SAFETY DATA SHEET

Date: May 20, 2020



Section 1 - Product and Company Identification

1.1 Product Name: Affinity Buffer A: 5X capture/wash Protein A, Protein G, ProPlus and Glutathione

1.2 Recommended Use: R&D use

1.3 Manufacturers Name: PhyNexus part of Biotage

3670 Charter Park Dr. San Jose, CA 95136

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1.5 Contact details:

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Section 2 - Hazards Identification

2.1 Classification of the product

This product is not hazardous according to UN GHS, EU Regulation 1272 / 2008 or Directive 67 / 548 / EEC

2.2 Label elements

Caution - substance not yet tested completely

2.3 Other hazards

Slip hazard - may cause floors to become very slippery if spilt

Section 3 - Composition/Information on Ingredients

Name:	Affinity Buffer A: 5X capture/wash Protein A, Protein G, ProPlus and Glutathione			
Synonyms:	Aqueous buffers for affinity protein purification Phosphate buffered saline solution, pH 7.4			
CAS - No.	EC - No.	Index - No.	Classification	Concentration
NA				

Name:	Sodium dihydro	Sodium dihydrogen phosphate, monohydrate, 50 mM			
Synonyms:	NaH ₂ PO ₄	NaH ₂ PO ₄			
CAS - No.	EC - No.	Index - No.	Classification	Concentration	
10049-21-5				<1%	

Name:	Sodium Chloride, 0.	Sodium Chloride, 0.7 M			
Synonyms:	NaCl	NaCl			
CAS - No.	EC - No.	Index - No.	Classification	Concentration	
7647-14-5	231-598-3			<4%	

Name:	Water			
Synonyms:	H ₂ O			
CAS - No.	EC - No.	Index - No.	Classification	Concentration
7732-18-5				95%

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Section 4 - First Aid Measures

4.1 Inhalation: NA

4.2 Skin Contact: Wash with soap and plenty of water. Seek medical attention if irritation develops or persists

4.3 Eye Contact: Wash thoroughly with plenty of water for at least 15 minutes, separating the eyelids with

the fingers. If redness or discomfort persist seek medical attention

4.4 Ingestion: Wash out mouth with copious amounts of water if person is conscious. Never give anything

by mouth to an unconscious person. Seek medical attention

Section 5 - Fire-Fighting Measures

5.1 Suitable Extinguishing Media

Use alcohol – resistant foam or dry chemical extinguishers

5.2 Unusual Fire Hazards and Explosion Hazards

Will produce black, acrid smoke if burned. May release toxic, corrosive, and / or flammable / explosive vapours in a fire

5.3 Special protective equipment for Fire Fighters

Wear self contained breathing apparatus for fire fighting if necessary

Section 6 - Accidental Release Measures

6.1 Personal precautions

Ventilate the area thoroughly and shut off sources of ignition. Use protective equipment as described in Section 8. Avoid raising dust. Avoid breathing dust, vapours, mist or gas

6.2 Environmental Precautions

Do not let product enter drains

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. Caution: Slip Hazard. Floor may be slippery even when dry due to spherical beads.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Provide appropriate exhaust ventilation. Normal measures for preventive fire protection. Properly designed equipment must be used if the material is to be used in conjunction with strong oxidising agents to prevent a rapid build up of pressure and possible explosion. Avoid ingestion and inhalation.

7.2 Conditions for safe storage

Keep in a dry and well - ventilated place. Store at4 degrees C, out of direct sunlight

Section 8 – Exposure Controls / Personal Protection

Contains no substances with occupational exposure limit values

8.1 Personal protective equipment

Respiratory protection

Respiratory protection is not required. For nuisance exposures use type P95 (US) or type P1 (EU EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

Hand protection

Handle with gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89 / 686 / EEC and the standard EN 374 derived from it. Gloves must be inspected prior to use. Use proper glove removal technique (without touching the outer surface of the glove) to avoid skin contact with product. Dispose of gloves after use in accordance with applicable regulations and good laboratory practice. Wash and dry hands

Eye protection

Safety glasses with side – shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)

Skin and body protection

Choose body protection in relation to its type, the concentration and the amount of dangerous substances, and to the specific workplace

Hygiene measures

Handle in accordance with good laboratory hygiene and safe practice. Wash hands before breaks and at the end of the workday

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Section 9 - Physical and Chemical Properties

9.1 Appearance

Form Plastic column

Colour clear

9.2 Safety data

pH No data available

Melting point Degrades before melting

Boiling point Does not boil
Flash point No data available
Ignition temperature No data available
Lower explosion limit No data available
Upper explosion limit No data available

Water solubility Does not dissolve in water

Section 10 - Stability and Reactivity

10.1 Chemical stability

Stable under recommended storage conditions

10.2 Conditions to avoid

Avoid temperatures above 200°C

10.3 Materials to avoid

Strong oxidising agents, concentrated mineral acids

10.4 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions - monomers, carbon dioxide and / or carbon monoxide

Section 11 - Toxicological Information

To the best of our knowledge, the toxicological properties of this material have not been fully investigated

(a) Acute toxicity

No data available

(b) Skin corrosion / irritation

No data available

(c) Serious eye damage / eye irritation

No data available

(d) Respiratory or skin sensitisation

No data available

(e) Germ cell mutagenicity

No data available

(f) Carcinogenicity

No data available

(g) Reproductive toxicity

No data available

(h) Specific target organ toxicity - single exposure

No data available

(i) Specific target organ toxicity - repeated exposure

No data available

(j) Aspiration hazard

No data available

(k) Potential health effects

Inhalation

Ingestion May be harmful if swallowed. Solid choking hazard. May cause irritation of the digestive tract

Skin May cause skin irritation

Eyes May cause eye irritation

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Section 12 - Ecological Information

The eco - toxicological properties of this material have not been fully investigated

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bio – accumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

Section 13 - Disposal Considerations

13.1 Product

Non-toxic waste and may be disposed with normal waste procedures: however, may contain regulated waste after consumer use. In that case, contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber

13.2 Contaminated packaging

Dispose of as unused product

Section 14 - Transport Information

Not classified as dangerous goods by ADR / RID, IMDG, or IATA

Section 15 – Regulatory Information

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture

This safety data sheet complies with the requirements of Regulation (EU) 2015/830

International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors: Neither banned nor restricted

Restrictions on the marketing and use of certain dangerous substances and preparations:

Neither banned nor restricted

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals

Neither banned nor restricted

Candidate List of Substances of Very High Concern for Authorization

Neither banned nor restricted

US (TSCA)

Note: polymers and liquids meeting the definition on 40 CFR 723.250 of the Toxic Substance Control Act (TSCA) is exempt from the notification requirements

of the Act. This material falls within this definition.

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Section 16 - Other Information

This substance must only be handled by, or under close supervision of those qualified in the handling and use of potentially hazardous substances. This Safety Data Sheet is offered without charge to the clients of Biotage and it is issued only as a guide for safe handling, use, storage, disposal and release. Information contained on this sheet is the most current available to Biotage at the time of preparation but does not purport to be all inclusive or a guarantee as to the properties of the material supplied. Biotage makes no warranties or representations as to the accuracy and completeness of the information contained herein. Biotage shall not be held responsible for the suitability of this information for the user's intended purposes or the consequences of such use, and shall not be liable for any damage or loss, howsoever arising, direct or otherwise.

Key to Abbreviations

CAS: Chemical Abstract Service. NIOSH: National Institute for Occupational Safety & Health. ADR / RID: Agreement on Dangerous Goods by Road / Regulations Concerning the transport of Dangerous Goods by Rail. IMDG: International Maritime Dangerous Goods Code. IATA: International Air Transport Association.

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