SECTION 1: Identification

1.1 Product identifier

Product name 100mM DTT

1.2 Other means of identification

Item number: DTT-100

1.3 Recommended use of the chemical and restrictions on use

Laboratory Chemicals

1.4 Supplier's details

Name Empirical Bioscience
Address 4635 40th Street SE
Grand Rapids, MI 49512
USA

Telephone 1-877.479.9949
Email empirical-customer.service@fortislife.com

1.5 Emergency phone number(s)

1-877.479.9949

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: (US) OSHA (29 CFR 1910.1200) and Regulation (EC) No 1272/2008 [CLP]

Not a hazardous substance or mixture.

2.2 GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Hazards not otherwise classified (HNOC)

No data available.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

Component	Concentration
DL-Dithiothreitol (CAS no.: 27565-41-9; EC no.: 3483-12-3)	**<10 %**

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled	Remove to fresh air and promote deep breathing. Get medical attention if effects persist.
In case of skin contact	Wash with plenty of soap and water. Get medical attention if irritation develops or persists.
In case of eye contact	Rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation, get medical attention
If swallowed	If the patient feels unwell or is concerned, obtain medical advice.

4.2 Most important symptoms/effects, acute and delayed
None, No further relevant information available.

4.3 Indication of immediate medical attention and special treatment needed, if necessary
No further relevant information available.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Specific hazards arising from the chemical
None known, No further relevant information available.

5.3 Special protective actions for fire-fighters
No special advice.

Further information
No data available.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Not required.

6.2 Environmental precautions
Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

6.3 Methods and materials for containment and cleaning up
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Reference to other sections
See Section 7 for information on safe handling.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.

Specific end use(s) No further relevant information available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. Additional information: The lists that were valid during the creation were used as basis

8.2 Appropriate engineering controls
Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Pictograms



Eye/face protection
Safety glasses are recommended.

Skin protection
Wear protective gloves, such as nitrile gloves.

Body protection
Not required.

Respiratory protection
Not required.

Thermal hazards
No data available.

Environmental exposure controls
No data available.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Colorless liquid
Odor	Characteristic
Odor threshold	No data available.
pH	No data available.
Melting point/freezing point	No data available.
Initial boiling point and boiling range	No data available.
Flash point	Not flammable.
Evaporation rate	No data available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability limits	No data available.
Upper/lower explosive limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	No data available.
Density	No data available.
Solubility(ies)	Fully miscible with water.
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	Not applicable.
Decomposition temperature	No data available.
Viscosity	No data available.
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Organic Solvents	0%
Water	No data available.
Solids content	No data available.

Other safety information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
Non-reactive under normal use conditions.

10.2 Chemical stability
Stable under normal storage conditions.

10.3 Possibility of hazardous reactions
No data available.

10.4 Conditions to avoid
No data available.

10.5 Incompatible materials
No further relevant information available.

10.6 Hazardous decomposition products
No dangerous decomposition products known.

SECTION 11: Toxicological information

Information on toxicological effects
Likely Routes of Exposure: Eye contact. Skin contact. Inhalation.

Acute toxicity
Based on available data, classification data are not met.
LD/LC50 values that are relevant for classification: No data available.

Skin corrosion/irritation
No irritant effect.

Serious eye damage/irritation
No irritant effect.

Respiratory or skin sensitization
No irritant effect.

Germ cell mutagenicity
Based on available data, classification data are not met.

Carcinogenicity
Based on available data, classification data are not met.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity
Based on available data, classification data are not met.

STOT-single exposure
Based on available data, classification data are not met.

STOT-repeated exposure
Based on available data, classification data are not met.

Aspiration hazard
Based on available data, classification data are not met.

Additional information
No further relevant information available.

SECTION 12: Ecological information

Toxicity
No data available on product

Persistence and degradability
No data available on product

Bioaccumulative potential
No data available on product

Mobility in soil
No data available on product.

Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects
No ecological problems are to be expected when the product is handled and used with due care and attention.

SECTION 13: Disposal considerations

Disposal of the product
Disposal should be in accordance with applicable Federal, State and local laws and regulations. Local regulations may be more stringent than State or Federal requirements.

Disposal of contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information

14.1 UN-Number
Not applicable

14.2 UN proper shipping name
Not applicable

14.3 Transport hazard class(es)
Not applicable

14.4 Packing group
Not applicable

14.5 Environmental hazards
No data available.

14.6 Special precautions for use
No data available.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code
Not applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Hazards
No SARA hazards.

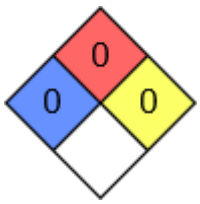
SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

TSCA (Toxic Substances Control Act)
All of the ingredients are listed.

HMIS Rating

100mM DTT	
HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	

NFPA Rating



SECTION 16: Other information

16.1 Further information/disclaimer

Date of issue: February 24, 2023.

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