

MATERIAL SAFETY DATA SHEET

I PRODUCT IDENTIFICATION AND USE

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

CHEMICAL/PRODUCT NAME: **Amylase**

CATALOGUE NUMBER: **321-07, 321-15**

NOTE: Physical and health hazard information on reagent mixtures have 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 quantitative determination of amylase.

II HAZARDOUS INGREDIENTS

	<u>ACGIH TLV</u> (NE Not Established)	<u>CAS</u>
Amylase Reagent:		
-Potassium Thiocyanate 52% w/w	NE	333-20-0
-MES Free Acid 9% w/w	NE	4432-31-9
-MES Sodium Salt 11% w/w	NE	71119-23-8

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: Causes irritation

EYE CONTACT: Causes irritation.

INGESTION: Harmful if ingested.

INHALATION: Causes irritation to mucous membranes and upper respiratory tract.

EFFECTS OF CHRONIC EXPOSURE: Potassium Thiocyanate: target organs
- central nervous system, cardiovascular system, thyroid.

EVIDENCE OF CARCINOGENICITY, TERATOGENICITY,
REPRODUCTIVE TOXICITY, MUTAGENICITY: n.av.

SENSITIZATION TO PRODUCT: n.av.

SYNERGISTIC PRODUCTS: n.av.

LD50: Potassium thiocyanate 854 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: Solid
APPEARANCE AND ODOUR: Off white powder, 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: 6.25 - 6.29
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: Emits toxic fumes under fire conditions.

VII REACTIVITY DATA

STABLE: Yes
HAZARDOUS POLYMERIZATION: Will not occur

INCOMPATIBILITY WITH OTHER SUBSTANCES: **Potassium Thiocyanate**: moisture, acids (liberates very toxic gases), strong bases. MES Free Acid and

MES Sodium salt: strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: MES Free Acid, MES Sodium salt & Potassium Thiocyanate: carbon monoxide, carbon dioxide, sulfur oxides, nitrogen oxides. MES Sodium salt also: sodium and sodium oxides. Potassium Thiocyanate also: potassium and hydrogen cyanide.

VIII PREVENTIVE MEASURES

LOCAL EXHAUST: 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.

RESPIRATORY PROTECTION: Respirator recommended when working with large amounts..

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 into sewer system, 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: 29 January 2002

** 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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