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

**Product Identifier**

**Product name:** Ecopol-DSH

**Synonyms:** Dispersible 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

[www.economypolymers.com](http://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)**

Comb. 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**

**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>Guar gum</td>
<td>(CAS No.) 9000-30-0</td>
<td>60 - 100</td>
<td>Comb. Dust, H232</td>
</tr>
<tr>
<td>Fumaric acid</td>
<td>(CAS No.) 110-17-8</td>
<td>1 - 5</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.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes.

**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:** Prolonged contact with large amounts of dust may cause mechanical irritation.
**Ecopol-DSH**

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**Inhalation:** Prolonged contact with large amounts of dust may cause mechanical irritation.

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

**Eye Contact:** Repeated or prolonged contact will cause mechanical irritation.

**Ingestion:** Ingestion of the dusts of this product may cause irritation of the mucus membranes.

**Chronic symptoms:** Not available

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

If medical advice is needed, have product container or label at hand.

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**SECTION 5: FIREFIGHTING MEASURES**

**Extinguishing Media**

Suitable extinguishing media: Alcohol foam, polymer foam, dry chemical powder, carbon dioxide, water spray, fog.

Unsuitable extinguishing media: None known.

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

**Fire hazard:** Combustible Dust

**Explosion hazard:** Dust clouds can be explosive.

**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).

**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 generation of dust during clean-up of spills.

**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.

**Methods And Material For Containment And Cleaning Up**

For containment: Sweep or vacuum the product to recover it

Methods for cleaning up: Clear up spills immediately and dispose of waste safely. Use a soft bristle brush or conductive rubber or conductive plastic shovel. Use caution, material is sensitive to initiation from sources such as heat, flame, shock, friction, or sparks.

**Reference To Other Sections**

See heading 8, Exposure Controls and Personal Protection.

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**SECTION 7: HANDLING AND STORAGE**

**Precautions For Safe Handling**

Additional hazards when processed: Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

**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.

Specific End Use(s)
Gelling Agent

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters
No Occupational Exposure Limits have been established for the product or its components.

Exposure Controls
Appropriate engineering controls: Not available

Materials for protective clothing: Not available
Hand protection: Wear chemically resistant protective gloves.
Eye protection: Chemical goggles or safety glasses.
Skin and body protection: Not available
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>Fine powder</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 - 8 (0.5% solution)</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>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>1.3</td>
</tr>
<tr>
<td>Specific gravity density</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>
</tbody>
</table>
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Viscosity, dynamic : Not available
Explosion data - sensitivity to mechanical impact : Not available
Explosion data - sensitivity to static discharge : Not available

SECTION 10: STABILITY AND REACTIVITY
Reactivity Hazardous reactions will not occur under normal conditions.
Chemical Stability Stable under recommended handling and storage conditions (see section 7).
Possibility Of Hazardous Reactions Hazardous polymerization will not occur.
Conditions To Avoid Direct sunlight. Extremely high or low temperatures. Sources of ignition.
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: 6 - 8 (0.5% solution)
Serious eye damage/irritation: Not classified pH: 6 - 8 (0.5% solution)
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 contact with large amounts of dust may cause mechanical 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: Repeated or prolonged contact will cause mechanical irritation.
Symptoms/injuries after ingestion: Ingestion of the dusts of this product may cause irritation of the mucus membranes.

Information On Toxicological Effects - Ingredient(s)
LD50 and LC50 Data

**Guar gum (9000-30-0)**
LD50 oral rat 6770 mg/kg

**Fumaric acid (110-17-8)**
LD50 oral rat 9300 mg/kg
LD50 dermal rabbit 20000 mg/kg

SECTION 12: ECOTOXICOCLOGICAL INFORMATION

Toxicity

**Fumaric acid (110-17-8)**
LC50 fish 1 245 mg/l (Exposure time: 48 h - Species: Brachydanio rerio [static])
EC50 Daphnia 1 73.6 mg/l (Exposure time: 24 h - Species: Daphnia magna)
EC50 other aquatic organisms 1 41 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)
EC50 Daphnia 2 204 - 220 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Persistence And Degradability

**Ecopol-DSH**
Persistence and degradability Not established.
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### Bioaccumulative Potential

<table>
<thead>
<tr>
<th>Substance</th>
<th>Bioaccumulative Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ecopol-DSH</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Bioaccumulative potential</strong></td>
<td>Not established.</td>
</tr>
<tr>
<td><strong>1,2-Propylene glycol (57-55-6)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>BCF fish 1</strong></td>
<td>&lt; 1</td>
</tr>
<tr>
<td><strong>Fumaric acid (110-17-8)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Log Pow</strong></td>
<td>0.33 (at 23 °C)</td>
</tr>
</tbody>
</table>

### Other Information

**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.

### 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
- **Additional information**: 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

**Guar gum (9000-30-0)**

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

**Fumaric acid (110-17-8)**

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

**EPA TSCA Regulatory Flag**

Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

#### US State regulations

**Guar gum (9000-30-0)**

- U.S. - Texas - Effects Screening Levels - Long Term
- U.S. - Texas - Effects Screening Levels - Short Term

**Fumaric acid (110-17-8)**

- U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities
- U.S. - Louisiana - Reportable Quantity List for Pollutants
- U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1
- U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2
- U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity
- U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1
- U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2
- U.S. - Massachusetts - Right To Know List
- U.S. - Michigan - Polluting Materials List
- U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances
- U.S. - New Jersey - Right to Know Hazardous Substance List
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<table>
<thead>
<tr>
<th>Canadian regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecopol-DSH</td>
</tr>
<tr>
<td>This product is uncontrolled by WHMIS criteria.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Guaranteed gum (9000-30-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the Canadian DSL (Domestic Substances List) inventory.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fumaric acid (110-17-8)</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>

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: 04/02/2013
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:

<table>
<thead>
<tr>
<th>Comb. Dust</th>
<th>Combustible Dust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage/eye irritation Category 2A</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</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.