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

Product Identifier
Product Form: Mixture
Product Name: Poly-Gel
Synonyms: High-Yield Bentonite
Intended Use of the Product
Use of the Substance/Mixture: For professional use only.

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
Comb. Dust
Carc. 1A H350
STOT RE 1 H372

Label Elements
GHS-US Labeling
Hazard Pictograms (GHS-US):

Signal Word (GHS-US): Danger

Hazard Statements (GHS-US):
- May form combustible dust concentrations in air
- H350 - May cause cancer
- H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary Statements (GHS-US):
- P201 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood
- P260 - Do not breathe dust.
- P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
- P270 - Do not eat, drink or smoke when using this product.
- P271 - Use only outdoors or in a well-ventilated area.
- P280 - Wear protective gloves, protective clothing, eye protection, face protection, respiratory protection.
- P308+P313 - If exposed or concerned: Get medical advice/attention.
- P312 - Call a POISON CENTER or doctor if you feel unwell.
- P314 - Get medical advice and attention if you feel unwell.
- P405 - Store locked up.
- P501 - Dispose of contents/container to local, regional, national, territorial, provincial, and international regulations.

Other Hazards
Other Hazards Not Contributing to the Classification: Inhalation may aggravate those with pre-existing conditions including: skin, eye, and respiratory conditions. Repeated or prolonged exposure to respirable crystalline silica dust will cause lung damage in the
form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss. Acute silicosis can be fatal.

**Unknown Acute Toxicity (GHS-US)** Not available

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**Substances**

**Mixture**

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier (CAS No)</th>
<th>% (w/w)</th>
<th>Classification (GHS-US)</th>
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</thead>
<tbody>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>4</td>
<td>Carc. 1A, H350, STOT SE 3, H335, STOT RE 1, H372</td>
</tr>
<tr>
<td>Bentonite</td>
<td>1302-78-9</td>
<td>96</td>
<td>Not classified</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. Obtain medical attention if irritation develops or persists.

**Eye Contact**: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persist.

**Ingestion**: Rinse mouth. Do NOT induce vomiting. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

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

**General**: Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure.

**Inhalation**: May cause respiratory irritation. May cause cancer by inhalation.

**Skin Contact**: Contact during a long period may cause light irritation.

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

**Ingestion**: Gastrointestinal irritation.

**Chronic Symptoms**: Repeated or prolonged exposure to respirable crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss. Acute silicosis can be fatal.

**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**: Water spray, dry chemical, foam, carbon dioxide.

**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**: Not considered flammable but may burn at high temperatures.

**Explosion Hazard**: Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion, keep dust levels to a minimum and follow applicable regulations.

**Reactivity**: Hazardous reactions will not occur under normal conditions.

**Advice for Firefighters**

**Precautionary Measures Fire**: Exercise caution when fighting any chemical fire.

**Firefighting Instructions**: Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

**Protection During Firefighting**: Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products**: Silicon oxides. Quartz (silica) will dissolve in hydrofluoric acid producing a corrosive gas, silicon tetrafluoride. Oxides of aluminum.
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Other information: Do not allow run-off from fire fighting to enter drains or water courses.

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). Use only outdoors or in a well-ventilated area. Do not allow product to spread into the environment. Do not get in eyes, on skin, or on clothing. Use only non-sparking tools.

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. Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.


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: Do not pressurize, cut, or weld containers. May form combustible dust concentrations in air. Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion, keep dust levels to a minimum and follow applicable regulations.

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. Store in a well-ventilated place. Keep container tightly closed. Keep/Store away from extremely high or low temperatures, direct sunlight, ignition sources, incompatible materials.


Storage Area: Store locked up.

Specific End Use(s)

For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

<table>
<thead>
<tr>
<th>Quartz (14808-60-7)</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>Mexico</td>
<td>OEL TWA (mg/m³)</td>
</tr>
<tr>
<td>USA ACGIH</td>
<td>ACGIH TWA (mg/m³)</td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (TWA) (mg/m³)</td>
</tr>
<tr>
<td>USA IDLH</td>
<td>US IDLH (mg/m³)</td>
</tr>
<tr>
<td>Alberta</td>
<td>OEL TWA (mg/m³)</td>
</tr>
<tr>
<td>British Columbia</td>
<td>OEL TWA (mg/m³)</td>
</tr>
<tr>
<td>Manitoba</td>
<td>OEL TWA (mg/m³)</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>OEL TWA (mg/m³)</td>
</tr>
</tbody>
</table>
Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use explosion-proof equipment.


Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant 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>Physical State</th>
<th>Solid</th>
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<tbody>
<tr>
<td>Appearance</td>
<td>Tan, powder</td>
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<tr>
<td>Odor</td>
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<tr>
<td>Odor Threshold</td>
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<tr>
<td>pH</td>
<td>8 - 10 (1% Soln)</td>
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<tr>
<td>Relative Evaporation Rate (butylacetate=1)</td>
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</tr>
<tr>
<td>Melting Point</td>
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<tr>
<td>Freezing Point</td>
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</tr>
<tr>
<td>Boiling Point</td>
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<td>Flash Point</td>
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<tr>
<td>Auto-ignition Temperature</td>
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</tr>
<tr>
<td>Decomposition Temperature</td>
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</tr>
<tr>
<td>Flammability (solid, gas)</td>
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<tr>
<td>Lower Flammable Limit</td>
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<tr>
<td>Upper Flammable Limit</td>
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<tr>
<td>Vapor Pressure</td>
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<td>Relative Vapor Density at 20 °C</td>
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</tr>
<tr>
<td>Relative Density</td>
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</tr>
<tr>
<td>Specific Gravity</td>
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<td>Solubility</td>
<td>Forms a gel.</td>
</tr>
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<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: Hazardous reactions will not occur under normal conditions.
Chemical Stability: Stable at standard temperature and pressure. Risk of dust explosion.
Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.
Hazardous Decomposition Products: Oxides of aluminum. Silicon oxides. Quartz (silica) will dissolve in hydrofluoric acid producing a corrosive gas, silicon tetrafluoride.

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 (1% Soln)
Serious Eye Damage/Irritation: Not classified pH: 8 - 10 (1% Soln)
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Teratogenicity: Not available
Carcinogenicity: May cause cancer.
Specific Target Organ Toxicity (Repeated Exposure): Causes damage to organs through prolonged or repeated exposure.
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: May cause respiratory irritation. May cause cancer by inhalation.
Symptoms/Injuries After Skin Contact: Contact during a long period may cause light irritation.
Symptoms/Injuries After Eye Contact: Prolonged contact with large amounts of dust may cause mechanical irritation.
Symptoms/Injuries After Ingestion: Gastrointestinal irritation.
Chronic Symptoms: Repeated or prolonged exposure to respirable crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss. Acute silicosis can be fatal.

Information on Toxicological Effects - Ingredient(s)
LD50 and LC50 Data
Quartz (14808-60-7)
LD50 Oral Rat > 5000 mg/kg
Bentonite (1302-78-9)
LD50 Oral Rat > 5000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION
Toxicity
Bentonite (1302-78-9)
LC50 Fish 1 8.0 - 19.0 g/l (Exposure time: 96 h - Species: Salmo gairdneri)
LC 50 Fish 2 19000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
Poly-Gel Safety Data Sheet

Persistence and Degradability Not available

Bioaccumulative Potential

| Poly-Gel | Bioaccumulative Potential | Not established. |

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

Transport by sea Not regulated for transport

Air transport Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Poly-Gel

SARA Section 311/312 Hazard Classes Delayed (chronic) health hazard Immediate (acute) health hazard

Quartz (14808-60-7)

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

Bentonite (1302-78-9)

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

US State Regulations

Quartz (14808-60-7)

U.S. - California - Proposition 65 - Carcinogens List WARNING: This product contains chemicals known to the State of California to cause cancer.

Quartz (14808-60-7)

U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)
U.S. - Idaho - Occupational Exposure Limits - Mineral Dusts
U.S. - Illinois - Toxic Air Contaminant Carcinogens
U.S. - Illinois - Toxic Air Contaminants
U.S. - Maine - Chemicals of High Concern
U.S. - Massachusetts - Right To Know List
U.S. - Michigan - Occupational Exposure Limits - TWAs
U.S. - Minnesota - Chemicals of High Concern
U.S. - Minnesota - Hazardous Substance List
U.S. - Minnesota - Permissible Exposure Limits - TWAs
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. - New Jersey - Right to Know Hazardous Substance List
U.S. - New Jersey - Special Health Hazards Substances List
U.S. - Oregon - Permissible Exposure Limits - Mineral Dusts
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Tennessee - Occupational Exposure Limits - TWAs
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| U.S. - Texas - Effects Screening Levels - Long Term |
| U.S. - Texas - Effects Screening Levels - Short Term |
| U.S. - Vermont - Permissible Exposure Limits - TWAs |
| U.S. - Washington - Permissible Exposure Limits - STELs |
| U.S. - Washington - Permissible Exposure Limits - TWAs |

**Bentonite (1302-78-9)**
- U.S. - Texas - Effects Screening Levels - Long Term
- U.S. - Texas - Effects Screening Levels - Short Term

**Canadian Regulations**

<table>
<thead>
<tr>
<th>WHMIS Classification</th>
<th>Class D Division 2 Subdivision A - Very toxic material causing other toxic effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bentonite (1302-78-9)</td>
<td>Class D Division 2 Subdivision B - Toxic material causing other toxic effects</td>
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</table>

<table>
<thead>
<tr>
<th>WHMIS Classification</th>
<th>Class D Division 2 Subdivision A - Very toxic material causing other toxic effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bentonite (1302-78-9)</td>
<td>Uncontrolled</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**

**Revision date**: 02/26/2015
**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>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>Carc. 1A</td>
<td>Carcinogenicity Category 1A</td>
</tr>
<tr>
<td>Comb. Dust</td>
<td>Combustible Dust</td>
</tr>
<tr>
<td>STOT RE 1</td>
<td>Specific target organ toxicity (repeated exposure) Category 1</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity (single exposure) Category 3</td>
</tr>
<tr>
<td>May form combustible dust concentrations in air</td>
<td></td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
<tr>
<td>H350</td>
<td>May cause cancer</td>
</tr>
<tr>
<td>H372</td>
<td>Causes damage to organs through prolonged or repeated exposure</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