



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 2020/2008

Revision Date 06-Dec-2023

Revision Number 4

EGHS / English

## 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.  
Revvity, Inc.  
**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	112
<b>SECTION 2: Hazards identification</b>	

**2.1. Classification of the substance or mixture****Classification of substance according to Regulation (EC) No 1272/2008 (CLP)**

Not a hazardous substance or mixture.

**2.2. Label elements****Label elements according to Regulation (EC) No 1272/2008 (CLP)**

Not a hazardous substance or mixture.

**2.3. Other hazards**

No information available

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

This product contains no substances which at their given concentration, are considered to be hazardous to health.

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

\* Any concentration shown as a range is to protect confidentiality or is due to process variation.

\*\*All components need not be disclosed according to applicable regulations due to non-hazardous classification status.

**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**

<b>Inhalation</b>	Remove to fresh air.
<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes.
<b>Eye contact</b>	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 Method</u>
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**

Test data is not available for the complete mixture.

**Classification procedure**

The method for classification of the mixture is based on ingredients of the mixture.

**Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	Specific test data for the substance or mixture is not available.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available.
<b>Ingestion</b>	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** Shall not be classified as acutely toxic.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	No information available.
<b>Serious eye damage/eye irritation</b>	No information available.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive Toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

**11.2. Endocrine disrupting properties**

This product does not contain known or suspected endocrine disruptors.

**SECTION 12: Ecological information**

**12.1. Ecotoxicity**

No information available.

**12.2. Persistence and degradability**

No information available.

**12.3. Bioaccumulative potential**

No information available.

**12.4. Mobility in soil**

No information available.

**12.5. Results of PBT and vPvB assessment**

No information available.

**12.6. Endocrine disrupting properties**

This product does not contain known or suspected endocrine disruptors.

**12.7 Other adverse effects**

Data not available.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

<b>Waste from residues/unused products</b>	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
<b>Contaminated packaging</b>	No information available.

## SECTION 14: Transport information

**IMDG**

<b>14.1 UN Number</b>	Not regulated
<b>14.2 Proper Shipping Name</b>	Not regulated
<b>14.3 Hazard Class</b>	Not regulated
<b>14.4 Packing group</b>	Not regulated
<b>14.5 Marine Pollutant</b>	Not applicable
<b>14.6 Special Provisions</b>	None
<b>14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code</b>	Not applicable

**RID**

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

**ADR**

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

**IATA**

<b>14.1 UN Number</b>	Not regulated
<b>14.2 Proper Shipping Name</b>	Not regulated
<b>14.3 Hazard Class</b>	Not regulated
<b>14.4 Packing group</b>	Not regulated
<b>14.5 Environmental hazard</b>	Not applicable
<b>14.6 Special Provisions</b>	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**

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



**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - 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/](http://www.ChemADVISOR.com/)

Revision Date

06-Dec-2023

This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 2020/2008.

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

**Data for Regulatory Rules**