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

Product Identifier
Product Name: Ecopol-2000LMS

Intended Use of the Product
Use of the Substance/Mixture: Emulsifying, Gelling, Stabilizing and Thickening Agent

Name, Address, and Telephone of the Responsible Party
Customer
Economy® Polymers & Chemicals
435 E. Anderson Road
77047 Houston, TX
T 713-723-8416
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, open flames, sparks. - No smoking
P261 - Avoid breathing mist, spray, vapors
P264 - Wash hands and forearms thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear eye protection, protective clothing, protective gloves
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)
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
P501 - Dispose of contents/container to local, regional, national, territorial, provincial, and international regulations
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Other Hazards Not available
Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances
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>Petroleum distillates, hydrotreated light</td>
<td>(CAS No) 64742-47-8</td>
<td>30 - 60</td>
<td>Flam. Liq. 3, H226</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Irrit. 2, H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT SE 3, H336</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Asp. Tox. 1, H304</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic 2, H411</td>
</tr>
<tr>
<td>Guar gum</td>
<td>(CAS No) 9000-30-0</td>
<td>30 - 60</td>
<td>Comb. Dust</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: 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: Not available
Inhalation: May cause drowsiness or dizziness.
Skin Contact: Causes skin irritation.
Eye Contact: May cause eye irritation.
Ingestion: May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Chronic Symptoms: Not available

Indication of Any Immediate Medical Attention and Special Treatment Needed
Not available

SECTION 5: FIREFIGHTING MEASURES

Extinguishing Media
Suitable Extinguishing Media: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).
Unsuitable Extinguishing Media: Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture
Fire Hazard: Combustible liquid
Explosion Hazard: May form flammable/explosive vapor-air mixture.
Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters
Precautionary Measures Fire: Not available
Firefighting Instructions: Exercise caution when fighting any chemical fire.
Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
Hazardous Combustion Products: Carbon oxides (CO, CO2).
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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: Use special care to avoid static electric charges. Keep away from open flames, hot surfaces and sources of ignition. No smoking. Avoid breathing (dust, vapor, mist, gas). Use only outdoors or in a well-ventilated area.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).


For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Absorb and/or contain spill with inert material, then place in suitable container. Do not take up in combustible material such as: saw dust or cellulosic material.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable. Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

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. Wash hands and forearms thoroughly after handling.

Conditions for Safe Storage, Including Any Incompatibilities

Not available

Technical Measures: Proper grounding procedures to avoid static electricity should be followed.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep in fireproof place.


Storage Area: Store in a well-ventilated place. Keep cool. Store locked up.

Specific End Use(s)

Emulsifying, Gelling, Stabilizing and Thickening Agent

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

<table>
<thead>
<tr>
<th>Petroleum distillates, hydrotreated light (64742-47-8)</th>
<th></th>
<th>200 mg/m³ (application restricted to conditions in which there are negligible aerosol exposures)</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia</td>
<td>OEL TWA (mg/m³)</td>
<td></td>
</tr>
</tbody>
</table>

Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas.


Materials for Protective Clothing: Not available

Hand Protection: Wear chemically resistant protective gloves.

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**Eye Protection:** Chemical goggles or safety glasses.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

**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>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<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>6.5 – 8 (pH @ 0.5% in water @ 25°C)</td>
</tr>
<tr>
<td>Relative Evaporation Rate (butylacetate=1)</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>-20 °C (-4 °F) [Pour point]</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>186 - 264 °C (366.8 - 507.2 °F)</td>
</tr>
<tr>
<td>Flash Point</td>
<td>62 °C (143.6 °F)</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>1.04 - 1.06</td>
</tr>
<tr>
<td>Density</td>
<td>8.92 lb/gal</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not available</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:** Combustible liquid. May form flammable/explosive vapor-air mixture.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

**Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.

**Hazardous Decomposition Products:** Carbon oxides (CO, CO2). May release flammable gases.

### 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. pH: 6.5 - 8 (pH @ 0.5% in water @ 25°C)
Serious Eye Damage/Irritation: Not classified pH: 6.5 - 8 (pH @ 0.5% in water @ 25C)
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
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 gastrointestinal irritation, nausea, vomiting and diarrhoea.

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 Rate (mg/l)</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>
</tr>
<tr>
<td>Guar gum (9000-30-0)</td>
<td>6770 mg/kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 12: ECOLOGICAL INFORMATION
Toxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>LC50 Fish 1</th>
<th>EC50 Daphnia 1</th>
<th>LC 50 Fish 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated light (64742-47-8)</td>
<td>45 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])</td>
<td>4720 mg/l (Exposure time: 96 h - Species: Den-dronereides heteropoda)</td>
<td>2.2 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])</td>
</tr>
</tbody>
</table>

Persistence and Degradability

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Persistence and Degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecopol-2000LMS</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

Bioaccumulative Potential

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Bioaccumulative Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecopol-2000LMS</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>BCF fish 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated light (64742-47-8)</td>
<td>61 - 159</td>
</tr>
</tbody>
</table>

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.

Additional Information: Handle empty containers with care because residual vapors are flammable.
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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
Additional Information 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

Guar gum (9000-30-0)
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

Guar gum (9000-30-0)
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

Canadian Regulations

Ecopol-2000LMS
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

Guar gum (9000-30-0)
Listed on the Canadian DSL (Domestic Substances List) inventory.

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 : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

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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>Comb. Dust</td>
<td>Combustible Dust</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>H227</td>
<td>Combustible liquid</td>
</tr>
<tr>
<td>H232</td>
<td>May form combustible dust concentrations in air</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