INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Call a physician.

SKIN CONTACT

The compound is not likely to be hazardous by skin contact but cleansing the skin after use is advisable.

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Material Safety Data Sheet (FIRST AID MEASURES - Continued)

Page 2

If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

Notes to Physicians

Activated charcoal mixture may be beneficial. Suspend 50 g activated charcoal in 400 mL water and mix well. Administer 5 mL/kg, or 350 mL for an average adult.

FIRE FIGHTING MEASURES

Flammable Properties

Flash Point : > 93C (>199 F)

Method: PMCC

Hazardous decomposition products including carbon dioxide, carbon monoxide, hydrogen fluoride, toxic gases or particles may be formed during combustion. These products may cause severe eye, nose, and throat irritation or toxic effects.

Extinguishing Media

Water Spray, Foam, Dry Chemical, CO2.

Fire Fighting Instructions

Wear self-contained breathing apparatus. Wear full protective equipment.

Avoid breathing decomposition products.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Spill Clean Up

Soak up with sawdust, sand, oil dry or other absorbent material. Shovel or sweep up.

<u>Accidental Release Measures</u> Flush spill area with water.

Material Safety Data Sheet (Handling And Storage - Continued)

Page 3

HANDLING AND STORAGE

<u> Handling (Personnel)</u>

Avoid breathing vapors or mist. Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling. Do not store or consume food, drink, or tobacco in areas where they may become contaminated with this material. Avoid circumstances that produce

respirable particles unless suitable ventilation and respirator are used.

Storage

Store in a well ventilated place. Keep container tightly closed. Freezing will affect physical condition but will not damage. Keep away from open flames and heated surfaces above 200 degrees C (392 deg F).

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Keep container tightly closed. Use only with adequate ventilation. Vent heated extruder or dryer fumes outside work area. Do not aerosolize. In spray applications, use airless type pressure spray equipment at less than 60 psi, and exhaust ducts, drip pans, or other design features to minimize worker exposure to mists and overspray.

Personal Protective Equipment

EYE/FACE PROTECTION

Wear safety glasses or coverall chemical splash goggles.

RESPIRATORS

Wear NIOSH approved respiratory protection, as appropriate.

PROTECTIVE CLOTHING

Where there is potential for skin contact have available and wear, as appropriate, impervious gloves, apron, pants, and jacket.

Material Safety Data Sheet (Physical And Chemical Prop - Continued)

Page 4

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Boiling Point : ~90 C (~176 F) @ 760 mm Hg

Volatiles : 60 WT% Solubility in Water : Miscible

pH: 7.5-8.5 Odor : Alcoholic Form : Liquid, Clear

Color : Clear

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

<u>Decomposition</u>

Hazardous decomposition products including carbon dioxide, carbon monoxide, hydrogen fluoride, toxic gases or particles may be formed during combustion. These products may cause severe eye, nose, and throat irritation or toxic effects.

TOXICOLOGICAL INFORMATION

Animal Data

RINSE AID

Oral LD50: 13,792 mg/kg in rats

The product, at concentrations up to 60%, is not a skin irritant or skin sensitizer. The product is a slight to mild eye irritant in animals. The 4-hour inhalation ALC in rats for 25% Telomer B monoether in water is >1800 mg/m3.

In a two-week repeated dose oral study with the product, changes occurred in the liver, spleen, thymus, and bone marrow. The product did not produce genetic damage in bacterial cell cultures. In a 90-day repeated dose oral study with 99% Telomer B monoether, decreased body weight, thyroid enlargement, kidney effects, clinical chemical and hematological changes occurred in rats. Animal data with the Telomer B monoether show developmental effects only at exposure levels producing other toxic effects in the adult animal. No malformations were present. A one-generation oral reproductive study in rats with the monoether showed reproductive effects that included a reduced fertility index and increased estrous cycle length at the lowest dose level, in the absence of parental toxicity.

Material Safety Data Sheet (Ecological Information - Continued)

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ECOLOGICAL INFORMATION

Ecotoxicological Information

96 hour LC50 - Fathead minnows : 19 mg/L.

48 hour EC50 - Daphnia magna : 8.3 mg/L.

DISPOSAL CONSIDERATIONS

Waste Disposal

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

TRANSPORTATION INFORMATION

Shipping Information

DOT

Proper Shipping Name : Not regulated

Hazard Class : Flammable Liquid

Hazard Class : 3

UN No. : UN 1219

Special Information: Flash Point: 93 degC

Packing Group : II

REGULATORY INFORMATION

Acute : Yes Chronic : No Fire : Yes Reactivity : No Pressure : No