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

Product Identifier
Product form: Substance
Substance name: Poly-Sal
Synonyms: Powdered Gel

Intended Use Of The Product
Use of the substance/mixture: 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 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
GHS-US classification
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
Unknown acute toxicity (GHS US): Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances
Name: Poly-Sal
CAS No.: 9000-30-0

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>% (w/w)</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guar gum</td>
<td>(CAS No.) 9000-30-0</td>
<td>100</td>
<td>Comb. Dust, H232</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: 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.
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**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 mechanical eye irritation.

**Ingestion:** None under normal use.

**Chronic symptoms:** Not available.

**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**

**Suitable extinguishing media:** Foam. Dry powder. Carbon dioxide. Water spray. Sand.

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

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

**Fire hazard:** Combustible Dust. Dust explosion hazard in air. Supports combustion at high temperatures. Under conditions of fire this material may produce: Carbon dioxide. Carbon monoxide.

**Explosion hazard:** Avoid dust clouds in combination with static electricity. Dust clouds can be explosive.

**Reactivity:** Stable at ambient temperature and under normal conditions of use.

**Advice For Firefighters**

**Precautionary measures fire:** Not available

**Firefighting instructions:** Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter drains or water courses.

**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. Handle in accordance with good industrial hygiene and safety practice. 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**

Prevent entry to sewers and public waters.

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

**Methods for cleaning up:** Collect spillage. 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.
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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.

Incompatible materials: Strong acids. Strong bases. Strong oxidizers

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

Materials for protective clothing: Not available

Hand protection: Wear protective gloves

Eye protection: Chemical goggles or safety glasses.

Skin and body protection: Not available

Respiratory protection: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of dust 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>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Powder, white, beige</td>
</tr>
<tr>
<td>Odour</td>
<td>Mild Bean-like</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>6 - 8 (0.5% Soln)</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=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>Vapour pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative vapour 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>1.3</td>
</tr>
<tr>
<td>Solubility</td>
<td>Forms gel</td>
</tr>
<tr>
<td>Log Pow</td>
<td>Not available</td>
</tr>
</tbody>
</table>
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Log Kow : Not available
Viscosity, kinematic : Not available
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 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. 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: 6 - 8 (0.5% Soln)
Serious eye damage/irritation: Not classified pH: 6 - 8 (0.5% Soln)
Respiratory or skin sensitisation: 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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>LD50 oral rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guar gum (9000-30-0)</td>
<td>6770 mg/kg</td>
</tr>
</tbody>
</table>

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not available

Persistence And Degradability

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Persistence and degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly-Sal</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>Poly-Sal</td>
<td>Not established.</td>
</tr>
</tbody>
</table>
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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

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

Canadian regulations
Poly-Sal
WHMIS Classification Uncontrolled product according to WHMIS classification criteria
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: 08/23/2013
Data sources: 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

08/23/2013 EN (English)