

? Section 1. Chemical Product and Company Identification

Product name 2-D Sample Buffer for Nuclear Proteins, Component A

Product No. 89863A

Supplier Pierce Biotechnology
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USA
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1.800.874.3723

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MSDS# 4133

Intended Use Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific applications.

Section 2. Composition, Information on Ingredients

Substance/Preparation : Preparation

<u>Ingredient Name</u>	<u>CAS No.</u>	<u>%</u>	<u>EC Number</u>	<u>Symbol</u>	<u>R-Phrases</u>
1) Ingredient Name #1		5-7	Not available.	Xi	R36/37/38
2) Ingredient Name #2		80-95	231-791-2	--	Not controlled under dsd (Europe).

Section 3. Hazards Identification

United States Review the most current and approved institutional guideline, protocol, standard operating procedure(s) and MSDS(s) for the proper handling of institutional materials/equipment associated with the use of this product.

Emergency Overview No specific hazard.

Routes of Entry Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Potential Acute Health Effects Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation (lung irritant).

Carcinogenic Effects Data **CARCINOGENIC EFFECTS:** Classified None. by OSHA [Ingredient Name #1].
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.

Medical Conditions Aggravated by Overexposure: Repeated or prolonged exposure is not known to aggravate medical condition.

Overexposure /Signs/Symptoms Not available.

Europe

Classification Not controlled under dsd (Europe).
Physical/chemical hazards Not applicable.
Human health hazards Not applicable.
Environmental hazards Not applicable.

See Toxicological Information (section 11)

Section 4. First Aid Measures

Notice to Reader Get immediate medical attention.

Effects and symptoms

Inhalation Slightly hazardous in case of inhalation (lung irritant).

Ingestion Slightly hazardous in case of ingestion.

Skin Contact Sensitization of the product: Not available.
Slightly hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Eye Contact Slightly hazardous in case of eye contact (irritant).

Aggravating conditions Repeated or prolonged exposure is not known to aggravate medical condition.

First-Aid Measures

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin Contact Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Eye Contact Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

Notes to Physician Not available.

Protection of first-aiders Not available.

Section 5. Fire Fighting Measures

Flammability of the Product Non-flammable.

Flash Points Not applicable.

Fire Hazards in Presence of Various Substances Not applicable.

Fire Fighting Media and Instructions Not applicable.

Protective Clothing (Fire) Not applicable.

Hazardous thermal (de)composition products Not applicable.

Section 6. Accidental Release Measures

Personal precautions Safety glasses. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Environmental Precautions and Clean-up Methods Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Small Spill and Leak Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Section 7. Handling and Storage

Handling Avoid breathing vapors or spray mists.

Storage Keep container tightly closed. Keep container in a cool, well-ventilated area.

Intended Use Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific applications.

Packaging materials

Suitable / Not suitable Use original container.

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Section 8. Exposure Controls/Personal Protection

Engineering Controls Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Exposure Limit Values

<u>Ingredient Name</u>	<u>Occupational Exposure Limits</u>
United States	
1) Ingredient Name #1	Not available.
Sweden	
1) Ingredient Name #1	Not available.
Denmark	
1) Ingredient Name #1	Not available.
Norway	
1) Ingredient Name #1	Not available.
France	
1) Ingredient Name #1	Not available.
Netherlands	
1) Ingredient Name #1	Not available.
Germany	
1) Ingredient Name #1	Not available.

Personal Protection

Eyes Splash goggles.

Body Lab coat.

Hands Gloves.

Respiratory Respirator is not needed under normal and intended conditions of use, if exposures are kept below established limits.

Protective Clothing
(Pictograms)



Section 9. Physical and Chemical Properties

Physical State and Appearance Liquid.

Odor Not available.

Molecular Weight Not applicable.

Taste Not available.

pH (1% Soln/Water) Neutral.

Color Colorless.

Boiling/Condensation Point The lowest known value is 100°C (212°F) (Nuclease-Free Water).

Melting/Freezing Point May start to solidify at -0.1°C (31.8°F) based on data for: Nuclease-Free Water.

Specific Gravity The only known value is 1 (Water = 1) (Nuclease-Free Water).

Vapor Pressure The highest known value is 2.3 kPa (@ 20°C) (Nuclease-Free Water).

Vapor Density The highest known value is 0.62 (Air = 1) (Nuclease-Free Water).

Evaporation Rate 0.36 (Nuclease-Free Water) compared to Butyl acetate.

Dispersion Properties Not available.

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Solubility Easily soluble in cold water.
Very slightly soluble in hot water.

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Conditions to avoid Keep away from heat and flame. (Ingredient Name #1)

Materials to avoid Slightly reactive to reactive with oxidizing agents, acids, alkalis.

**Hazardous Decomposition
Products** Not applicable.

Section 11. Toxicological Information

Toxicity to Animals LD50: Not available.
LC50: Not available.

Chronic Effects on Humans **CARCINOGENIC EFFECTS:** Classified None. by OSHA [Ingredient Name #1].

Other Toxic Effects on Humans Slightly hazardous in case of eye contact (irritant), of ingestion, of inhalation (lung irritant).

**Special Remarks on Toxicity to
Animals** Not available.

**Special Remarks on Chronic
Effects on Humans** Not available.

**Special Remarks on Other Toxic
Effects on Humans** Not available.

Section 12. Ecological Information

Mobility Not available.

Persistence/degradability Not available.

Bioaccumulative potential Not available.

Ecotoxicity Not available.

Germany water class VCI WGK: No products were found.

Section 13. Disposal Considerations

Waste Information Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Waste Stream Not available.

Consult your local or regional authorities.

Section 14. Transport Information

Contact the supplier for all information regarding the proper transportation method for this material.

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Section 15. Regulatory Information

**Label Requirements
(Europe)**

This product is not classified according to the EU regulations.

HCS Classification Irritating substance.

U.S. Federal Regulations TSCA 8(b) inventory: Nuclease-Free Water

SARA 302/304/311/312 extremely hazardous substances: No products were found.
 SARA 302/304 emergency planning and notification: No products were found.
 SARA 302/304/311/312 hazardous chemicals: No products were found.
 SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.
 SARA 313 toxic chemical notification and release reporting: No products were found.
 Clean Water Act (CWA) 307: No products were found.
 Clean Water Act (CWA) 311: No products were found.
 Clean air act (CAA) 112 accidental release prevention: No products were found.
 Clean air act (CAA) 112 regulated flammable substances: No products were found.
 Clean air act (CAA) 112 regulated toxic substances: No products were found.

WHMIS (Canada) Not controlled under WHMIS (Canada).

CEPA DSL: Nuclease-Free Water

International Regulations

EINECS Not available.

DSCL (EEC) This product is not classified according to the EU regulations.

International Lists Australia (NICNAS): Nuclease-Free Water

VCI WGK: No products were found.

Korea (TCCL): Nuclease-Free Water

Philippines (RA6969): Nuclease-Free Water

State Regulations No products were found.

California prop. 65: No products were found.

Section 16. Other Information

**Hazardous Material
Information System
(U.S.A.)**

Health	1
Fire Hazard	0
Reactivity	0
Personal Protection	g

**National Fire Protection
Association (U.S.A.)**



References Not available.

History of Document Changes Any information changes since last document version are marked with a triangle symbol.

Full text of R-Phrases Irritating to eyes, respiratory system and skin.
 referred under headings 2 and 3:

Intended Use Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific applications.

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Component A**

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Date of Previous Issue No Previous
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Version

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Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.