



## 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: Total Bilirubin L3K®  
CATALOGUE NUMBER: 285-10, 285-30, 285-50A, 285-50B, 285-OP  
PRODUCT USE: For IN VITRO quantitative determination of bilirubin (total) in serum.  
DATE OF MSDS PREPARATION: April 27, 2007  
MSDS PREPARED BY: John Gabriel  
EMERGENCY TELEPHONE NO.: 1- (902) 566-1396

### 2 COMPOSITION, INGREDIENT INFORMATION

<u>COMPONENT</u>	<u>CAS REGISTRY NUMBER</u>	<u>ACGIH TLV</u>
<b>Accelerator Reagent (R1):</b> Hydrogen chloride 0.8 % w/w	7647-01-0	C 2 ppm STEL
<b>Diazo Reagent (R2):</b> Hydrogen chloride 0.5 % w/w	7647-01-0	C 2 ppm STEL

### 3 HAZARDOUS IDENTIFICATION

#### EMERGENCY OVERVIEW:

May be harmful if swallowed. Physical and health hazard information on reagent mixtures has 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. No human data on teratogenicity, embryo toxicity or mutagenicity.

### 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 material 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: 2-8 °C

INCOMPATIBILITIES: not available

HAZARDOUS DECOMPOSITION PRODUCTS: not available

## **8 EXPOSURE CONTROLS, PERSONAL PROTECTION**

ENGINEERING CONTROLS: Local exhaust not required under normal circumstances.  
PERSONAL PROTECTIVE CLOTHING (PPE): safety glasses with side-shields, lab coat, rubber nitrile or other impermeable gloves.  
RESPIRATORY PROTECTION: none required.  
EXPOSURE LIMITS: not available

## **9 PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL STATE: All reagents are liquids  
APPEARANCE: R1 is clear and colorless; R2 is clear with a slight peach color.  
ODOUR THRESHOLD: not available  
MELTING POINT: not available  
BOILING POINT: not available  
SPECIFIC GRAVITY: not available  
VAPOUR PRESSURE: not available  
VAPOUR DENSITY: not available  
WATER SOLUBILITY: soluble  
EVAPORATION RATE: not available  
pH at 25 °C: R1=0.74; R2=<1.0  
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**

LD<sub>50</sub>: Hydrogen chloride 900 mg/kg, oral rabbit  
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**

SPECIAL SHIPPING INFORMATION:

R1 and R2: UN1789, Hydrochloric acid solution, Class 8, Packing Group II

## **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: R36/38 Irritating to eyes and skin.

SAFETY PHRASES: S24/25 Avoid contact with skin and eyes

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S27/28 After contact with skin, take off immediately

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.

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