



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: Magnesium Assay (XB)
CATALOGUE NUMBER: 125-12, 125-50, 125-12-91
PRODUCT USE: For the IN VITRO quantitative determination of magnesium in serum.
DATE OF MSDS PREPARATION: November 19, 2007
MSDS PREPARED BY: John Gabriel
EMERGENCY TELEPHONE NO.: CANUTEC +1-613-996-6666

2 COMPOSITION, INGREDIENT INFORMATION

<u>HAZARDOUS INGREDIENTS</u>	<u>CAS REGISTRY NUMBER</u>	<u>ACGIH TLV</u>
Magnesium Reagent:		
Trishydroxymethylaminomethane 2.4 % w/w	77-86-1	not established
Triton X-100 1.1% v/v	9002-93-1	not established
Sodium carbonate 1.1 % w/w	497-19-8	not established
Magnesium Standard:		
Ethylene glycol 20% v/v	107-21-1	C 100 mg/m ³ (STEL)

3 HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW:

To the best of our knowledge this product is not hazardous as defined by OSHA (US) or WHMIS (Canada), or dangerous as defined by EU Directives. 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:

EVIDENCE OF CARCINOGENICITY, TERATOGENICITY, REPRODUCTIVE TOXICITY, MUTAGENICITY: No constituents recognized by IARC, ACGIH, NTP or California Proposition 65 as carcinogenic. Laboratory experiments have shown ethylene glycol causes developmental effects in 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 materials 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: 18-26°C

INCOMPATIBILITIES: None known

HAZARDOUS DECOMPOSITION PRODUCTS: none known.

8 EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROLS: Local exhaust not required under normal circumstances.

PERSONAL PROTECTIVE CLOTHING (PPE): Lab coat, safety glasses with side shields, and impermeable gloves.

RESPIRATORY PROTECTION: none required.

EXPOSURE LIMITS: not available

9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: All reagents are liquids

APPEARANCE: Magnesium Reagent is clear and blue. Standard is colorless.

ODOUR THRESHOLD: not available

MELTING POINT: not available

BOILING POINT: not available

SPECIFIC GRAVITY: Magnesium Reagent = 1.007. Standard = 1.030.

VAPOUR PRESSURE: not available

VAPOUR DENSITY: not available

WATER SOLUBILITY: soluble

EVAPORATION RATE: not available

pH at 25°C: Magnesium Reagent = 11.10-11.30. 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

Ethylene glycol
LD₅₀: 4700 mg/kg, oral rat. 10626 mg/kg, dermal rabbit

Trishydroxymethylaminomethane
LD₅₀: 5900 mg/kg, oral rat. 1800 mg/kg intravenous rat. 1210 mg/kg intravenous mouse

Triton X-100
LD₅₀: 500 mg/kg, oral rat. 8000 mg/kg, dermal rabbit

Sodium carbonate
LD₅₀: 4700 mg/kg, oral rat.
LC₅₀: 2-h 5750 mg/L

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.

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

14 TRANSPORT 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.

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.

MSDS12512-8