

SAFETY DATA SHEET

United States

Section 1. Identification Product name

Other means of identification

Low pl Kit, pH 3.5 - 6.5 (ten vials containing a lyophilised mixture of well characterised, purified proteins)

Catalogue Number

Chemical name

Product type

29443548

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

Solid.

Identified uses

Analytical chemistry. Laboratory chemicals Scientific research and development Industrial applications: Analytical chemistry. Scientific research and development

Supplier

Cytiva Amersham Place Little Chalfont Buckinghamshire HP7 9NA United Kingdom +44 0800 515 313 Cytiva USA 100 Results Way Marlborough, MA 01752 1-800-526-3593

In case of emergency	INFOTRAC - 24 Hour number: 1-800-535-5053
	Outside of the United States, call 24 Hour number: 001-352-323-3500 (Call Collect)

Section 2. Hazards identification

OSHA/HCS status	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	Not classified.
GHS label elements	
Signal word	No signal word.
Hazard statements	No known significant effects or critical hazards.
Precautionary statements	
Prevention	Not applicable.
Response	Not applicable.
Storage	Not applicable.
Disposal	Not applicable.
Hazards not otherwise classified	None known.



Page: 1/7 Validation date 20 March 2024

Section 3. Composition/information on ingredients

Substance/mixture Chemical name Other means of identification	Substance Lyophilized mixture of stable, salt-free, highly purified proteins Not available.		
CAS number/other identifiers CAS number	Not available.		
Ingredient name Lyophilized mixture of stable, salt-	free, highly purified proteins	% 100	CAS number

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary fi	rst aid measures
Eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Most important symptoms/	effects, acute and delayed
Potential acute health effe	<u>ects</u>
Eye contact	No known significant effects or critical hazards.
Inhalation	No known significant effects or critical hazards.
Skin contact	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.
<u>Over-exposure signs/sym</u>	ptoms
Eye contact	No specific data.
Inhalation	No specific data.
Skin contact	No specific data.
Ingestion	No specific data.
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	No specific treatment.

Section 5. Fire-fighting measures

See toxicological information (Section 11)

Extinguishing media

Protection of first-aiders

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	No specific fire or explosion hazard.
Hazardous thermal decomposition products	No specific data.
Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

No action shall be taken involving any personal risk or without suitable training.

29443548

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.	
For emergency responders	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".	
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).	
Methods and materials for containment and cleaning up		
Small spill	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.	
Large spill	Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.	
Section 7. Handling and	storage	

Precautions for safe handling	
Protective measures	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	Store between the following temperatures: 2 to 8°C (35.6 to 46.4°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Hygiene measures

Eye/face protection

Skin protection

Occupational exposure limits Lyophilized mixture of stable, salt	t-free, highly purified proteins None.
Biological exposure indices	
No exposure indices known.	
Appropriate engineering controls	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures	

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all Hand protection times when handling chemical products if a risk assessment indicates this is necessary. Personal protective equipment for the body should be selected based on the task being performed **Body protection** and the risks involved and should be approved by a specialist before handling this product. Other skin protection Appropriate footwear and any additional skin protection measures should be selected based on the

task being performed and the risks involved and should be approved by a specialist before handling this product.



Page: 3/7 Validation date 20 March 2024

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	Solid.	
Color	White.	
Odor	Odorless.	
Odor threshold	Not available.	
рН	Not available.	
Melting point/freezing point	Not available.	
Boiling point, initial boiling	Decomposes	
point, and boiling range		
Flash point	Not applicable.	
Burning time	Not available.	
Burning rate	Not available.	
Evaporation rate	Not available.	
Flammability	Not available.	
Lower and upper explosive	Not applicable.	
(flammable) limits		
Vapor pressure	Not available.	
Relative vapor density	Not applicable.	
Relative density	Not available.	
Solubility(ies)		
	Media	Result
	cold water hot water	Easily soluble Easily soluble
Solubility in water	Not available.	-
Partition coefficient: n-octand	ol/ Not available.	
water		
Auto-ignition temperature	Not applicable.	
Decomposition temperature	Not available.	
SADT	Not available.	
Viscosity	Not applicable.	
Flow time (ISO 2431)	Not available.	
Particle characteristics		
Median particle size	Not available.	

Section 10. Stability and reactivity

Reactivity Chemical stability	No specific test data related to reactivity available for this product or its ingredients. The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	No specific data.
Incompatible materials	No specific data.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity Not available.

Irritation/Corrosion

Not available.

Sensitization Not available.

Mutagenicity Not available.

Article Number :



Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes. of exposure

Potential acute health effects

r otential acute fleatin effects		
Eye contact	No known significant effects or critical hazards.	
Inhalation	No known significant effects or critical hazards.	
Skin contact	No known significant effects or critical hazards.	
Ingestion	No known significant effects or critical hazards.	
Symptoms related to the physical, chemical and toxicological characteristics		
Eye contact	No specific data.	
Inhalation	No specific data.	
Skin contact	No specific data.	
Ingestion	No specific data.	
Delayed and immediate effects and also chronic effects from short and long term exposure		
Short term exposure		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
Long term exposure		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
Potential chronic health effects		
Not available.		
General	No known significant effects or critical hazards.	
Carcinogenicity	No known significant effects or critical hazards.	
Mutagenicity	No known significant effects or critical hazards.	
Reproductive toxicity	No known significant effects or critical hazards.	
Numerical measures of toxicity		
Acute toxicity estimates		

N/A

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability Not available. Bioaccumulative potential Not available. Mobility in soil Soil/water partition coefficient (K oc) Not available. Not available.



Section 13. Disposal considerations

product, solutio environmental requirements. contractor. Wa requirements o or landfill shoul must be dispos	of waste should be avoided or minimized wherever possible. Disposal of this ns and any by-products should at all times comply with the requirements of protection and waste disposal legislation and any regional local authority Dispose of surplus and non-recyclable products via a licensed waste disposal ste should not be disposed of untreated to the sewer unless fully compliant with the f all authorities with jurisdiction. Waste packaging should be recycled. Incineration d only be considered when recycling is not feasible. This material and its container ed of in a safe way. Empty containers or liners may retain some product residues. of spilled material and runoff and contact with soil, waterways, drains and sewers.
---	--

Section 14. Transport information

Product is not regulated as dangerous goods for transport.

Section 15. Regulatory information

U.S. Federal regulations TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Not listed
Clean Air Act Section 602 Class I Substances	Not listed
Clean Air Act Section 602 Class II Substances	Not listed
DEA List I Chemicals (Precursor Chemicals)	Not listed
DEA List II Chemicals (Essential Chemicals)	Not listed

SARA 302/304

Composition/information on ingredients
--

No products were found.

SARA 304 RQ Not applicable.

SARA 311/312 Classification

Not applicable.

Composition/information on ingredients

No products were found.

State regulations

Massachusetts	This material is not listed.
New York	This material is not listed.
New Jersey	This material is not listed.
Pennsylvania	This material is not listed.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations

Chemical Weapon Conve	ntion List Schedules I, II & III Chemicals
Not listed.	
Montreal Protocol	
Not listed.	
Stockholm Convention or	n Persistent Organic Pollutants
Not listed.	
Rotterdam Convention or	<u>n Prior Informed Consent (PIC)</u>
Not listed.	
UNECE Aarhus Protocol	on POPs and Heavy Metals
Not listed.	
Inventory list	
United States	Not determined.
Canada inventory	Not determined.



Section 16. Other information

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



Procedure used to derive the classification

Classification Justification Not classified. **History** Date of printing 3/20/2024 3/20/2024 Date of issue/Date of revision Date of previous issue 11/8/2021 Version 2 sds_author@cytiva.com Key to abbreviations ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available UN = United Nations References Not available.

Indicates information that has changed from previously issued version.

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.

