PRODUCT: EVO-100 Propylene Glycol USP

Section 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER......................................... ARCHER DANIELS MIDLAND
4666 Faries Parkway
Decatur
IL
USA
62526

PRODUCT NAME.......................................... EVO-100 Propylene Glycol USP

PRODUCT CODE(S)..................................... N/A

MATERIAL USE............................................ Cosmetic applications. Food and pharmaceutical industry.

PRODUCT USE............................................. USP.

CHEMICAL FAMILY...................................... Propylene Glycol.

SYNONYMS

24 HOUR EMERGENCY NUMBER:............. CALL Newalta Industrial Services 1-800-567-7455.

Section 02: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Ingredients</th>
<th>% Exposure Limit</th>
<th>C.A.S.#</th>
<th>LD/50, Route,Species</th>
<th>LC/50 Route,Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Glycol</td>
<td>&gt;99.5 Not Indicated</td>
<td>57-55-6</td>
<td>Oral Rat &gt; 21,000 mg/kg.</td>
<td>Not Indicated</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dermal Rabbit 20,800 mg/kg</td>
<td>Not Indicated</td>
</tr>
<tr>
<td>Water</td>
<td>&lt;0.5 Not Indicated</td>
<td>7732-18-5</td>
<td>Not Indicated</td>
<td>Not Indicated</td>
</tr>
</tbody>
</table>

Section 03: HAZARDS IDENTIFICATION

ROUTE OF ENTRY ...................................... Eye contact. Skin contact. Inhalation. Ingestion.

EYE CONTACT............................................. May cause eye irritation. Avoid eye contact.

SKIN CONTACT............................................ May cause skin irritation. Avoid skin contact.

INGESTION................................................... Do not ingest.

INHALATION................................................. Avoid inhalation.

MEDICAL CONDITIONS AFFECTED BY .... None known.

EXPOSURE

SIGNS OF OVER EXPOSURE..................... No additional remark.

Section 04: FIRST AID MEASURES

SKIN CONTACT............................................ Wash affected area immediately with large amounts of soap and water. If irritation develops or persists, seek medical attention.

EYE CONTACT............................................. Immediately hold eyelids open and flush with water for at least 15 minutes. If irritation develops or persists, seek medical attention.

INHALATION................................................. Move victim to fresh air. In all cases of doubt, or when symptoms persist, seek medical attention.

INGESTION................................................... DO NOT induce vomiting. Rinse out mouth with water. If necessary, seek medical attention.

NOTES TO PHYSICIAN................................ No additional remark.

Section 05: FIRE FIGHTING MEASURES

FLASH POINT (ºC), METHOD......................... 99 C.
AUTO IGNITION TEMPERATURE (ºC)............. 371 C.
UPPER FLAMMABLE LIMIT (% VOL)............. 12.6.
LOWER FLAMMABLE LIMIT (% VOL)............. 2.6.
FLAMMABILITY............................................. Class IIIB.
EXTINGUISHING MEDIA.............................. Water fog, alcohol foam, carbon dioxide or dry chemical agents.
SENSITIVITY TO MECHANICAL IMPACT.... Not sensitive.
SENSITIVITY TO STATIC DISCHARGE....... Not sensitive.
UNUSUAL FIRE / EXPLOSION HAZARDS.. Vapours may travel along ground and flashback along vapour trail.
SPECIAL FIRE FIGHTING PROCEDURES.. Use water spray to cool containers. Firefighters should wear protective equipment as required.
PRODUCT: EVO-100 Propylene Glycol USP

**Section 06: ACCIDENTAL RELEASE MEASURES**

**LEAKS AND SPILLS**

Clean contaminated area with water, contain with absorbent and place in a chemical waste container. Do not allow product to enter sewers or waterways. Flush area with detergent and water to remove final traces. For larger spills, dike area and pump into waste containers. Wear protective clothing during cleanup.

**Section 07: HANDLING AND STORAGE**

**HANDLING PROCEDURES**

Avoid contact with eyes and skin. Avoid inhalation and ingestion. Wash skin thoroughly after handling and before eating or smoking. Use under well ventilated conditions. Use good industrial hygiene practices in handling this material.

**STORAGE NEEDS**

Do not store in open, unlabeled or mislabeled containers. Keep container tightly closed. Keep away from ignition sources: flames, pilot lights, electrical sparks, and sparking tools. Store in a cool, dry, well-ventilated area.

**Section 08: EXPOSURE CONTROLS / PERSONAL PROTECTION**

**VENTILATION REQUIREMENTS**

General ventilation is recommended.

**PROTECTIVE EQUIPMENT**

- **EYE/TYPE**
  - Safety goggles or glasses required.
- **RESPIRATORY/TYPE**
  - NIOSH approved for acid, mists or vapour if present. Consult your supplier of personal protective equipment for additional instructions on proper usage for nuisance dust.
- **GLOVES/TYPE**
  - Wear protective gloves.
- **CLOTHING/TYPE**
  - No special protective clothing is required.
- **FOOTWEAR/TYPE**
  - No special footwear is required.
- **BODY/TYPE**
  - No special protective clothing is required.

**Section 09: PHYSICAL AND CHEMICAL PROPERTIES**

- **PHYSICAL STATE**
  - Colourless. Viscous liquid.
- **ODOUR**
  - Low odour.
- **ODOUR THRESHOLD (ppm)**
  - Not applicable.
- **VAPOUR PRESSURE (mm Hg)**
  - 0.08 mmHg, @ 20 C.
- **VAPOUR DENSITY (AIR=1)**
  - 2.6. (AIR = 1).
- **EVAPORATION RATE**
  - < 0.01. (BuAc = 1).
- **BOILING POINT (ºC)**
  - 187 C.
- **MELTING POINT (ºC)**
  - Not applicable.
- **pH**
  - approx. 7.
- **SOLUBILITY IN WATER (% W/W)**
  - Miscible.
- **COEFFICIENT OF WATER/OIL**
  - Not applicable.
- **FREEZING POINT ( ºC)**
  - -60 C.
- **SPECIFIC GRAVITY**
  - 1.04. @ 20 C.

**Section 10: STABILITY AND REACTIVITY**

- **HAZARDOUS POLYMERIZATION**
  - Will not occur.
- **STABILITY**
  - Stable.
- **INCOMPATIBILITY**
- **CONDITIONS TO AVOID**
  - Keep away from excessive heat or open flame. Ignition sources.
- **HAZARDOUS PRODUCTS OF DECOMPOSITION**
  - Not available.

**Section 11: TOXICOLOGICAL INFORMATION**

- **TOXICITY EFFECTS ON ANIMALS**
  - No additional remark.
- **TOXIC EFFECTS ON HUMANS**
  - May cause mild skin irritation. May cause slight eye irritation. May cause slight respiratory irritation.
- **CHRONIC EFFECTS ON HUMANS**
  - No specific information is available in our database regarding the chronic toxic effects of this material for humans.
- **CARCINOGENICITY**
  - No evidence of carcinogenic effects according to ACGIH or IARC.
- **TERATOGENICITY**
  - No evidence of teratogenic effects.
- **MUTAGENICITY**
  - No evidence of mutagenic effects.
- **REPRODUCTIVE EFFECTS**
  - No evidence of reproductive effects.

**Section 12: ECOLOGICAL INFORMATION**

- **ECOTOXICITY DATA**
  - propylene Glycol - 96 hr LC50 (Onchorhynchus my kiss) 51,600 mg/L; 48 Hr EC50 (Daphnia magna) >10,000 mg/L; 96 hr EC50 (pseudokirchneriella subcapitata) 19,000 mg/L.
- **PRODUCTS OF DEGRADATION**
  - No specific information is available in our database regarding the degradation of this product.
- **BIODEGRADABILITY**
  - Readily biodegradable.
Section 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL....................................... Dispose in a suitable waste treatment facility in compliance with all federal, provincial and local regulations.

Section 14: TRANSPORT INFORMATION

TDG CLASSIFICATION................................. Not regulated under TDG (Canada).

Section 15: REGULATORY INFORMATION

CEPA STATUS.............................................. All the ingredients are on the DSL list.
WHMIS CLASSIFICATION............................ This is not a WHMIS controlled product.

Section 16: OTHER INFORMATION

REFERENCES.............................................. Manufacturer's Material Safety Data Sheet.
TELEPHONE NUMBER:............................... N/A
PREPARED BY:.......................................... Regulatory Affairs
PREPARATION DATE:................................. Dec06/11
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