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SECTION 1: IDENTIFICATION

Effective Date: 9/26/97
Product Name: DITHIOTREITOL; Cleland's Reagent; DTT
Chemical Formula: C₄H₁₀O₂S₂
CAS No.: 3483-12-3

SECTION 2: HAZARDOUS INGREDIENTS:

Very dangerous is case of eye and skin contact (irritant), of ingestion, of inhalation. Product may irritate eyes and skin upon contact. Inflammation of eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

SECTION 3: PHYSICAL DATA

Physical Data:

Appearance and Odor:	powdered solid, white, slight odor
Boiling point:(760 mmHg)	128°C (262.4°F)
Vapor Pressure (mmHg):	n/a
Specific Gravity (Water = 1):	n/a
Solubility in water:(by weight)	partially soluble in cold water
Melting Point:	42.5°C (108.5°F)
Volatility:	n/a
Vapor Density:	n/a

SECTION 4: FIRE AND EXPLOSION DATA

Fire and Explosion Information:

Combustible?:	Yes
Flash point:	closed cup: 110°C (230°F)
Flammable limit:	n/a
Extinguishing Media:	Small fire: dry chemicals, CO ₂ , water spray or foam. Large fire: Use water spray , fog or foam. Do not use water jet
Unusual Fire and Explosion Hazards:	No specific information is available

SECTION 5: REACTIVITY DATA

Reactivity Data:

Stable X Unstable

Conditions to Avoid:	no specific information is available
Incompatibilities:	no specific information is available
Hazardous Decomposition or byproducts:	Products of combustion are carbon oxides and sulfur oxides
Hazardous Polymerization:	no

SECTION 6: HEALTH HAZARD DATA

Threshold Limit Value (TLV):	n/a
Routes of Entry:	ingestion, inhalation
Toxicity:	

Oral LD50 (mouse):

n/a

SECTION 7: SPILLAGE AND DISPOSAL PROCEDURES

Spillage: Small spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose according to local and regional authority requirements. Large spill: Use shovel to put material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Disposal: Recycle to process if possible. Consult your local or regional authorities.

SECTION 8: FIRST AID PROCEDURES

First Aid:

Eyes: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

Skin: Remove contaminate clothes as quickly as possible, protecting your own hands and body. Place victim under deluge shower. If chemical touches victim's exposed skin, such as hands, gently wash with running water and non-abrasive soap. Cold water may be used. Cover irritated skin with an emollient. Seek medical attention if irritation persists.

Inhalation: Allow victim to rest in well ventilated area. Seek medical attention

Ingestion: Remove dentures if any. Have conscious person drink several glasses of water or milk. Induce vomiting by sticking finger in throat. Lower head so vomit will not enter the mouth and throat. Never give an unconscious person anything to ingest. Seek medical attention.

SECTION 9: PRECAUTION TO BE TAKEN IN HANDLING AND STORING

Other Precautions: Keep away from heat, sources of ignition, and strong oxidizing agents. Keep container dry, tightly closed, and in well ventilated, cool place. Ground all equipment containing material. Do not ingest or inhale dust. Evaporate container residue under fume hood. Wear respiratory equipment if necessary. Avoid contact with skin and eyes.

Combustible materials should be stored away from extreme heat. If ingested, seek medical advice immediately and show the container or the label.

SECTION 10: SPECIAL PROTECTION INFORMATION

Ventilation: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits.

Eye Protection: Splash goggles

Protective Gloves: Impervious gloves

Respiratory Protection: Dust respirator (MSHA/NIOSH approved or equivalent)

Other Protective Gear: Lab coat

SECTION 11: TRANSPORT INFORMATION

DOT classification: not a DOT regulated material

DOT pictograms:

SECTION 12: OTHER REGULATORY INFORMATION

Federal and State regulations: Dithiotreitol is listed on TSCA

OSHA: hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

Canadian Environmental Protection Act: This product is on the domestic list and is acceptable for use under the provisions of CEPA

substances

WHMIS (Canada): WHMIS Class D-2B material causing other toxic effects (toxic)

DSCL (EEC): R36/38-irritating to eyes and skin
HMIS (USA): health hazard 2, fire hazard 2, reactivity 0, personal protection e