

## 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: **Total Protein (Micro) Assay**

CATALOGUE NUMBER: **450-50**

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 total protein.

### II HAZARDOUS INGREDIENTS (NE not established)

#### ACGIH TLV

#### CAS

Total Protein Reagent: n.ap.  
Total Protein Standard: 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:** None anticipated.

SKIN CONTACT: May cause irritation.

EYE CONTACT: May cause irritation.

INGESTION: May be harmful if swallowed.

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

**EFFECTS OF CHRONIC EXPOSURE** n.av.

EVIDENCE OF CARCINOGENICITY, TERATOGENICITY,  
REPRODUCTIVE TOXICITY, MUTAGENICITY: No data available.

SENSITIZATION TO PRODUCT: n.av.

SYNERGISTIC PRODUCTS: n.av.

LD50: Methanol 5628 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: Liquid  
APPEARANCE AND ODOUR: The reagent is clear red and the standard is clear and colourless.  
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: Reagent = 2.25, Standard = 7  
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: None known

HAZARDOUS DECOMPOSITION PRODUCTS: n.av.

## **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: None 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: Dispose of in accordance with all applicable provincial, federal, state and local regulations.

STORAGE REQUIREMENTS: Refrigerate @ 2-8 °C

**SHIPPING INFORMATION: Not regulated**

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

PREPARED BY: Denise Bustard  
PHONE NO: 902-566-1396  
DATE: 15 March 2004

*\* 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.

MSDS45050-4