

MATERIAL SAFETY DATA SHEET

I PRODUCT IDENTIFICATION AND USE

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

CHEMICAL/PRODUCT NAME: **Alkaline Phosphatase -SL**

CATALOGUE NUMBER: **328-10, 328-17, 328-30**

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 quantitative determination of alkaline phosphatase in human serum.

II HAZARDOUS INGREDIENTS

	<u>ACGIH TLV</u>	(NE = Not Established)	<u>CAS</u>
Reagent 1: 2-amino-2-methyl-1-propanol 8%v/v	NE		124-68-5
12N Hydrochloric acid 1.1% v/v	C 5ppm		7647-01-0
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: R1 Contact will cause burns.

EYE CONTACT: R1 Contact will cause burns.

INGESTION: R1 is Harmful if ingested.

INHALATION: R1 Harmful if inhaled.

EFFECTS OF CHRONIC EXPOSURE: Hydrochloric acid: may cause fetal and mutagenic effects. IARC Group 3 carcinogen. Extremely destructive to tissue of mucous membranes and respiratory tract, eyes and skin.

EVIDENCE OF **CARCINOGENICITY**, TERATOGENICITY, REPRODUCTIVE TOXICITY, **MUTAGENICITY**: Hydrochloric acid: may cause fetal effects and mutagenic effects. IARC Group 3 carcinogen.

SENSITIZATION TO PRODUCT: Prolonged or repeated skin contact with hydrochloric acid may cause dermatitis.

SYNERGISTIC PRODUCTS: n.av.

LD50: 2-Amino-2-methyl-1-propanol, oral rat 2900 mg/kg.
LD50: Hydrochloric acid, oral rabbit 900mg/kg

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 liquid, R2 is a liquid.

APPEARANCE AND ODOUR: R1 is clear and colourless; R2 is a clear yellow liquid.

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 = 10.5 @ 25° C; R2 = 8.6 @ 25° C

COEFFICIENT OF OIL/WATER DISTRIBUTION: n.av.

VI FIRE AND EXPLOSION HAZARD DATA

FLAMMABLE: 2-Amino-2-methyl-1-propanol is a combustible liquid.

EXTINGUISHING MEDIA: As appropriate for fire in surrounding materials.

FLASH POINT: R1 >67°C (2-Amino-2-methyl-1-propanol has a FP of 67°C).

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: Amino-2-methyl-1-propanol: copper, brass, aluminum, and oxidizing agents.
Hydrochloric acid: bases and oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Burning may produce carbon dioxide, carbon monoxide or nitrogen oxides.

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 preparing the Buffer reagent (R1), or when exposed to large amounts of it.

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

WASTE DISPOSAL: Neutralize the Buffer reagent (R1) with a weak base. Dilute R2 with a large volume of water. Dispose of into sewer system, in accordance with local regulations.

STORAGE REQUIREMENTS: 2-8°C

**SHIPPING INFORMATION: Reagent 1: Corrosive Liquid NOS (2-amino-2-methyl-1-propanol) UN 1760 Class 8 Packing Group III. PCKG instruction 818 (passenger air) 5 L; PCKG instruction 820 (cargo air) 60 L. PCKG instruction Y818 1 L
Reagent 2: not regulated.**

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

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DATE: April 26, 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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