

IMPORTANT NOTICE CONCERNING MATERIAL SAFETY DATA SHEET/SAFETY DATA SHEET INFORMATION

Dear Valued Customer,

Sekisui Diagnostics (formerly Genzyme Diagnostics) is working to update all existing documentation in light of the change to our company name and corporate ownership. This includes the (Material) Safety Data Sheets ((M)SDSs) provided with our products.

The following contact information relative to (M)SDSs has changed effective immediately:

Corporate Headquarters:

Sekisui Diagnostics, LLC 31 New York Avenue Framingham, MA 01701 USA www.sekisuidiagnostics.com

Phone: 800-332-1042

Manufacturer:

Sekisui Diagnostics P.E.I. Inc. 70 Watts Avenue Charlottetown, Prince Edward Island C1E 2B9, Canada www.sekisuidiagnostics.com

Phone: 800-565-0265

Emergency Telephone Numbers:

Americas: 1-760-476-3962

Europe, Middle East & Africa: +1-760-476-3961

Asia Pacific: +1-760-476-3960

Access Code: 333512

Please feel free to use the information provided above to contact us with any questions pertaining to (M)SDSs.

Tel: 800-332-1042 Fax: 508-271-9399

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: Urea (Rate) Assay Kit

CATALOGUE NUMBER: 275-06, 275-06I, 275-11, 275-13, 275-11-50

Physical and health hazard information on reagent mixtures have not been determined. Any physical and health information noted NOTE:

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 urea.

II HAZARDOUS INGREDIENTS (NE not established)

ACGIH TLV CAS Urea Reagent: 3% α-Ketoglutaric acid NE 328-50-7 Urea Standard: 30% Ethylene glycol 107-27-1 50 ppm

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: May cause irritation. Urea standard may be absorbed.

EYE CONTACT: Contact with Urea Standard causes irritation, contact with

Urea reagent may cause irritation.

INGESTION: May be harmful if swallowed.

INHALATION: May cause irritation to mucous membranes and upper

respiratory tract.

EFFECTS OF CHRONIC EXPOSURE: Prolonged or repeated exposure to the Urea Reagent may cause an allergic reaction in certain sensitive individuals. Ethylene glycol: may cause kidney injury; has caused adverse reproductive and fetal effects in animals. ACGIH: Class A - not classifiable as a Human carcinogen (aerosol). Target organs: kidneys, heart, central

nervous system.

EVIDENCE OF CARCINOGENICITY, TERATOGENICITY, REPRODUCTIVE TOXICITY, MUTAGENICITY: Ethylene glycol: may cause kidney injury; has caused adverse reproductive and fetal effects in animals. ACGIH: Class A - not classifiable as a Human carcinogen (aerosol).

SENSITIZATION TO PRODUCT: Prolonged or repeated exposure to the Urea Reagent may cause an allergic reaction in certain sensitive individuals.

SYNERGISTIC PRODUCTS: n.av.

LD50: Ethylene glycol, oral rat 4700 mg/kg LD50: alpha-ketoglutaric acid, n.av.

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: Urea Reagent is a solid, the Urea Standard is a liquid.

APPEARANCE AND ODOUR: Urea Reagent, off white powder, Urea Standard is a clear colourless solution.

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: Urea reagent = 7.6, after recon. Urea Standard n.av.

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.

 $\label{eq:hazardous} \begin{array}{lll} \text{HAZARDOUS} & \text{COMBUSTION} & \text{PRODUCTS:} & \text{Carbon} & \text{dioxide,} & \text{carbon} \\ \text{monoxide.} & \end{array}$

EXPLOSION DATA:

SENSITIVITY TO MECHANICAL IMPACT: n.ap. SENSITIVITY TO STATIC DISCHARGE: n.ap.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Ethylene glycol: imitating and toxic fumes and gases.

VII REACTIVITY DATA

STABLE: Yes

HAZARDOUS POLYMERIZATION: Will not occur

INCOMPATIBILITY WITH OTHER SUBSTANCES: Urea Standard; strong acids, strong bases and strong oxidizing agents. Ethylene glycol: avoid ignition sources, excess heat, strong oxidants; causes ignition at RT with chromium trioxide, potassium permanganate, and sodium peroxide. Urea Reagent;: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. Wash contaminated clothing before reuse.

RESPIRATORY PROTECTION: None normally required. Respirator recommended when working with raw materials or large volumes of reagent/standard.

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

WASTE DISPOSAL: Dispose of in accordance with all applicable federal, provincial, 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: March 12, 2004

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.

MSDS27511-5

^{*} n.av. not available n.ap. not applicable