

Material Safety Data Sheet

Section 1. Identification of the Substance/Mixture

Product name: LiDirect™ Genotyping DNA Extraction Buffer

Cat. #: M0014

Manufacturer/Supplier identification

Life Science Biotechnology LLC

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Tel: +1-301-328-1977

Email: info@lifescb.com

For research use only. Not for use in diagnosis procedures

Section 2. Hazards Identification

GHS Classification

Signal Word:	None
Hazard pictograms:	None
Health hazards:	Not hazardous
Physical hazards:	Not hazardous
Environmental hazards:	Not hazardous
Hazard Statements:	Not Applicable
Prevention:	Not Applicable
Response:	Not Applicable
Disposal:	Not Applicable
Other hazards:	Not Applicable

HMIS

Health	0
Flammability	0
Reactivity	0

Section 3. Composition/Information on Ingredients

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

Section 4. First Aid Measures

Description of first aid measures

Skin contact	Rinse skin with water. Immediate medical attention is not required.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.
Inhalation	Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
Notes to Physician	Treat symptomatically.
Most important symptoms and effects, both acute and delayed	Not Applicable
Indication of any immediate medical attention and special treatment needed	None.

Section 5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical.
Unsuitable extinguishing media	No information available.

Special hazards arising from the substance or mixture
Not known

Protective equipment and precautions for firefighters
Standard procedure for chemical fires.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation
Always wear recommended Personal Protective Equipment Use personal protection equipment
See section 8 for more information

Environmental precautions
No special environmental precautions required.

Methods and material for containment and cleaning up
Soak up with inert absorbent material.

Reference to other sections
See section 8 for more information.

Section 7. Handling and Storage

Precautions for safe handling
Use personal protective equipment as required. No special handling advices are necessary.

Conditions for safe storage, including any incompatibilities
Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Specific end use(s)
For research use only.

Section 8. Exposure Controls/Personal Protection

Control parameters

Exposure Limits	Contains no substances with occupational exposure limit values.
Engineering Measures	Ensure adequate ventilation, especially in confined areas.

Exposure controls

Personal Protective Equipment

Respiratory protection	In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.
Hand protection	Wear suitable gloves. Glove material: Compatible chemical-resistant gloves.
Eye protection	Tight sealing safety goggles.
Skin and Body Protection	Wear suitable protective clothing.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No special environmental precautions required.

Section 9. Physical and Chemical Properties

Information on basic physical and chemical

properties Appearance	liquid
Odor	No data
Odor Threshold	No data
Molecular Weight	No data
Melting point / melting range	°C No data
Boiling point / boiling range	°C No data
Flash point	°C No data
Autoignition Temperature	°C No data
Decomposition temperature	°C No data
Evaporation rate	No data
Flammability (solid, gas)	No data
Upper explosion limit	No data
Lower explosion limit	No data
Vapor Pressure	No data
Vapor density	No data
Relative density	No data
Specific gravity	No data
Solubility	No data

Partition coefficient:

n-octanol/water	No data
Viscosity	No data
Explosive properties	No data
Oxidizing properties	No data
Other information	No data.

Section 10. Stability and Reactivity

Reactivity	None known.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Hazardous reaction has not been reported.
Conditions to avoid	No information available.
Incompatible materials	No dangerous reaction known under conditions of normal use.
Hazardous decomposition products	No data available

Section 11. Toxicological information

Information on toxicological effects

There is no evidence available indicating acute toxicity.

Principal Routes of Exposure

Acute toxicity	Data are conclusive but insufficient for classification.
Skin corrosion/irritation	Data are conclusive but insufficient for classification
Serious eye damage/irritation	Data are conclusive but insufficient for classification
Respiratory or skin sensitization	Data are conclusive but insufficient for classification
Specific target organ toxicity (STOT)–singleexposure	Data are conclusive but insufficient for classification
Specific target organ toxicity (STOT)–repeatedexposure	Data are conclusive but insufficient for classification
Carcinogenicity	Data are conclusive but insufficient for classification
Germ cell mutagenicity	Data are conclusive but insufficient for classification
Reproductive toxicity	Data are conclusive but insufficient for classification
Aspiration hazard	Data are conclusive but insufficient for classification

Section 12. Toxicological information

Ecotoxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

Mobility in soil No information available.

Persistence and degradability No information available.

Bioaccumulative potential No information available.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other adverse effects No information available

Section 13. Disposal considerations

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

Section 14. Transport Information

IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations

UN number Not Applicable

UN proper shipping name Not Applicable

Transport hazard class(es) Not Applicable

Packing group Not Applicable

Environmental hazards Not Applicable

Special precautions for user Not Applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not Applicable.

Section 15. Regulatory Information

US Federal Regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

National Regulations - Brazil

Not regulated

Section 16. Other Information

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

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End of Material Safety Data Sheet