+P378 In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish

Storage:
P403 Store in a well ventilated place. Keep cool

Disposal:
P501 Dispose of contents and container in accordance with local and national regulations

Hazards not otherwise classified:
Material can accumulate static charges which may cause an ignition.
Material can release vapors that readily form flammable mixtures. Vapor accumulation could flash or explode if ignited.
Section 3: Composition/Information on Ingredients

Substances
- Mixture

Mixtures

Hazardous Components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>%(Wt.)</th>
<th>CAS #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>100</td>
<td>64742-47-8</td>
</tr>
<tr>
<td>(or Petroleum hydrocarbon with viscosity less than 20.5 cSt @ 40°C)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 4: First-Aid Measures

Description of first aid measures

Inhalation
- Move victim to fresh air if adverse effects are observed.
- For those providing assistance, avoid exposure to yourself or others.
- Use adequate respiratory protection.
- If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance.
- If breathing has stopped, assist ventilation with a mechanical device or use mouth to mouth resuscitation.

Skin
- IF ON SKIN: Wash skin with soap and water. Remove contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention.

Eye
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion
- Do NOT induce vomiting. Seek medical attention.

Most important symptoms and effects

Acute
- May cause skin dryness and irritation.

Delayed
- Prolonged/repeated exposure may cause skin irritation in susceptible individuals.

Indication of any immediate medical attention and special treatment needed

Note to Physician
- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media
- Water fog, foam, carbon dioxide, dry chemical.

Unsuitable Extinguishing Media
- Avoid the use of water jet, as this may spread the fire.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards
- Combustible. Vapors are flammable and heavier than air. Vapors may travel across the ground.

Hazardous Combustion Products
- Smoke, soot, fumes or vapors, oxides of carbon.

Special Protective Equipment and Precautions for Firefighters
- Evacuate area. Prevent run off from fire control or dilution from entering waterways.
• Structural firefighters' protective clothing will only provide limited protection. Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Wear positive pressure self-contained breathing apparatus (SCBA). Water spray may be used to cool containers exposed to fire.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Notification
• In event of a major spill or accidental release notify relevant authorities in accordance with all applicable regulations.

Personal Precautions
• Avoid contact with spilled material.
• For emergency responders: Respiratory protection: half face or full face respirator with filter(s) for organic vapor or SCBA can be used.
• Small spills: normal antistatic work clothes are usually adequate.
• Large spills: full body suit of chemical resistant, antistatic material is recommended.

Environmental precautions
• Avoid run off to waterways and sewers.

Methods and material for containment and cleaning up

Containment/Clean-up
• Eliminate all ignition sources. All equipment used when handling product must be grounded. Use non-sparking tools to collect absorbed material. Absorb or cover with dry earth, sand or other non-combustible materials and transfer to containers.
• Recover free liquid for recycle or disposal.

Section 7: Handling and Storage

Precautions for safe handling

Handling
• Material can accumulate static charges which may cause an electric spark (ignition source). Use proper bonding and/or grounding procedures.
• Empty container contains product residue which may exhibit hazards of product.

Conditions for safe storage, including any incompatibilities

Storage
• Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep away from open flame. Storage containers should be grounded and bonded.

Incompatible Materials
• Strong oxidizing agents.

General Industrial Hygiene Considerations
• Handle in accordance with good industrial hygiene and safety practice.
Wash thoroughly with soap and water after handling and before eating or drinking. Safety shower and eye wash should be available close to work station.

Environmental Exposure
• Follow best practice for site management and disposal of waste.

Section 8: Exposure Controls/Personal Protection

Exposure Controls

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Value type</th>
<th>Control parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (Petroleum), hydrotreated light</td>
<td>TWA (Mist)</td>
<td>&lt;5mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>200 mg/m³ (vapor)</td>
</tr>
</tbody>
</table>

EDM 185  Page 3 of 7  August 26, 2016
Engineering Measures/Controls

- Use adequate mechanical (general) ventilation or local exhaust as needed to control concentration of airborne contaminants below applicable exposure limit values.

Personal Protective Equipment Pictograms

Respiratory

- Not necessary under conditions of normal use. In case of insufficient ventilation, wear suitable respiratory equipment if exposure limits are exceeded.

Eye/Face

- Wear safety goggles.

Hands

- Wear protective gloves- neoprene, butyl or nitrile rubber with cuffs.

Skin/Body

- Where extensive dermal exposure may be expected, either a chemical suit or chemical apron will be needed.

Section 9: Physical and Chemical Properties

Information on physical and chemical properties

**Appearance**

Clear liquid

**Odor**

Mild

**Odor Threshold**

Not Determined

**pH**

None

**Melting Point/Freezing Point**

Not Determined

**Boiling Point Range**

200 - 250°C, 392 - 482°F

**Flash Point**

> 82°C (180°F) Cleveland Open Cup

**Evaporation Rate**

0.1 (n-butyl acetate = 1)

**Flammability Limits**

Upper explosion limit: 5.0% volume, lower explosion limit: 0.6%

**Vapor Pressure**

0.023 kPa (0.17 mm Hg) at 20°C

**Vapor Density (Air=1)**

5.5 at 101 kPa

**Specific Gravity/Relative Density**

0.798 @ 16°C, 61°F

**Density**

6.66 lbs/gal

**Solubilities**

Insoluble in water

**Octanol/Water Partition coefficient**

Not Determined

**Auto ignition temperature**

251°C (484°F)

**Decomposition temperature**

Not Determined

**Viscosity**

2.2 cSt @ 40°C, 104°F

Section 10: Stability and Reactivity

**Reactivity**

- No dangerous reaction known under conditions of normal use.

**Chemical stability**

- Stable under normal temperatures and pressures.

**Possibility of hazardous reaction**

- Not determined

**Conditions to avoid**

- Avoid heat, sparks, open flames and other ignition sources.

**Incompatible materials**

- Do not mix with strong oxidants.

**Hazardous decomposition products**

- None known under normal use.
Section 11: Toxicological Information

Information on the likely routes of exposure; symptoms; and acute, delayed and chronic effects

Inhalation
- Overexposure to mists or vapors may irritate respiratory tract. May be fatal if swallowed and enters airways.

Aspiration Hazard
- If swallowed can be aspirated into the lungs and cause chemical pneumonia, varying degrees of pulmonary injury or death.

Ingestion
- Ingestion of concentrate may cause gastrointestinal irritation. Do not induce vomiting. Vomiting may increase risk of product aspiration.

Eye
- Direct contact with concentrate may cause mild eye irritation based on component information.

Skin corrosion/irritation
- Prolonged/repeated exposure to concentrate may cause skin irritation in some individuals.

Numerical measures of toxicity

<table>
<thead>
<tr>
<th>Category</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>Not classified</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>This product is classified as an Aspiration hazard, Category 1.</td>
</tr>
</tbody>
</table>

Carcinogenicity
- Not listed in NTP, OSHA, or IARC monographs.

Additional Information
- Practical experience has not demonstrated any adverse effects with normal use dilutions of this product.
- Contains petroleum oil, which if misted in excess at exposure limits may cause respiratory irritation, coughing, and extreme overexposure may cause oil pneumonitis.

Section 12: Ecological Information

Toxicity
- Not determined.

Persistence and degradability
- Not determined.

Bioaccumulative potential
- Not determined.

Mobility in Soil
- Not determined.

Other adverse effects
- Oil spills are generally hazardous to the environment.

Section 13: Disposal Considerations

Waste treatment methods

Product waste
- Do not discard into any sewers, on the ground, or any body of water.
- Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.
• This product, as manufactured in its present state, is not considered to be a hazardous waste according to 40CFR 261.4(b)(4). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This product should be recycled if possible, otherwise it should be disposed of in accordance with all applicable federal, state, and local regulations.

Contaminated containers or packaging
• Contaminated containers should be offered for professional cleaning before reuse or packaging
• Dispose of spent container in accordance with local, regional, national, and/or international regulations.

Section 14: Transport Information

UN Number
• Not regulated for transport.

UN Proper Shipping Name
• Not applicable

Transport Hazard Class(es)
• Not applicable

Packing Group
• Not applicable

Environmental Hazards
• Not determined

Transport in Bulk
• Not regulated
• Land (TDG) Canada - Not regulated for Land transport.
• Sea (IMDG) - Not regulated for Sea Transport according to IMDG-Code
• Marine pollutant - NO

Special Precautions for user
• None specified

Section 15: Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Global Chemical Inventories

<table>
<thead>
<tr>
<th>USA</th>
<th>All components of this material are on the US TSCA Inventory or are exempt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other TSCA Reg.</td>
<td>Oil mist, mineral</td>
</tr>
<tr>
<td>Australia</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Canada</td>
<td>All ingredients listed on DSL</td>
</tr>
<tr>
<td>China</td>
<td>Not determined.</td>
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<td>EU</td>
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<tr>
<td>New Zealand</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Switzerland</td>
<td>Not determined.</td>
</tr>
</tbody>
</table>

Other U.S. Federal Regulations

• This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substances list.

SARA Section 313
• This product does not contain greater than 1.0% (> 0.1% for carcinogenic substance) of any chemical substances listed under SARA Section 313.
### SARA 311/312 Classifications

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Chronic Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Reactivity Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

### CERCLA Hazardous Substances

- None known.

### FDA Approval

- Not Applicable.

### State Regulations

#### Cal. Prop. 65

- This product may contain chemicals known by the State of California to cause cancer and/or birth defects. However, we do not routinely analyze products for impurities which may be such chemicals.

### Section 16: Other Information

#### HMIS Ratings

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
</tr>
<tr>
<td>Flammability</td>
<td>2</td>
</tr>
<tr>
<td>Physical</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>B</td>
</tr>
</tbody>
</table>

#### NFPA Ratings

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
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<tbody>
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</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
</tbody>
</table>

### Acronyms/Abbreviations

- **NTP**: National Toxicology Program Report on Carcinogens (latest edition)
- **IARC**: International Agency for the Research on Cancer
- **TSCA**: Toxic Substance Control Agency

### Last Revision Date

8/26/2016

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