1 Identification

- Product identifier
  - Trade name: PAG Oil 46
    - Part number: 69080
    - Application of the substance / the mixture: lubrication for refrigeration oil

- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier:
    UView Ultraviolet Systems Inc., division of CPS Products Canada Ltd.
    1324 Blundel Road
    Mississauga, ON, L4Y 1M5
    Canada
  - Emergency telephone number:
    CHEMTREC International +1 (703) 527-3887 (outside the US), 1-800-424-9300 (in the US) 24 hr

2 Hazard(s) identification

- Classification of the substance or mixture
  The product is not classified according to the Globally Harmonized System (GHS).

- Additional information:
  This product is not classified as hazardous according to 29 CFR 1910.1200.

- Label elements
  - GHS label elements: Not Applicable
    - Hazard pictograms: Not Applicable
    - Signal word: Not Applicable
    - Hazard statements: Not Applicable

- Classification system:
  - NFPA ratings (scale 0 - 4)
    Health = 0
    Fire = 1
    Reactivity = 0
  - HMIS-ratings (scale 0 - 4)
    HEALTH 0
    FIRE 1
    REACTIVITY 0

- Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures
  - Description: Mixture: consisting of the following components.

- Chemical components:
  Polyalkylene glycol 100%
4 First-aid measures

· Description of first aid measures
  · General information: No special measures required.
  · After inhalation: Supply fresh air; consult doctor in case of complaints.
  · After skin contact: Wash with plenty of soap and water. Remove contaminated clothing. If skin irritation occurs, get medical attention. Launder contaminated clothing before reuse.
  · After eye contact: Rinse cautiously with water. Remove contact lenses, if present and easy to do. Get medical attention if eye irritation develops or persists.
  · After swallowing: Rinse out mouth. Do not induce vomiting. If symptoms persist consult doctor.
  · Information for doctor: Treat Systematically
    · Most important symptoms and effects, both acute and delayed
      No further relevant information available.
    · Indication of any immediate medical attention and special treatment needed
      No further relevant information available.

5 Fire-fighting measures

· Extinguishing media
  · Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  · For safety reasons unsuitable extinguishing agents: Water with full jet

· Special hazards arising from the substance or mixture See section 10 for additional information.

· Advice for firefighters
  · Protective equipment: Wear self-contained respiratory protective device.
  · Wear fully protective suit.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures
  Personal protective equipment must be worn. Avoid contact with skin, eyes or clothing. Ventilate area if spilled in a confined space or other poorly ventilated area.
  · Environmental precautions: Do not allow product to reach sewage system or any water course.
  · Methods and material for containment and cleaning up:
    Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

7 Handling and storage

· Handling:
  · Precautions for safe handling
    Avoid contact with the eyes and skin.
    Avoid contact with clothing.
    Use only in well ventilated areas.
    Avoid splashes or spray in enclosed areas.
8 Exposure controls/personal protection

- **Engineering Controls**
  - eye wash station
  - safety shower

- **Control parameters**
  - **Components with limit values that require monitoring at the workplace:**
    The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
  - **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**
  - **Personal protective equipment:**
    - **General protective and hygienic measures:**
      The usual precautionary measures for handling chemicals should be followed.
    - **Breathing equipment:**
      Not necessary if room is well-ventilated.
      Use suitable respiratory protective device only when aerosol or mist is formed.
    - **Protection of hands:**
      Chemical resistant protective gloves
  - **Eye protection:**
    Safety glasses. If potential for splash or mist exists, wear chemical goggles or faceshield.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
    - **Appearance:**
      - **Form:** Fluid
      - **Color:** clear to light yellow
      - **Odor:** Mild
      - **Odour threshold:** Not determined.
    - **pH-value:** Not determined.
**Change in condition**
- Melting point/Melting range: Undetermined.
- Boiling point/Boiling range: Undetermined.

**Flash point:** > 191 °C (> 376 °F)

**Flammability (solid, gaseous):** Not applicable.

**Ignition temperature:**
- Decomposition temperature: Not determined.
- Auto igniting: Product is not selfigniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Explosion limits:**
- Lower: Not determined.
- Upper: Not determined.

**Vapor pressure:** Not determined.

**Density at 20 °C (68 °F):** 0.97 g/cm³ (8.095 lbs/gal)
- Relative density: Not determined.
- Vapour density: Not determined.
- Evaporation rate: Not determined.

**Solubility in / Miscibility with**
- Water: Not miscible or difficult to mix.

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**
- Dynamic: Not determined.
- Kinematic at 40 °C (104 °F): 46 cSt

**Solvent content:**
- Organic solvents: 0.0 %

**Other information**
No further relevant information available.

**10 Stability and reactivity**

**Reactivity**
- Chemical stability
  - Thermal decomposition / conditions to be avoided:
    No decomposition if used and stored according to specifications.

**Possibility of hazardous reactions**
No dangerous reactions known.

**Conditions to avoid**
No further relevant information available.

**Incompatible materials:** Strong acids. Oxidizing agents.

**Hazardous decomposition products:**
Smoke, carbon monoxide, carbon dioxide and other products of incomplete combustion.

(Contd. on page 5)
11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
  - LD/LC50 values that are relevant for classification:

<table>
<thead>
<tr>
<th>Polyalkylene glycol</th>
<th>Oral</th>
<th>LD50</th>
<th>&gt;5000 mg/kg (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal</td>
<td>LD50</td>
<td>&gt;5000 mg/kg (rabbit)</td>
<td></td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - on the skin: May cause mild skin irritation. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis.
  - on the eye: May cause eye irritation.

- Sensitization: No sensitizing effects known.

- Additional toxicological information:
  When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    None of the ingredients is listed.
  - NTP (National Toxicology Program)
    None of the ingredients is listed.
  - OSHA-Ca (Occupational Safety & Health Administration)
    None of the ingredients is listed.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.

- Persistence and degradability: No further relevant information available.

- Behavior in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: Not Determined

- Additional ecological information:
  - General notes:
    Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

- Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods
- Recommendation:
  Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Trade name: PAG Oil 46

- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  - DOT, IMDG, IATA: Not Regulated
- UN proper shipping name
  - DOT, IMDG, IATA: Not Regulated
- Transport hazard class(es)
  - DOT, ADN, IMDG, IATA: Not Regulated
- Packing group
  - DOT, IMDG, IATA: Not Regulated
- Environmental hazards:
  - Marine pollutant: No
- Special precautions for user: Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.
- UN "Model Regulation": -

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Sara
    - Section 355 (extremely hazardous substances):
      None of the ingredients is listed.
    - Section 313 (Specific toxic chemical listings):
      None of the ingredients is listed.
    - TSCA (Toxic Substances Control Act):
      None of the ingredients is listed.
- Proposition 65
  - Chemicals known to cause cancer:
    None of the ingredients is listed.
  - Chemicals known to cause reproductive toxicity for females:
    None of the ingredients is listed.
  - Chemicals known to cause reproductive toxicity for males:
    None of the ingredients is listed.
  - Chemicals known to cause developmental toxicity:
    None of the ingredients is listed.
## Carcinogenic categories

- **EPA (Environmental Protection Agency)**
  None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**
  None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  None of the ingredients is listed.

### GHS label elements

- **Not Applicable**
  - **Hazard pictograms** Not Applicable
  - **Signal word** Not Applicable
  - **Hazard statements** Not Applicable

## Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Contact**: Engineering Department
- **Issue Date**: April 14, 2015

### Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)