

## MATERIAL SAFETY DATA SHEET

### I PRODUCT IDENTIFICATION AND USE

SUPPLIERS NAME: Diagnostic Chemicals Limited  
16 McCarville St  
West Royalty Industrial Park  
Charlottetown, P.E.I.  
Canada C1E-2A6  
902-566-1396

CHEMICAL/PRODUCT NAME: **Sorbitol Dehydrogenase Assay**

CATALOGUE NUMBER: **740-25**

NOTE: Physical and health hazard information on reagent mixtures has not been determined. Any physical and health information noted is based 1) on evaluation of data for the pure ingredients, and 2) concentration of ingredients as packaged.

PRODUCT DESCRIPTION: For the in-vitro quantitative determination of sorbitol dehydrogenase in serum. For veterinary use only.

### II HAZARDOUS INGREDIENTS

|                            | <u>ACGIH TLV</u> (NE = Not Established) | <u>CAS</u> |
|----------------------------|---|------------|
| Reagent 1: n.ap.           |   |            |
| Reagent 1 Diluent:         |   |            |
| Tris, free base (1.2% w/v) | NE                                      | 77-86-1    |
| Chloroform (0.2% v/v)      | 10 ppm TWA                              | 67-66-3    |
| Reagent 2: n.ap.           |   |            |

### III TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY/EXPOSURE

SKIN CONTACT: [x] EYE CONTACT: [x] INHALATION: [x] INGESTION: [x] SKIN ABSORPTION [x]

#### **EFFECTS OF ACUTE EXPOSURE:**

SKIN CONTACT: May cause irritation.

EYE CONTACT: May cause irritation.

INGESTION: May be harmful if ingested.

INHALATION: May cause irritation to mucous membranes and upper respiratory tract.

**EFFECTS OF CHRONIC EXPOSURE:** Tris, free base: May cause liver and kidney damage.

Chloroform: Target organs: blood, kidneys, heart, central nervous system, liver, cardiovascular system, excretory system, reproductive system.

EVIDENCE OF **CARCINOGENICITY, TERATOGENICITY, REPRODUCTIVE TOXICITY, MUTAGENICITY:**

Chloroform: Possible cancer hazard based on tests with laboratory animals.

ACGIH: A3 - Animal Carcinogen

NIOSH: Occupational Carcinogen

NTP: Suspect Carcinogen

OSHA: Possible Select Carcinogen

IARC: Group 2B carcinogen

May cause reproductive and fetal effects. Lab experiments have resulted in mutagenic effects.

SENSITIZATION TO PRODUCT: Prolonged or repeated skin contact with Tris or chloroform may cause dermatitis.

SYNERGISTIC PRODUCTS: n.av.

LD50: Tris, free base 5900 mg/kg, Oral rat

LD50: Chloroform 695 mg/kg, Oral rat

### IV EMERGENCY AND FIRST AID MEASURES

SKIN: In case of contact, immediately flush area with plenty of water.

EYES: Immediately flush eyes with plenty of water for at least 15 minutes and get medical attention.

ORAL: If ingested drink plenty of fluids and contact a physician.

INHALATION: If inhaled remove victim to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen, and call a physician.

### V PHYSICAL DATA

PHYSICAL STATE: R1 is a lyophilized powder. R1 diluent and R2 are liquids.

APPEARANCE AND ODOUR: R1 is a white solid with no distinctive odour. R1 diluent is a clear and colourless liquid with a slight chloroform odour. R2 is a clear and colourless liquid with no distinctive odour.

ODOUR THRESHOLD: n.av.

VAPOUR PRESSURE: n.av.

VAPOUR DENSITY: n.av.

SPECIFIC GRAVITY: n.av.

EVAPORATION RATE: n.av.

MELTING POINT: n.av.

BOILING POINT: n.av.

SOLUBILITY IN WATER: Soluble

pH: R1 reconstituted with R1 diluent = 7.5 (25°C)

R2= 5.4 (25°C)

COEFFICIENT OF OIL/WATER DISTRIBUTION: n.av.

### VI FIRE AND EXPLOSION HAZARD DATA

FLAMMABLE: No

EXTINGUISHING MEDIA: As appropriate for fire in surrounding materials.

FLASH POINT: n.ap.

UPPER FLAMMABLE LIMIT: n.ap.

LOWER FLAMMABLE LIMIT: n.ap.

AUTOIGNITION TEMPERATURE: n.ap.

HAZARDOUS COMBUSTION PRODUCTS: n.av.

EXPLOSION DATA:

    SENSITIVITY TO MECHANICAL IMPACT: n.ap.

    SENSITIVITY TO STATIC DISCHARGE: n.ap.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Unknown

### VII REACTIVITY DATA

STABLE: Yes  
HAZARDOUS POLYMERIZATION: Will not occur  
INCOMPATIBILITY WITH OTHER SUBSTANCES: n.av.  
HAZARDOUS DECOMPOSITION PRODUCTS: n.av.

#### **VIII PREVENTIVE MEASURES**

LOCAL EXHAUST: Recommended when working with chloroform, otherwise not required

PROTECTIVE CLOTHING: Lab coat

PROTECTIVE GLOVES: Rubber

EYE PROTECTION: Safety glasses

OTHER PRECAUTIONS: Avoid contact and inhalation, do not get in eyes, on skin or clothing. Do not pipet by mouth. Wash contaminated clothing before reuse. Absorption of **chloroform** through the skin for prolonged periods may cause systemic poisoning.

RESPIRATORY PROTECTION: Recommended when working with hazardous raw materials (Tris and Chloroform), otherwise not normally required.

LEAK AND SPILL PROCEDURE: Absorb small leaks or spills with sponge, mop up large spills with plenty of soap and water.

WASTE DISPOSAL: Dilute with a large volume of water and dispose of in accordance with local regulations.

STORAGE REQUIREMENTS: 2-8°C

SHIPPING INFORMATION: Not regulated

#### **IX PREPARATION OF THE M.S.D.S.**

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DATE PREPARED: 10 January 2003

*\* n.av. not available n.ap. not applicable*

The information provided on this Material Safety Data Sheet is provided in the interest of promoting safe handling of the material. While this information is believed to be correct DCL makes no warranty in respect to any of the information disclosed. Observe all federal, provincial, state and local laws concerning health and pollution.

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