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

Product Identifier

Product form: Substance

Substance name: Ecopol-400

CAS No.: 39421-75-5

Synonyms: Powdered Gel

Intended Use Of The Product

Use of the substance/preparation: Gelling Agent

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 telephone 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

Combustible Dust

Label Elements

GHS-US labeling

Signal word (GHS-US): Warning

Hazard statements (GHS-US): May form combustible dust concentrations in air

Other Hazards: Not available

Unknown acute toxicity (GHS US): Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>% (w/w)</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydroxypropyl guar gum</td>
<td>(CAS No.) 39421-75-5</td>
<td>100</td>
<td>Combustible Dust</td>
</tr>
</tbody>
</table>

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.

Skin Contact: Rinse with plenty of water.

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 expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: Prolonged inhalation of dust may cause respiratory irritation.

Skin Contact: Dust may cause irritation in skin folds or by contact in combination with tight clothing.

Eye Contact: Dust from this product may cause minor eye irritation.

Ingestion: None under normal use.
Chronic symptoms: Prolonged/repeated exposure to skin or eyes may cause mechanical irritation or scratching. Prolonged inhalation of dust may cause respiratory irritation.

Indication Of Any Immediate Medical Attention And Special Treatment Needed
If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIREFIGHTING MEASURES

Extinguishing Media

Unsuitable extinguishing media: Do not use a heavy water stream.

Special Hazards Arising From The Substance Or Mixture
Fire hazard: Combustible Dust
Explosion hazard: Dust clouds can be explosive.
Reactivity: Stable at ambient temperature and under normal conditions of use.

Advice For Firefighters
Precautionary measures fire: 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)

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 generating dust. Good housekeeping is needed during storage, transfer, handling, and use of this material to avoid excessive dust accumulation.

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: Not applicable

Methods And Material For Containment And Cleaning Up
Methods for cleaning up: Collect spillage. Use only non-sparking tools. Avoid generation of dust during clean-up of spills. Vacuum must be fitted with HEPA filter to prevent release of particulates during clean-up. Practice good housekeeping—spillage can be slippery on smooth surface either wet or dry.

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: Keep only in the original container in a cool, well ventilated place away from: direct sunlight, heat sources, ignition sources. Keep container closed when not in use. Protect from moisture.


Specific End Use(s)
Gelling Agent
**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

Control Parameters
No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

**Exposure Controls**

**Appropriate engineering controls:** Provide adequate ventilation to minimize dust concentrations. Ensure all national/local regulations are observed. Proper grounding procedures to avoid static electricity should be followed.

**Personal protective equipment:** Dust formation: dust mask. Gloves. Protective goggles.

**Hand protection:** Wear protective gloves.

**Eye protection:** Chemical goggles or safety glasses if dust particles are present.

**Respiratory protection:** Wear approved mask.

**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>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Yellow Powder</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild Bean-like</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>8-10 (0.5% Soln)</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 150°C (302°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>Not available</td>
</tr>
<tr>
<td>Specific gravity density</td>
<td>1.5</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>
Ecopol-400
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 10: STABILITY AND REACTIVITY
Reactivity Stable at ambient temperature and under normal conditions of use.
Chemical Stability Stable under normal conditions.
Possibility Of Hazardous Reactions Hazardous polymerization will not occur.
Conditions To Avoid Direct sunlight, sparks, heat, open flame. Extremely high or low temperatures. Protect from moisture. Use good housekeeping practices during storage, transfer, handling, to avoid excessive dust accumulation.
Hazardous Decomposition Products Carbon oxides (CO, CO2)

SECTION 11: TOXICOLOGICAL INFORMATION
Information On Toxicological Effects - Product
Acute toxicity : Not classified
LD50 and LC50 Data: Not available
Skin corrosion/irritation: Not classified (pH: 8 - 10 (0.5% Soln))
Serious eye damage/irritation: Not classified (pH: 8 - 10 (0.5% Soln))
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): Not classified
Aspiration hazard: Not classified
Symptoms/injuries after inhalation: Prolonged inhalation of dust may cause respiratory irritation.
Symptoms/injuries after skin contact: Dust may cause irritation in skin folds or by contact in combination with tight clothing.
Symptoms/injuries after eye contact: Dust from this product may cause minor eye irritation.
Symptoms/injuries after ingestion: None under normal use.
Information On Toxicological Effects - Ingredient(s)
LD50 and LC50 Data: Not available

SECTION 12: ECOLOGICAL INFORMATION
Toxicity Not available
Persistence And Degradability
Ecopol-400 (3942175-5)
Persistence and degradability Not established.
Bioaccumulative Potential
Ecopol-400 (3942175-5)
Bioaccumulative potential Not established.
Mobility In Soil Not available
Other Adverse Effects Not available

SECTION 13: DISPOSAL CONSIDERATIONS
Waste disposal recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.
Ecopol-400
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 14: TRANSPORT INFORMATION
In accordance with ICAO/IATA/DOT/TDG
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
Hydroxypropyl guar gum (39421-75-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State regulations
Neither this product nor its chemical components appear on any US state lists.

Canadian regulations
Ecopol-400 (3942175-5)
WHMIS Classification Uncontrolled product according to WHMIS classification criteria

Hydroxypropyl guar gum (39421-75-5)
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 08/23/2013
Other information : 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:
| Comb. Dust | Combustible Dust |

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