

MATERIAL SAFETY DATA SHEET

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: Dulbecco's Phosphate-Buffered Saline (D-PBS)(1X)

Manufacturer Name:

XDx

3260 Bayshore Blvd.

Brisbane, CA 94005

USA

Telephone: 415-287-2300

Emergency Telephone:

888-464-2967

Intended Use: Sample processing

2 HAZARDS IDENTIFICATION

Emergency Overview

Physical State: Liquid

Color: No data available.

Odor: No data available.

Low hazard for usual industrial or commercial handling by trained personnel.

Potential Health Effects

Inhalation: No inhalation hazard under normal conditions.

Eye Contact: May cause temporary eye irritation.

Skin Contact: None known.

Ingestion: Expected to be a low ingestion hazard.

OSHA Regulatory Status: This product is not hazardous according to OSHA 29CFR 1910.1200.

3 COMPOSITION / INFORMATION ON INGREDIENTS

The components are not hazardous or are below required disclosure limits.

4 FIRST AID MEASURES

Inhalation: If symptomatic, move to fresh air. Get medical attention if symptoms persist.

Eye Contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention promptly if symptoms occur after washing.

Skin Contact: Wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Ingestion: Seek medical advice.

5	FIRE-FIGHTING MEASURES
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Extinguishing Media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable Extinguishing Media: Not applicable.

Special Fire Fighting Procedures: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Hazardous Combustion Products: Not applicable

6	ACCIDENTAL RELEASE MEASURES
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Personal Precautions: Wear appropriate personal protective equipment.

Spill Cleanup Methods: Small Liquid Spills: Absorb up with sand or other non-combustible absorbent material. Large Spillages: Flush area with plenty of water. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

7	HANDLING AND STORAGE
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Handling: No special precautions are necessary beyond normal good hygiene practices. See Section 8 of the MSDS for additional personal protection advice when handling this product.

Storage: Keep container closed.

8	EXPOSURE CONTROLS / PERSONAL PROTECTION
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Exposure Limits: No exposure limits noted for ingredient(s) on ACGIH, OSHA and WEEL lists.

Engineering Controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Eye Protection: Risk of contact: Wear approved safety goggles.

Hand Protection: It is a good industrial hygiene practice to minimize skin contact.

Skin Protection: Apron and long sleeves are recommended.

Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental Exposure Controls: Environmental manager must be informed of all major spillages.

9	PHYSICAL AND CHEMICAL PROPERTIES
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Color: No data available.

Odor: No data available.

Odor Threshold: No data available.

Physical State: Liquid

pH: No data available

Melting Point: No data available.

Freezing Point: No data available.

Boiling Point: No data available.

Flash Point: Not applicable.

Evaporation Rate: No data available.

Flammability Limit - Upper (%): Not applicable.

Flammability Limit - Lower (%): Not applicable.

Vapor Pressure: No data available.

Vapor Density (Air=1): No data available.

Specific Gravity: No data available.

Solubility in Water: Soluble

Solubility (Other): No data available.

Partition Coefficient (n-Octanol/water): No data available.

Autoignition Temperature: No data available.

Decomposition Temperature: No data available.

Viscosity: No data available.

Explosive Properties: No data available

10	STABILITY AND REACTIVITY
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Stability: Stable.

Conditions to Avoid: None known.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: No data available.

11	TOXICOLOGICAL INFORMATION
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Specified Substance(s)

Acute Toxicity:

Test Results: No test data available for the ingredients.

Listed Carcinogens: None.

Product Information

Acute Toxicity:

Test Results: No test data available for the product.

Other Acute: No additional adverse health effects noted.

Chronic Toxicity: No additional adverse health effects noted.

12	ECOLOGICAL INFORMATION
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Ecotoxicity: No data available.

Mobility: No data available.

Persistence and Degradability: The product is biodegradable.

Bioaccumulation Potential: The product is not bioaccumulating.

13	DISPOSAL CONSIDERATIONS
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General Information: Dispose of waste and residues in accordance with local authority requirements.

Disposal Methods: No specific disposal method required.

Container: Since emptied containers retain product residue, follow label warnings even after container is emptied.

14	TRANSPORT INFORMATION
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DOT Not regulated.

TDG Not regulated.

IATA Not regulated.

IMDG Not regulated.

15	REGULATORY INFORMATION
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Canadian Controlled Products Regulations: This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the MSDS contains all required information.

WHMIS Classification: This is not a WHMIS controlled product.

Mexican Dangerous Statement: This product is not dangerous according to Mexican regulations.

US Regulations

CERCLA Hazardous Substance List (40 CFR 302.4): Not regulated.

SARA Title III

Section 302 Extremely Hazardous Substances (40 CFR 355, Appendix A): Not regulated.

Section 311/312 (40 CFR 370):

Acute (Immediate) Chronic (Delayed) Fire Reactive Pressure Generating

Section 313 Toxic Release Inventory (40 CFR 372): Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
Not regulated.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): Not regulated.

Drug Enforcement Act: Not regulated.

TSCA

TSCA Section 4(a) Final Test Rules & Testing Consent Orders: Not regulated.

TSCA Section 5(a)(2) Final Significant New Use Rules (SNURs) (40CFR 721, Subpt. E): Not regulated.

TSCA Section 5(e) PMN-Substance Consent Orders: Not regulated.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.

State Regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): Not regulated.

Massachusetts Right-To-Know List: Not regulated.

Michigan Critical Materials List (Michigan Natural Resources and Environmental Protection Act (Act. 451 of 1994)): Not regulated.

Minnesota Hazardous Substances List: Not regulated.

New Jersey Right-To-Know List: Not regulated.

Pennsylvania Right-To-Know List: Not regulated.

Rhode Island Right-To-Know List: Not regulated.

16	OTHER INFORMATION
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HAZARD RATINGS

	Health Hazard	Fire Hazard	Instability	Special Hazard
NFPA	0	0	0	NONE

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

NFPA Label colored diamond code: Blue - Health; Red - Flammability; Yellow - Instability; White - Special Hazards

	Health Hazard	Flammability	Physical Hazard	Personal Protection
HMIS	0	0	0	--

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

HMIS Label colored bar code: Blue - Health; Red - Flammability; Orange - Physical Hazards; White - Special

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Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.