

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 04/29/2015

Version: 1.0

SECTION 1: IDENTIFICATION

Product Identifier
Product Form: Substance
Product Name: Ecopol-RK
CAS No: 56780-58-6
Synonyms: Cationic Starch

Intended Use of the Product

Gelling Agent

Name, Address, and Telephone of the Responsible Party

Customer

Economy Polymers & Chemicals

435 E. Anderson Road Houston, TX 77047 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

Classification (GHS-US)

Comb. Dust

Full text of H-phrases: see section 16

Label Elements
GHS-US Labeling

Signal Word (GHS-US) : Warning

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

Other Hazards

No additional information available

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Starch, 2-hydroxy-3-	(CAS No) 56780-58-6	100	Comb. Dust
(trimethylammonio)propyl ether, chloride			

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: If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: When symptoms occur: rinse immediately with plenty of water. Do not rub.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do not rub. Obtain medical attention if irritation develops or persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Seek medical attention if a large amount is swallowed.

Most Important Symptoms and Effects Both Acute and Delayed

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

Inhalation: Prolonged inhalation of dust may cause respiratory irritation.

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

Eye Contact: Eye contact with dust may cause mechanical irritation. **Ingestion:** Ingestion is likely to be harmful or have adverse effects. **Chronic Symptoms:** None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire. Water spray, fog.

Unsuitable Extinguishing Media: Do not use a high powered water stream. Use of a high powered stream may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Under fire conditions, decomposition may produce hazadous fumes. Combustible Dust.

Explosion Hazard: Product itself is not explosive but if dust is generated, dust clouds suspended in air can be explosive.

Reactivity: Reacts with strong oxidants causing fire and explosion hazard.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present. Do not breathe fumes from fires or vapors from decomposition.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

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

Hazardous Combustion Products: Thermal decomposition generates: Carbon oxides. Chlorine oxides. Nitrogen compounds.

Ammonia.

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 generating dust. Avoid breathing 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: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area. Eliminate ignition sources.

Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid. Use only non-sparking tools.

Methods for Cleaning Up: Avoid generation of dust during clean-up of spills. Take up with inert, damp, non-combustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.

Reference to Other Sections

See Heading 8. Exposure controls and personal protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: Proper grounding procedures to avoid static electricity should be followed.

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

Technical Measures: Ensure adequate ventilation. Avoid creating or spreading dust. Good housekeeping is needed during storage, transfer, handling, and use of this material to avoid excessive dust accumulation. Comply with applicable regulations.

Storage Conditions: Keep only in the original container in a cool, well ventilated place away from: Direct sunlight. Heat sources.

Keep container closed when not in use. **Incompatible Materials:** Strong oxidizers.

Specific End Use(s)

Gelling Agent.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

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. Ensure that all electrical components/systems are in compliance with the National Electrical Code. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment.

Personal Protective Equipment: Protective goggles. Gloves. Dust formation: dust mask. Dustproof clothing.



Evaporation Rate

Relative Density







Materials for Protective Clothing: Not available

Hand Protection: In case of repeated or prolonged contact wear gloves.

Eye Protection: In case of dust production: protective goggles.

Skin and Body Protection: In case of dust production: dustproof clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Not available

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: SolidAppearance: White flakeOdor: OdorlessOdor Threshold: Not available

pH : 8 - 11 (0.5% Solution)

Melting Point Not available **Freezing Point** Not available **Boiling Point** Not available > 150 °C (> 302°F) **Flash Point Auto-ignition Temperature** Not available **Decomposition Temperature** Not available Flammability (solid, gas) Not available **Lower Flammable Limit** Not available **Upper Flammable Limit** Not available **Vapor Pressure** Not available Relative Vapor Density at 20 °C Not available

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Specific Gravity : 0.6

Solubility: Forms a gelPartition Coefficient: N-Octanol/Water: Not availableViscosity: Not available

Explosion Data – Sensitivity to Mechanical Impact : Not expected to present an explosion hazard due to mechanical impact.

Explosion Data – Sensitivity to Static Discharge : Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Reacts with strong oxidants causing fire and explosion hazard.

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. Incompatible materials. Sources of ignition. Generation

of airborne dust.

Incompatible Materials: Strong oxidizers.

Hazardous Decomposition Products: Thermal decomposition generates: Carbon oxides (CO, CO2). Chlorine oxides. Nitrogen

compounds. Ammonia.

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 - 11 (0.5% Solution)

Serious Eye Damage/Irritation: Not classified

pH: 8 - 11 (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 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: Eye contact with dust may cause mechanical irritation. **Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data: Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity No additional information available

Persistence and Degradability

Ecopol-RK (56780-58-6)	
Persistence and Degradability	Not established.

Bioaccumulative Potential

Ecopol-RK (56780-58-6)	
Bioaccumulative Potential	Not established.

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

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SECTION 13: DISPOSAL CONSIDERATIONS

Sewage Disposal Recommendations: Do not empty into drains; dispose of this material and its container in a safe way.

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, provincial, territorial, national, and international regulations.

Ecology – Waste Materials: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

In Accordance With ICAO/IATA/DOT/TDG

- **14.1. UN Number** Not regulated for transport
- 14.2. UN Proper Shipping Name Not regulated for transport
- **14.3.** 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

Starch, 2-hydroxy-3-(trimethylammonio)propyl ether, chloride (56780-58-6)
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-RK (56780-58-6)		
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria	
Starch, 2-hydroxy-3-(trime	ethylammonio)propyl ether, chloride (56780-58-6)	
	ethylammonio)propyl ether, chloride (56780-58-6) L (Domestic Substances List)	

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 04/29/2015

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
	May form combustible dust concentrations in air

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.

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