

# Material Safety Data Sheet

## LDH-L

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** LDH-L

**Catalog Numbers:** TR20003, TR20004, TR20010, TR20015, 1670-200, 1670-500, BU2001-BP, UV2001xxxx-BP, VC2001xxxx, VT2001xxxx

**Use:** This reagent is intended for the in vitro quantitative determination of LDH (L-Lactate: NAD oxidoreductase EC 1.1.1.27) in human serum on both manual or automated systems.

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**Contact Point**

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### 2. HAZARD IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO EU CRITERIA

**Hazard Classification:** HAZARDOUS SUBSTANCE, NON DANGEROUS GOODS.

**Hazard Category:** Irritant

**RISK PHRASES**

R36/38 Irritating to eyes and skin.

**SAFETY PHRASES**

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

**Poison Schedule:** None allocated.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME	Proportion	CAS Number
TRIS(HYDROXYMETHYL)AMINOMETHANE	30 to 60 %	77-86-1
FILLERS, ADDITIVES NON-HAZARDOUS	Balance	Mixture

All other ingredients determined not to be hazardous according to the EU criteria.

### 4. FIRST AID MEASURES

**Swallowed:**

If swallowed, **DO NOT** induce vomiting. Give 1 to 2 glasses of water to drink. If irritation persists transport to hospital or doctor.

**Eye:**

If dust enters the eyes, immediately, flush with plenty of water or normal saline for 15 minutes, occasionally lifting eye lids, until no evidence of chemical remains. If irritation persists, immediately transport to hospital or doctor.

**Skin:**

If dust is falls onto the skin, remove any contaminated clothing and wash skin thoroughly with soap and water. If irritation persists transport to hospital or doctor.

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### 4. FIRST AID MEASURES (continued)

**Inhaled:**

Move victim to fresh air. Apply resuscitation if victim is not breathing - If trained personnel available administer oxygen if breathing is difficult.

**First Aid Facilities:**

Eye wash fountain, safety shower and normal wash room facilities.

**Advice to Doctor:**

Treat symptomatically.

**In case of poisoning, contact Poisons Information Centre**

**In Australia call Tel: 131126**

**In New Zealand Tel: 034747000**

### 5. FIRE-FIGHTING MEASURES

**Fire/Explosion Hazard**

If safe to do so, move undamaged containers from fire area.

**Hazardous Decomposition Products:** Decomposes on heating emitting oxides of carbon and oxides of nitrogen.

**Fire Fighting Procedures:** Fire fighters to wear Self-contained breathing apparatus (SCBA) in confined spaces, in oxygen deficient atmospheres or if exposed to products of decomposition. Full protective clothing is also recommended.

**Extinguishing Media:** Use extinguishing media suitable for surrounding fire situation.

**Flammability**

This material is not a combustible or flammable solid.

### 6. ACCIDENTAL RELEASE MEASURES

Avoid generating dusts. Wear suitable protective equipment. Ventilate area. If possible wet area down to prevent high dust levels. If available, use dustless methods, such as a HEPA vacuum and filter. Otherwise, use a non-sparking shovel and place into a suitably labeled container for later disposal. **Do not dry sweep.**

### 7. HANDLING AND STORAGE

Store in a cool place and out of direct sunlight. Store away from strong acids. Keep containers closed, when not using the product. Store at 2-8°C and the reagent will be stable until the expiry date stated on the bottle and kit box labels. Store in original packages as approved by manufacturer.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Standards**

The National Occupational Health & Safety Commission (NOHSC) has not assigned any exposure standards for this product or for any of the components, however, it is recommended that an exposure standard of 10 mg/m<sup>3</sup> be adopted for nuisance dusts.

**Engineering Controls**

Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate.

**Personal Protection Equipment**

**GLOVES:** Nitrile or neoprene.

**EYES:** Chemical glasses or goggles.

**RESPIRATORY PROTECTION:** Avoid breathing of dusts. The use of a respirator is not normally required, however, if high dust levels are present, then the use of a suitable dust mask or half-face respirator fitted with a P1 filter is recommended. All respirators must comply with AS/NZS 1715 and AS/NZS 1716.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	White to off white powder with no odour.
<b>Boiling Point:</b>	Not available.
<b>Freezing Point:</b>	Not available.
<b>Vapour Pressure:</b>	Not available.
<b>Specific Gravity:</b>	Not available.
<b>Flash Point:</b>	Not applicable.
<b>Flammability Limits:</b>	Not applicable.
<b>Solubility in Water:</b>	Completely miscible.

#### Other Properties

**pH:**  $9.0 \pm 0.1$  @ 20°C (at use concentrations)

### 10. STABILITY AND REACTIVITY

#### STABILITY:

Stable under normal conditions of use.

#### HAZARDOUS DECOMPOSITION PRODUCTS:

Decomposes on heating emitting oxides of carbon and oxides of nitrogen.

#### HAZARDOUS POLYMERIZATION:

Will not occur.

#### INCOMPATIBILITIES:

Strong mineral acids and oxidizing agents.

#### CONDITIONS TO AVOID:

Incompatibles.

### 11. TOXICOLOGICAL INFORMATION

There is no toxicological information available for this product.

#### ACUTE HEALTH EFFECTS

##### Swallowed:

May cause irritation to mouth, throat and stomach.

##### Eye:

Will cause irritation to the eyes, with effects including: tearing, pain, stinging and blurred vision.

##### Skin:

Will cause irritation to the skin, with effects including; Redness, itchiness, and drying/defatting.

##### Inhaled:

Dusts from the product may cause irritation to the nose, throat and respiratory system.

##### Chronic:

Prolonged or repeated skin contact may lead to skin rashes and potential dermatitis. Prolonged eye contact with the dust may cause severe and possible permanent injury.

### 12. ECOLOGICAL INFORMATION

There is no ecological information available for this product, however, it is considered relatively inert to the environment and it is anticipated that the TRIS will breakdown.

#### Ecotoxicity:

No information for product.

#### Mobility:

No information for product.

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## 12. ECOLOGICAL INFORMATION

**Persistence / Degradability:**

No information for product.

**Chemical Fate Information:**

No information available.

Do not dispose of large quantities to waterways, drains or sewers.

## 13. DISPOSAL CONSIDERATIONS

Refer to appropriate authority in your State. Normally suitable for disposal by approved waste disposal agent.

## 14. TRANSPORT INFORMATION

**UN Number:** None allocated

**Proper Shipping Name:** NONE ALLOCATED

**Dangerous Goods Class:** None allocated

**Subsidiary risk:** None allocated

**Packing Group:** None allocated

**Hazchem Code:** None allocated

**Road and Rail Transport:**

Not classified as a Dangerous Good according to the United Nations Recommendations for the Transport of Dangerous Goods and Globally Harmonized System for the classification and labelling of Chemicals.

**Air Transport:**

Not classified as a Dangerous Good according to the International Civil Aviation Organization (ICAO) and International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

**Marine Transport:**

Not classified as a Dangerous Good according to the International Maritime Organization Rules (Maritime Dangerous Goods Code - IMDG Code) for transport by sea.

## 15. REGULATORY INFORMATION

**Poison Schedule:** None allocated.

**Inventory Status:**

Australia (AICS)	Y
United States (TSCA)	Y
Canada (DSL)	Y
Europe (EINECS/ELINCS)	Y
Japan (MITI)	Y
South Korea (KECL)	Y

Y = all ingredients are on the inventory.

## 16. OTHER INFORMATION

Issue date: July, 2004

**Reasons for Update:**

1. Alignment with the 2<sup>nd</sup> Edition of National Code of Practice for the Preparation of Material Safety Data Sheets [NOHSC:2001(2003).
2. Changes and /or addition made to all sections.

**Key Legend Information:**

NOHSC - National Occupational Health & Safety Commission [Aust]

TWA - Time Weighted Average [Int]

STEL - Short Term Exposure Limit [Int]

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## 16. OTHER INFORMATION (continued)

AICS - Australian Inventory of Chemical Substances

EPA - Environmental Protection Agency [Int]

NIOSH - National Institute for Occupational Safety and Health [US]

AS/NZS 1715 - Selection, use and maintenance of respiratory protective devices. [Aust]

AS/NZS 1716 - Respiratory protective devices. [Aust]

IATA - International Aviation Transport Authority [Int]

ICAO - International Civil Aviation Organization

IM IMDG - International Maritime Dangerous Goods

United Nations Recommendations for the Transport of Dangerous Goods and Globally Harmonized System for the classification and labelling of Chemicals. [Int]

EU - European Union

[Aust/NZ] = Australian/New Zealand

[Int] = International

[US] = United States of America

### Principal References:

Information supplied by manufacturer, reference sources including the public domain.

### Disclaimer

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

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**END OF MSDS**