



# Ecopol-14S

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision Date: 02/26/2015

Version: 1.0

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

#### Product Identifier

**Product Form:** Mixture

**Product Name:** Ecopol-14S

**Synonyms:** Cationic Guar Gum

#### Intended Use of the Product

**Use of the Substance/Mixture:** Gelling Agent. 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](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

**Other Hazards Not Contributing to the Classification:** Inhalation may aggravate those with pre-existing conditions including: skin, eye, and respiratory conditions.

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

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### Substances

##### Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Guar gum, 2-hydroxy-3-(trimethylammonio)propyl ether, chloride	(CAS No) 65497-29-2	60 - 100	Comb. Dust
Fumaric acid	(CAS No) 110-17-8	1 - 5	Eye Irrit. 2A, H319

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.

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

**General:** Not expected to present a significant hazard under anticipated conditions of normal use.

**Inhalation:** May cause respiratory irritation.

**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:** 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:** 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:** Carbon oxides (CO, CO<sub>2</sub>). Silicon oxides. Nitrogen oxides.

**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).

**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. 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.

**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely. Collect spillage. Minimize generation of dust.

Contact competent authorities after a spill. Vacuum must be fitted with HEPA filter to prevent release of particulates during clean-up.

### **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:** 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

**Technical Measures:** Comply with applicable regulations. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment.

**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.

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

**Storage Area:** Store locked up.

#### Specific End Use(s)

Gelling Agent. For professional use only.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control Parameters

No additional information available

#### 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.

**Personal Protective Equipment:** Protective goggles. Gloves. Insufficient ventilation: wear respiratory protection. Protective clothing.



**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

Physical State	: Solid
Appearance	: Yellow solid, Powder
Odor	: Mild Bean-like
Odor Threshold	: Not available
pH	: 5 - 7 (0.5% soln)
Relative Evaporation Rate (butylacetate=1)	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: > 150 °C (302 °F)

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<b>Auto-ignition Temperature</b>	: Not available
<b>Decomposition Temperature</b>	: Not available
<b>Flammability (solid, gas)</b>	: Not available
<b>Lower Flammable Limit</b>	: Not available
<b>Upper Flammable Limit</b>	: Not available
<b>Vapor Pressure</b>	: Not available
<b>Relative Vapor Density at 20 °C</b>	: Not available
<b>Relative Density</b>	: Not available
<b>Specific Gravity</b>	: 1.5
<b>Solubility</b>	: Forms a gel.
<b>Log Pow</b>	: Not available
<b>Log Kow</b>	: Not available
<b>Viscosity, Kinematic</b>	: Not available
<b>Viscosity, Dynamic</b>	: Not available
<b>Explosion Data – Sensitivity to Mechanical Impact</b>	: Not available
<b>Explosion Data – Sensitivity to Static Discharge</b>	: 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.

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

**Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides. Silicon oxides.

### 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:** 5 - 7 (0.5% soln)

**Serious Eye Damage/Irritation:** Not classified **pH:** 5 - 7 (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:** May cause respiratory irritation.

**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.

#### Information on Toxicological Effects - Ingredient(s)

##### **LD50 and LC50 Data**

<b>Guar gum, 2-hydroxy-3-(trimethylammonio)propyl ether, chloride (65497-29-2)</b>	
ATE (oral)	12500.000 mg/kg
<b>Fumaric acid (110-17-8)</b>	
LD50 Oral Rat	9300 mg/kg

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LD50 Dermal Rabbit	20000 mg/kg
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### SECTION 12: ECOLOGICAL 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** Not available

#### Bioaccumulative Potential

Ecopol-14S	
Bioaccumulative Potential	Not established.

Fumaric acid (110-17-8)	
Log Pow	0.33 (at 23 °C)

**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

Guar gum, 2-hydroxy-3-(trimethylammonio)propyl ether, chloride (65497-29-2)	
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

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	

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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  
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances  
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List  
U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Texas - Effects Screening Levels - Long Term  
U.S. - Texas - Effects Screening Levels - Short Term

### Canadian Regulations

#### Ecopol-14S

WHMIS Classification | Uncontrolled product according to WHMIS classification criteria

#### Guar gum, 2-hydroxy-3-(trimethylammonio)propyl ether, chloride (65497-29-2)

Listed on the Canadian DSL (Domestic Substances List) inventory.

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

Listed on the Canadian DSL (Domestic Substances List) inventory.

Listed on the Canadian Ingredient Disclosure List

WHMIS Classification | Class D Division 2 Subdivision B - Toxic material causing other toxic effects

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:

Comb. Dust	Combustible Dust
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
	May form combustible dust concentrations in air
H319	Causes serious eye irritation

#### 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