

SAFETY DATA SHEET: 100x concentrate LBSD-X buffer

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier Product name LBSD-X buffer

1.2 Relevant Identified Uses of the Substance/Mixture and Uses Advised Against
Investigational research by professional users

1.3 Details of the Supplier of the Safety Data Sheet

MAP Diagnostics Ltd, The iLAB Stannard Way, Priory Business Park, Bedford,
Bedfordshire MK44 3RZ

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 [EU-GHS/CLP]

Acute toxicity; Category 4 ; Oral

H302 Harmful if swallowed.

Skin corrosion; Category 1B

H314 Causes severe skin burns and eye damage.

Specific target organ toxicity - repeated exposure; Category 2

H373 May cause damage to organs through prolonged or repeated exposure.

Acute aquatic toxicity; Category 1

H400 Very toxic to aquatic life.

Chronic aquatic toxicity; Category 1

H410 Very toxic to aquatic life with long lasting effects.

2.2 Label Elements

GHS LABEL ELEMENTS AND CLASSIFICATION

GHS Label Elements



WARNING

H302 - Harmful if swallowed

H314 : Causes severe skin burns and eye damage.

H373 : May cause damage to organs through prolonged or repeated exposure.

H410 : Very toxic to aquatic life with long lasting effects.



- P273 : Avoid release to the environment.
- P280 : Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P305 + P351 + P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 : Immediately call a POISON CENTER or doctor/ physician.



- R22 : Harmful if swallowed.
- R48/22 : Harmful: danger of serious damage to health by prolonged exposure if swallowed.
- R34 : Causes burns.
- R50 : Very toxic to aquatic organisms.



- S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S28 : After contact with skin, wash immediately with plenty of soap and water.
- S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection.
- S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S60 : This material and its container must be disposed of as hazardous waste.
- S61 : Avoid release to the

2.3 Other Hazards

None found.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Chemical Names/Description **Mixture**

SECTION 4 - FIRST AID MEASURES

4.1 Description of First Aid Measures

Inhalation

Move to fresh air. If breathing is irregular or stopped, administer artificial respiration. Give oxygen. First aider needs to protect himself. Call a physician immediately.

Ingestion

Call a physician immediately. Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person

Skin

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eyes

Immediately flush eyes with plenty of water for at least fifteen minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

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4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Inhalation

Symptoms may include coughing, shortness of breath.

Ingestion

Symptoms may include nausea, vomiting, diarrhea, drunkenness, and bluish skin color.

Skin

Symptoms include redness, itching, and pain.

Eyes

Symptoms include redness, and pain.

4.2 Most important symptoms and effects both acute and delayed

Unknown

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Unknown/not applicable

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media

Water spray, dry chemical, alcohol-resistant foam, or carbon dioxide.

5.2 Special Hazards Arising from the Substance/Mixture

Toxic gases may be involved in fires of this product.

Hazardous Decomposition Products

Burning may produce carbon monoxide, carbon dioxide,

Hazardous Polymerization

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

5.3 Advice for Firefighters

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

5.4 Further Information

No data available.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

Wear appropriate protective equipment as specified in Section 8.

6.2 Environmental Precautions

Prevent discharge into the environment. Dike spills and stop leakage where practical. Do not allow material to enter drains.

6.3 Methods and Materials for Containment and Cleaning Up

Use absorbent material to collect and contain for salvage or disposal.

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6.4 References to Other Sections

For disposal information, see Section 13. For protective clothing and equipment, see Section 8.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

7.2 Conditions for Safe Storage (including any incompatibles)

To maintain product quality, do not store in heat or direct sunlight.

7.3 Specific End Uses

Investigational research by professional users

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS

8.1 Control Parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure Controls

Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source.

Respiratory Protection

For conditions of use where exposure to the dust or mist is apparent, a full-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator.

Eye Protection

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Skin Protection

Wear protective gloves and clean body covering clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical & Chemical Properties

a. Appearance	Liquid	b. Odor	Disagreeable odor
c. Odor Threshold	N.A.	d. pH	10(30% solution)
e. Melting/Freezing Point (°C)	108F (42C)	f. Boiling point (°C)	260F (127C)
g. Flash Point (°C)	>109	h. Evaporation Rate	N.A.
i. Flammability	N.A.	j. Upper/Lower Flammability or Explosive Limits	N.A.
k. Vapor Pressure	23 hPa (20oC)	l. Vapor Density (Air = 1)	5.3
m. Relative Density	0.967	n. Water Solubility	Soluble

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o. Partition Coefficient n-octanol/water	N.A.	p. Autoignition Temperature (°C)	N.A.
q. Decomposition Temperature (°C)	N.A.	r. Viscosity	No data available.
s. Explosive Properties	N.A.	t. Oxidizing Properties	not an oxidizer

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

Stable under recommended storage conditions ass concentrate.

10.2 Chemical Stability

Stable under ordinary conditions of use and storage.

10.3 Possibility of Hazardous Reactions

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

10.4 Conditions to Avoid

No data

10.5 Incompatible Materials

No data

10.6 Hazardous Decomposition Products

Burning may produce carbon monoxide, carbon dioxide, and/or Nitrous oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

Product LD50 Values

Oral Rat LD50 (mg/kg) 8710mg/Kg

Dermal Rabbit LD50 (mg/kg) >20,000mg/kg

Component Cancer List Status

Unknown

Potential Health Effects

Inhalation

Causes irritation to the respiratory tract. Can cause nausea, headache and vomiting. Exposure may result in blood in urine, difficulty breathing, irregular heartbeat, anaemia, weakness, drunkenness, bluish skin colour, lung congestion, kidney damage, paralysis, convulsions unconsciousness and coma. Thiols may cause central nervous system depression (CNS).

Ingestion

Exposure can cause headache, weakness, restlessness, paralysis and coma.

Skin

Exposure may cause irritation and possible burns to the skin. May cause dermatitis.

Eyes

Contact with the eye may cause sever irritation, and possible eye burns.

Carcinogenicity

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No information is available.

Mutagenicity

No information is available.

Reproductive Toxicity

No information is available.

Teratogenic Effects

No information is available.

Routes of Entry

Contact with this material by any route of exposure (eye/skin, inhalation or ingestion) may cause serious adverse health consequences.

Target Organ Statement

No information is available.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	No data	ca. 20 mg/l Species: Daphnia magna (Water flea) Immobilization Exposure time: 24 h Method: OECD Test Guideline 202	No data	10-50 mg/l Species: Pseudomonas puti
	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

12.2 Persistence and Degradability

The surfactant(s) contained in this mixture complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

12.3 Bioaccumulative Potential

No data

12.4 Mobility in Soil

No data

12.5 Results of PBT and vPvB Assessment

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other Adverse Effects

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None

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Offer surplus or non-recyclable product to licensed disposal company. Disposal is subject to user compliance with applicable law and product characteristics at time of disposal. Dispose of packaging as product.

SECTION 14 - TRANSPORT INFORMATION

	ADR/RID	IATA	IMO	DOT
14.1 UN Number	N.A.	N.A.	N.A.	N.A.
14.2 Shipping Name	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.3 Hazard Class	N.A.	N.A.	N.A.	N.A.
14.4 Packing Group	N.A.	N.A.	N.A.	N.A.
14.5 Environmental Hazards	N.A.	N.A.	N.A.	N.A.
14.6 Special Precautions	N.A.	N.A.	N.A.	N.A.

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance/Mixture

United States

TSCA Regulatory Statement

SARA 311/312 Hazard Categories

Europe

EEC Regulatory

SECTION 16 - OTHER INFORMATION

Full text of H-Statements H301

Toxic if swallowed.

H314

Causes severe skin burns and eye damage.

H373

May cause damage to organs through prolonged or repeated exposure.

H400

Very toxic to aquatic life.

H410

Very toxic to aquatic life with long lasting effects.

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