SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

Product Identifier
Product form: Mixture
Product name: Ecopol-18Y2LMS
Synonyms: Liquid Gel Concentrate

Intended Use Of The Product
Gelling Agent. For professional use only.

Name, Address, And Telephone Of The Responsible Party
Economy® Polymers & Chemicals
435 E. Anderson Road
77047 Houston, TX
T 713-723-8416; 1-800-231-2066
www.economypolymers.com

Emergency Telephone Number
Emergency number: CHEMTREC 1-800-424-9300 (US); 703-527-3887 (International, collect calls are accepted)

SECTION 2: HAZARDS IDENTIFICATION
Classification Of The Substance Or Mixture
Classification (GHS-US)
Flam. Liq. 4 H227
Skin Irrit. 2 H315
STOT SE 3 H336

Label Elements
GHS-US labeling
Hazard pictograms (GHS-US): !

Signal word (GHS-US): Warning

Hazard statements (GHS-US): H227 - Combustible liquid
H315 - Causes skin irritation
H336 - May cause drowsiness or dizziness

Precautionary statements (GHS-US): P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands and forearms thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P312 - Call a POISON CENTER or doctor if you feel unwell
P321 - Specific treatment (see section 4 on this label)
P332+P313 - If skin irritation occurs: Get medical advice/attention
P362 - Take off contaminated clothing
P370+P378 - In case of fire: Use appropriate media for extinction.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
**Ecopol-18Y2LMS**

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P501 - Dispose of contents/container according to all local, regional, national, territorial, provincial, and international regulations

### Other Hazards

**Other hazards not contributing to the classification:**
- Hazardous to the aquatic environment- Long-term Hazard Category 2.
- H411- Toxic to aquatic life with long lasting effects.

### Unknown acute toxicity (GHS US)

51.97% of the mixture consists of ingredient(s) of unknown acute toxicity.

---

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**Mixture**

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>% (w/w)</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene carbonate</td>
<td>(CAS No.) 108-32-7</td>
<td>0.1 - 1</td>
<td>Eye Irrit. 2A, H319</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

---

### SECTION 4: FIRST AID MEASURES

**Description Of First Aid Measures**

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Ingestion:** Rinse mouth. Do NOT induce vomiting.

**Most Important Symptoms And Effects Both Acute and Delayed**

**General:** Vapors may cause drowsiness and dizziness.

**Inhalation:** May cause drowsiness or dizziness.

**Skin Contact:** Causes skin irritation.

**Eye Contact:** May cause eye irritation.

**Ingestion:** May cause headache, dizziness, drowsiness, and loss of coordination. Abdominal pain.

**Chronic symptoms:** Repeated or prolonged skin contact may cause dermatitis.

**Indication Of Any Immediate Medical Attention And Special Treatment Needed**

If exposed or concerned, get medical advice and attention.

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### SECTION 5: FIREFIGHTING MEASURES

**Extinguishing Media**

**Suitable extinguishing media:** Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

**Unsuitable extinguishing media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**Special Hazards Arising From The Substance Or Mixture**

**Fire hazard:** Combustible liquid

**Explosion hazard:** Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

**Reactivity:** Hazardous reactions will not occur under normal conditions.
Advice For Firefighters
Precautionary measures fire: Exercise caution when fighting any chemical fire.
Firefighting instructions: Do not allow firefighting runoff to enter drains or waterways.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
Hazardous Combustion Products: Carbon oxides (CO, CO2)

Reference To Other Sections
Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment And Emergency Procedures
General measures: Avoid breathing (dust, vapor, mist, gas). Use only outdoors or in a well-ventilated area. Do not allow product to spread into the environment.

For Non-Emergency Personnel
Protective equipment: Use appropriate personal protection equipment (PPE).
Emergency procedures: Evacuate unnecessary personnel.

For Emergency Personnel
Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Ventilate area.

Environmental Precautions
Prevent entry to sewers and public waters. Avoid release to the environment.

Methods And Material For Containment And Cleaning Up
Methods for cleaning up: Clear up spills immediately and dispose of waste safely. Use only non-sparking tools.

Reference To Other Sections
See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions For Safe Handling
Hygiene measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

Conditions For Safe Storage, Including Any Incompatibilities
Storage conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use.
Storage area: Store locked up.

Specific End Use(s)
Gelling Agent

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Petroleum distillates, hydrotreated light (64742-47-8)

| British Columbia | OEL TWA (mg/m³) | 200 mg/m³ (application restricted to conditions in which there are negligible aerosol exposures) |

Exposure Controls
Appropriate engineering controls: Ensure adequate ventilation, especially in confined areas.

Materials for protective clothing: Chemically resistant materials and fabrics
Hand protection: Wear chemically resistant protective gloves.
Eye protection: Chemical goggles or safety glasses.
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Skin and body protection: Wear suitable protective clothing.
Respiratory protection: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.
Other information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information On Basic Physical And Chemical Properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Viscous liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Not available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>8 – 10 (0.5% in water at 25°C)</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting point</td>
<td>-15 °C (pour point)</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>186 - 264 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>62 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available</td>
</tr>
<tr>
<td>Lower flammable limit</td>
<td>Not available</td>
</tr>
<tr>
<td>Upper flammable limit</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific gravity density</td>
<td>1.04-1.06</td>
</tr>
<tr>
<td>Solubility</td>
<td>Not available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>Not available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosion data - sensitivity to mechanical impact</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosion data - sensitivity to static discharge</td>
<td>Not available</td>
</tr>
</tbody>
</table>

SECTION 10: STABILITY AND REACTIVITY

Reactivity Hazardous reactions will not occur under normal conditions.
Chemical Stability Stable at standard temperature and pressure.
Possibility Of Hazardous Reactions Hazardous polymerization will not occur.
Conditions To Avoid Direct sunlight. Extremely high or low temperatures.

SECTION 11: TOXICOLOGICAL INFORMATION

Information On Toxicological Effects - Product

Acute toxicity: Not classified
LD50 and LC50 Data: Not available
Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/irritation: Not classified
Respiratory or skin sensitization: Not classified
Germ cell mutagenicity: Not classified
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Teratogenicity: Not available
Carcinogenicity: Not classified
Specific target organ toxicity (repeated exposure): Not classified
Reproductive toxicity: Not classified
Specific target organ toxicity (single exposure): May cause drowsiness or dizziness.
Aspiration hazard: Not classified
Symptoms/injuries after inhalation: May cause drowsiness or dizziness.
Symptoms/injuries after skin contact: Causes skin irritation.
Symptoms/injuries after eye contact: May cause eye irritation.
Symptoms/injuries after ingestion: May cause headache, dizziness, drowsiness, and loss of coordination. Abdominal pain.
Chronic symptoms: Repeated or prolonged skin contact may cause dermatitis and defatting.

Information On Toxicological Effects - Ingredient(s)

LD50 and LC50 Data

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>LD50 oral rat</th>
<th>LD50 dermal rabbit</th>
<th>LC50 inhalation rat (mg/l)</th>
<th>Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite (68953-58-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated light (64742-47-8)</td>
<td>&gt; 5000 mg/kg</td>
<td>&gt; 2000 mg/kg</td>
<td>&gt; 5.2 mg/l (Exposure time: 4 h)</td>
<td>LD50 oral rat: &gt; 5000 mg/kg</td>
</tr>
<tr>
<td>Propylene carbonate (108-32-7)</td>
<td>LD50 oral rat: 29000 mg/kg</td>
<td>LD50 dermal rabbit: &gt; 20000 mg/kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 12: ECOLOGICAL INFORMATION

Toxicity
Ecology - general: Toxic to aquatic life with long lasting effects.

Petroleum distillates, hydrotreated light (64742-47-8)

| LC50 fish 1 | 45 mg/l (Exposure time: 96 h; Species: Pimephales promelas [flow-through]) |
| EC50 Daphnia 1 | 4720 mg/l (Exposure time: 96 h; Species: Den-noroneireides heteropoda) |
| LC50 fish 2 | 2.2 mg/l (Exposure time: 96 h; Species: Lepomis macrochirus [static]) |

Propylene carbonate (108-32-7)

| LC50 fish 1 | 5300 mg/l (Exposure time: 96 h; Species: Leuciscus idus [static]) |
| EC50 Daphnia 1 | > 500 mg/l (Exposure time: 48 h; Species: Daphnia magna) |
| EC50 other aquatic organisms 1 | > 500 mg/l (Exposure time: 72 h; Species: Desmodesmus subspicatus) |
| LC50 fish 2 | > 1000 mg/l (Exposure time: 96 h; Species: Cyprinus carpio [semi-static]) |

Persistence And Degradability

Ecopol-18Y2LMS
Persistence and degradability: Not established. May cause long-term adverse effects in the environment.

Bioaccumulative Potential

Ecopol-18Y2LMS
Bioaccumulative potential: Not established.

Petroleum distillates, hydrotreated light (64742-47-8)

| BCF fish 1 | 61 - 159 |

Propylene carbonate (108-32-7)

| Log Pow | 0.48 (at 25 °C) |
## Mobility In Soil
Not available

### Other Adverse Effects

**Other information:** Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste disposal recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

**Ecology - waste materials:** This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

## SECTION 14: TRANSPORT INFORMATION

**In accordance with ICAO/IATA/DOT/TDG**

**49 CFR 173.120 (3)**

A combustible liquid that does not sustain combustion is not subject to the requirements of this subchapter as a combustible liquid. Either the test method specified in ASTM D 4206 or the procedure in appendix H of this part may be used to determine if a material sustains combustion when heated under test conditions and exposed to an external source of flame.

**UN Number** Not regulated for transport

**UN Proper Shipping Name** Not regulated for transport

**Overland transport** Not regulated for transport

**Transport by sea** Not regulated for transport

**Air transport** Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

### US Federal regulations

**Petroleum distillates, hydrotreated light (64742-47-8)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

**Propylene carbonate (108-32-7)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### US State regulations

**Petroleum distillates, hydrotreated light (64742-47-8)**

- U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour
- U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual
- U.S. - Texas - Effects Screening Levels - Long Term
- U.S. - Texas - Effects Screening Levels - Short Term

**Propylene carbonate (108-32-7)**

- U.S. - Delaware - Volatile Organic Compounds Exempt from Requirements
- U.S. - New Jersey - Excluded Volatile Organic Compounds
- U.S. - Texas - Effects Screening Levels - Long Term
- U.S. - Texas - Effects Screening Levels - Short Term

### Canadian regulations

#### Ecopol-18Y2LMS

**WHMIS Classification**

Class B Division 3 - Combustible Liquid

Class D Division 2 Subdivision B - Toxic material causing other toxic effects

#### Petroleum distillates, hydrotreated light (64742-47-8)

Listed on the Canadian DSL (Domestic Substances List) inventory.

**WHMIS Classification**

Class B Division 3 - Combustible Liquid

Class D Division 2 Subdivision B - Toxic material causing other toxic effects
**Ecopol-18Y2LMS**

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<table>
<thead>
<tr>
<th><strong>Propylene carbonate (108-32-7)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the Canadian DSL (Domestic Substances List) inventory.</td>
</tr>
<tr>
<td>Listed on the Canadian Ingredient Disclosure List</td>
</tr>
</tbody>
</table>

**WHMIS Classification**
Class D Division 2 Subdivision B - Toxic material causing other toxic effects

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

**SECTION 16: OTHER INFORMATION**

**Indication of changes**
Revision date 09/11/2013

**Other information**
Harmonized Tarriff Code: 2901.10.50
This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

**GHS Full Text Phrases:**

<table>
<thead>
<tr>
<th>Aquatic Chronic 2</th>
<th>Hazardous to the aquatic environment - Chronic Hazard Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asp. Tox. 1</td>
<td>Aspiration hazard Category 1</td>
</tr>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage/eye irritation Category 2A</td>
</tr>
<tr>
<td>Flam. Liq. 3</td>
<td>Flammable liquids Category 3</td>
</tr>
<tr>
<td>Flam. Liq. 4</td>
<td>Flammable liquids Category 4</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>skin corrosion/irritation Category 2</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity (single exposure) Category 3</td>
</tr>
<tr>
<td>H226</td>
<td>Flammable liquid and vapor</td>
</tr>
<tr>
<td>H304</td>
<td>May be fatal if swallowed and enters airways</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H336</td>
<td>May cause drowsiness or dizziness</td>
</tr>
<tr>
<td>H411</td>
<td>Toxic to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>

**Party Responsible For The Preparation Of This Document:**
Economy Polymers & Chemicals
435 E. Anderson Road Houston, TX 77047
713-723-8416; 1-800-231-2066

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

North America GHS US 2012 & WHMIS