

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

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EGHS / English



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Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Code(s) B-002000-UB-100

Product Name 5X Buffer Solution

Chemical name

Reach Number A registration number is not required for this substance.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Laboratory chemicals.

Uses advised against No information available.

1.3. Details of the supplier of the safety data sheet

Supplier Name Dharmacon Inc.
Horizon Discovery Ltd.

Supplier Address 2560 Crescent Drive Suite 100
Lafayette, Co 80026

Supplier Phone Number Tel: (303)-604-9499
Fax: (303)-604-9680

Supplier Email technical@horizondiscovery.com

For further information, please contact.

1.4. Emergency telephone number

Emergency telephone Chemtrec International 1-703-741-5970

Emergency telephone §45 - (EC)1272/2008

Europe

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SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

Regulation (EC) No 1272/2008

2.2. Label elements**2.3. Other hazards**

No information available

SECTION 3: Composition/information on ingredients**3.1 Substances**

Chemical name	EC No	CAS-No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Reg. No.
Water	-	7732-18-5	20-50%	No data available	No data available
Potassium Chloride	-	7447-40-7	0-20%	No data available	No data available
Magnesium Chloride	-	7786-30-3	0-5%	No data available	No data available
HEPES	-	7365-45-9	0-10%	No data available	No data available

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Chemical name	CAS-No	SVHC candidates
HEPES	7365-45-9	-
Potassium Chloride	7447-40-7	-
Water	7732-18-5	-
Magnesium Chloride	7786-30-3	-

SECTION 4: First aid measures**4.1. Description of first aid measures****Inhalation**

Remove to fresh air.

Skin contact

Wash off immediately with plenty of water for at least 15 minutes.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Ingestion

DO NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

None.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment as required.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Should not be released into the environment. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2. Exposure controls**Engineering Controls**

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand Protection Protective gloves.

Skin and body protection Wear suitable protective clothing.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state Liquid
Colour Clear
Odour Data not relevant for safe use

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
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Melting / freezing point	Data not relevant for safe use	None known
Boiling point / boiling range	Data not relevant for safe use	None known
Flammability	Data not relevant for safe use	None known
Lower and Upper Exposure Limit	Data not relevant for safe use	None known
Flash Point	Data not relevant for safe use	None known
Auto-ignition Temperature	Data not relevant for safe use	None known
Flammability Limit in Air	Data not relevant for safe use	None known
Decomposition Temperature	Data not relevant for safe use	None known
pH	Data not relevant for safe use	None known
Kinematic viscosity	Data not relevant for safe use	None known
Solubility	Soluble in water	None known
Partition coefficient: n-octanol/water	Data not relevant for safe use	None known
Vapour pressure	Data not relevant for safe use	None known
Density / Relative Density	Data not relevant for safe use	None known
Relative vapour density	Data not relevant for safe use	None known
Decomposition temperature	Data not relevant for safe use	None known
Particle characteristics	Data not relevant for safe use	None known

9.2. Other information

Softening Point	Data not relevant for safe use
Molecular Weight	Data not relevant for safe use
VOC Content (%)	Data not relevant for safe use
Liquid Density	Data not relevant for safe use
Bulk Density	Data not relevant for safe use
Particle Size	Data not relevant for safe use
Particle Size Distribution	Data not relevant for safe use

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

Explosion Data

Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.

10.3. Possibility of hazardous reactions

Possibility of Hazardous Reactions None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

10.4. Conditions to avoid

Incompatible materials.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

None under normal use conditions.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Information on likely routes of exposure****Product Information**

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Information on toxicological effects

Symptoms No information available.

Numerical measures of toxicity**Acute Toxicity****Unknown acute toxicity****Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive Toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity No information available.

12.2. Persistence and degradability

Persistence and Degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation No information available.

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

12.6. Other adverse effects

Other adverse effects No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging No information available.

SECTION 14: Transport information

IMDG

14.1 UN Number Not regulated

14.2 Proper Shipping Name Not regulated

14.3 Hazard Class Not regulated

14.4 Packing group Not regulated

14.5 Marine Pollutant	Not applicable
14.6 Special Provisions	None
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code	Not applicable

RID

14.1 UN-No.	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

ADR

14.1 UN-No.	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

IATA

14.1 UN Number	Not regulated
14.2 Proper Shipping Name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV). This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Persistent Organic Pollutants

Not applicable.

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable.

International Inventories

TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AICS	Contact supplier for inventory compliance status.

Legend

TSCA	- United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL	- Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS	- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS	- Japan Existing and New Chemical Substances
IECSC	- China Inventory of Existing Chemical Substances
KECL	- Korean Existing and Evaluated Chemical Substances
PICCS	- Philippines Inventory of Chemicals and Chemical Substances
AICS	- Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

No information available.

SECTION 16: Other information
Key or legend to abbreviations and acronyms used in the safety data sheet**Legend**

SVHC: Substances of Very High Concern for Authorization:

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	-	Skin designation

Key literature references and sources for data

www.ChemADVISOR.com/

Revision Date 15-Dec-2022

This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006.

Disclaimer

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End of Safety Data Sheet

Data for Regulatory Rules
