# **Material Safety Data Sheet**

## 1 PRODUCT IDENTIFICATION AND USE

MANUFACTURER:
Diagnostic Chemicals Limited
16 McCarville Street
West Royalty Industrial Park

Charlottetown, P.E.I. Canada C1E-2A6 +1-902-566-1396

PRODUCT NAME: Total Serum Cholesterol Assay

CATALOGUE NUMBER: 225-26, 225-S7

PRODUCT USE: For In Vitro quantitative determination of total serum cholesterol in serum.

DATE OF MSDS PREPARATION: November 29, 2007

MSDS PREPARED BY: John Gabriel

EMERGENCY TRANSPORTATION TELEPHONE NO.: 1- (902) 566-1396

### **2 COMPOSITION, INGREDIENT INFORMATION**

<u>COMPONENT</u>	CAS REGISTRY NUMBER	ACGIH TLV
Cholesterol Color Reagent: Chloramphenicol 0.1 % w/w	56-75-7	not established
Cholesterol Phenol Reagent: Phenol 0.38 % w/w p-tertiary-Octylphenoxy polyethyl alcohol 1 % w/w	108-95-2 9002-93-1	5 ppm (TWA) not established
Cholesterol Standard: Polyethylene glycol nonylphenyl ether 9.9 % w/w	9016-45-9	not established

## **3 HAZARDOUS IDENTIFICATION**

## **EMERGENCY OVERVIEW:**

To the best of our knowledge, the reagents are not hazardous as defined by OSHA (US) or WHMIS (Canada), or dangerous as defined by EU Directives.

Cholesterol Color Reagent contains <0.1 % w/w sodium azide, a toxic substance. Avoid contact with components, which contain sodium azide, and do not ingest. An accumulation of sodium azide may result in a reaction with lead or copper plumbing to form an explosive metal azide complex. If drain disposed, dilute and flush with a copious amount of running water to prevent azide build-up. Sodium azide is dangerous when in contact with acid.

Physical and health hazard information on reagent mixtures have not been fully determined.

### **POTENTIAL HEALTH EFFECTS:**

ROUTE OF ENTRY/EXPOSURE: EYE CONTACT: [X] SKIN CONTACT: [X] INHALATION: [X] INGESTION: [X] SKIN ABSORPTION: [X]

## **EFFECTS OF ACUTE EXPOSURE TO PRODUCTS:**

EYES: May cause irritation. SKIN: May cause irritation.

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

INGESTION: May be harmful if ingested.

### EFFECTS OF CHRONIC EXPOSURE TO PRODUCT:

Chloramphenicol has been reported to probably be carcinogenic by IARC, OSHA, ACGIH, NTP or EPA.

Phenol is not classifiable as to its carcinogenicity by IARC, OSHA, ACGIH, NTP or EPA. Phenol has been reported to cause abnormalities in laboratory animals.

### 4 FIRST AID MEASURES

EYES: Flush eyes with water for at least 15 minutes and obtain medical attention.

SKIN: In case of contact, immediately flush area with plenty of water. If irritation continues seek medical attention.

INHALATION: If inhaled, remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and obtain medical attention.

INGESTION: If ingested, drink plenty of fluids and obtain medical attention.

#### **5 FIRE AND EXPLOSION HAZARDS**

FLAMMABLE: No

FLASH POINT: not available

FLAMMABLE LIMITS (% in Air): Lower: not available. Upper: not available EXTINGUISHING MEDIA: As appropriate for fires in surrounding materials.

FIREFIGHTING: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

AUTOIGNITION TEMPERATURE: not available

HAZARDOUS COMBUSTION PRODUCTS: not available

EXPLOSION DATA: Sensitivity to mechanical impact: not available. Sensitivity to static discharge: not available

#### 6 ACCIDENTAL RELEASE MEASURES

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL: Ventilate the area. Wear appropriate personal protective equipment as specified in Section 8. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material and place in waste container. Wash surrounding area. Dispose of spilled and contaminated material in accordance with federal, provincial, state, and local regulations.

### 7 HANDLING AND STORAGE

HANDLING PROCEDURES AND EQUIPMENT: Avoid contact. Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.

STORAGE REQUIREMENTS: 2-8 °C

INCOMPATIBILITIES: not available

HAZARDOUS DECOMPOSITION PRODUCTS: not available

#### 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS: Local exhaust not required under normal circumstances.

PERSONAL PROTECTIVE CLOTHING (PPE): safety glasses with side-shields, lab coat, rubber nitrile or other impermeable gloves.

RESPIRATORY PROTECTION: none required.

EXPOSURE LIMITS: not available

### 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquids

COLOR: Cholesterol Color Reagent and the Cholesterol Standard are clear and colorless. Cholesterol Phenol Reagent is clear and amber.

ODOR: Odorless

ODOUR THRESHOLD: not available MELTING POINT: not available BOILING POINT: not available

SPECIFIC GRAVITY: Cholesterol Color Reagent = 1.024. Cholesterol Phenol Reagent = 1.002. Cholesterol Standard = 1.006

VAPOUR PRESSURE: not available VAPOUR DENSITY: not available WATER SOLUBILITY: soluble EVAPORATION RATE: not available

pH at 25 °C: Cholesterol Color Reagent = 6.5. Cholesterol Phenol Reagent = 6.0. Cholesterol Standard = 6.0 COEFFICIENT OF OIL/WATER DISTRIBUTION: not available

### 10 STABILITY AND REACTIVITY

STABILITY: Stable

POSSIBLE HAZARDOUS REACTIONS/CONDITIONS: not available

CONDITIONS TO AVOID: not available MATERIALS TO AVOID: not available

HAZARDOUS DECOMPOSITION PRODUCTS: not available.

### 11 TOXICOLOGICAL INFORMATION

Chloramphenicol: LD50: 2500 mg/kg, oral rat

Phenol:

LD50: 317 mg/kg, oral rat LC50: 316 mg/m3, inhalation rat

p-tertiary-Octylphenoxy polyethyl alcohol: LD50: 1800 mg/kg, oral rat

Polyethylene glycol nonylphenyl ether:

LD50: 4 gm/kg, oral rat

SENSITIZATION TO PRODUCT: not available

NAME OF TOXICOLOGICALLY SYNERGISTIC PRODUCTS: not available

IRRITANCY OF PRODUCT: not available

EVIDENCE OF CARCINOGENICITY, TERATOGENICITY, REPRODUCTIVE TOXICITY, MUTAGENICITY: no data available

#### 12 ECOLOGICAL INFORMATION

not available

### 13 DISPOSAL CONSIDERATIONS

RECOMMENDATION FOR DISPOSAL OF UNUSED PRODUCT: Observe all federal, provincial, state and local regulations. If solutions containing sodium azide are drain disposed, dilute and flush with a copious amount of running water to prevent azide build-up (See Section 3).

RECOMMENDATION FOR DISPOSAL OF PACKAGING: Observe all federal, provincial, state and local regulations.

### 14 TRANSPORT INFORMATION

SPECIAL SHIPPING INFORMATION:

Not regulated

### **15 REGULATORY INFORMATION**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulation (CPR) and the MSDS contains all the information required by the CPR.

RISK PHRASES: not required

SAFETY PHRASES: S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Toxic Substances Control Act (TSCA)

All components of this product(s) are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

All components are on the DSL or are not required to be listed

### 16 OTHER INFORMATION

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 the environment.

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