Materials Safety Data Sheet

Section 1 - Chemical Product MSDS Name: Triphenylsilanol 99% min. Synonym: Hydroxytriphenylsilane Supplier and Emergence Contact: ENERGYCO LTD. Tel: +8625-8371-9363 Fax: +8625-8421-4930 E-mail: 101@energycochem.com

Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS CAS# Chemical Name content EINECS# 791-31-1 Triphenylsilanol 98 212-339-3 Hazard Symbols: XI Risk Phrases: 36/37/38

Section 3 - HAZARDS IDENTIFICATION EMERGENCY OVERVIEW

Irritating to eyes, respiratory system and skin.Moisture sensitive.The toxicological properties of this material have not been fully investigated.

Potential Health Effects

Eye:

Causes eye irritation. May cause chemical conjunctivitis.

Skin:

Causes skin irritation.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.

Inhalation:

Causes respiratory tract irritation. The toxicological properties of this substance have not been fully investigated. Can produce delayed pulmonary edema.

Chronic:

Effects may be delayed.

Section 4 - FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If

conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:

Do NOT get water inside containers. In case of fire, use carbon dioxide, dry chemical powder or appropriate foam.

Section 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Provide ventilation. Do not get water inside containers.

Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation. Do not allow contact with water. Wash clothing before reuse. Keep from contact with moist air and steam.

Storage:

Store in a tightly closed container. Store protected from moisture. Store in a cool, dry area away from incompatible substances.

Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 791-31-1: United Kingdom, WEL - TWA: (listed as silica, amorphous): 6 mg/m3 (inhalable dust); 2.4 mg/m3 TWA (respirable dust) United Kingdom, WEL - STEL: (listed as silica, amorphous): 18 mg/ STEL (inhalable dust); 7.2 mg/m3 STEL (respirable dust) Russia: (listed as silica, amorphous): 1 mg/m3 TWA Personal Protective Equipment Eyes: Wear appropriate protective eyeglasses

or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure. Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Powder Color: white Odor: None reported. pH: Not available. Vapor Pressure: Not available. Viscosity: Not available. Boiling Point: Not available. Melting Point: 153.00 - 157.00 deg C Auto ignition Temperature: 535 deg C (995.00 deg F) Flash Point: Not applicable. Explosion Limits, lower: Not available. Explosion Limits, upper: Not available. Decomposition Temperature: Not available. Solubility in water: reacts Specific Gravity/Density: Not available. Molecular Formula: C18H16OSi Molecular Weight: 276.40 _____

Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable at room temperature in closed containers under normal storage and handling conditions. Moisture sensitive.

Conditions to Avoid:

Incompatible materials, moisture, excess heat, strong oxidants.

Incompatibilities with Other Materials:

Strong oxidizing agents, moisture.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide, silicon dioxide, acrid smoke and fumes.

Hazardous Polymerization: Has not been reported.

Section 11 - TOXICOLOGICAL INFORMATION RTECS#:

CAS# 791-31-1: VV4325500 LD50/LC50: Not available. Carcinogenicity: Triphenylsilanol - Not listed by ACGIH, IARC, or NTP. Other: See actual entry in RTECS for complete information.

Section 12 - ECOLOGICAL INFORMATION Other No information available.

Section 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - TRANSPORT INFORMATION

IATA Not regulated as a hazardous material. IMO Not regulated as a hazardous material. RID/ADR Not regulated as a hazardous material.

Section 15 - REGULATORY INFORMATION

European/International Regulations European Labeling in Accordance with EC Directives Hazard Symbols: XI **Risk Phrases:** R 36/37/38 Irritating to eyes, respiratory system and skin. Safety Phrases: S 24/25 Avoid contact with skin and eyes. WGK (Water Danger/Protection) CAS# 791-31-1: No information available. Canada CAS# 791-31-1 is listed on Canada's NDSL List. CAS# 791-31-1 is not listed on Canada's Ingredient Disclosure List. **US FEDERAL** TSCA CAS# 791-31-1 is listed on the TSCA inventory. _____