

SAFETY DATA SHEET

Antigen Retrieval Solution, pH9

Section 1. Identification

Antigen Retrieval Solution, pH9	: Product name
BU05	: Product code
Not available.	: Other means of identification
Professional use. Use in laboratories: Research.	: Product use
Lunaphore Technologies SA Route de Lully 5C, CH-1131 Tolochenaz, Switzerland + 41 800 84 86 89 support-tech@lunaphore.com	: Supplier's details
CHEMTREC: +972 3-763-0639 (Local)	: e-mail address of person responsible for this SDS
	: Emergency telephone number

Section 2. Hazard identification

Classification of the substance or mixture

Mixture : Product definition

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

100 percent of the mixture consists of component(s) of unknown acute oral toxicity : **Ingredients of unknown toxicity**

100 percent of the mixture consists of component(s) of unknown acute dermal toxicity

100 percent of the mixture consists of component(s) of unknown acute inhalation toxicity

Contains 100% of components with unknown hazards to the aquatic environment : **Ingredients of unknown ecotoxicity**

See Section 11 for more detailed information on health effects and symptoms.

Label elements

No signal word. : Signal word

No known significant effects or critical hazards. : Hazard statements

Precautionary statements

Not applicable. : Prevention

Not applicable. : Response

Not applicable. : Storage

Not applicable. : Disposal

Not applicable. : Supplemental label elements

Not applicable. : Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Section 2. Hazard identification

2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.	: Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
None known.	: Other hazards which do not result in classification

Section 3. Composition/information on ingredients

Mixture : 3.2 Mixtures

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Section 4. First aid measures

Description of necessary first aid measures

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.	: Eye contact
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.	: Inhalation
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.	: Skin contact
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.	: Ingestion

Most important symptoms/effects, acute and delayed

Potential acute health effects

No known significant effects or critical hazards.	: 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

Over-exposure signs/symptoms

No specific data.	: Eye contact
No specific data.	: Inhalation
No specific data.	: Skin contact
No specific data.	: Ingestion

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.	: Notes to physician
No specific treatment.	: Specific treatments
No action shall be taken involving any personal risk or without suitable training.	: Protection of first-aiders

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Use dry chemical, CO ₂ , water spray (fog) or foam. Use an extinguishing agent suitable for the surrounding fire.	: Suitable extinguishing media
Do not use water jet.	: Unsuitable extinguishing media
In a fire or if heated, a pressure increase will occur and the container may burst.	: Specific hazards arising from the chemical
In a fire, decomposition may produce toxic gases/fumes.	: Hazardous thermal decomposition products
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 actions 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.	: Special protective equipment for fire-fighters
Not considered to be a product presenting a risk of explosion.	: Remark (Explosibility)

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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 non-emergency personnel
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".	: For emergency responders
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).	: Environmental precautions

Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.	: Small spill
Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.	: Large spill

Section 7. Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8).	: Protective measures
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.	: Advice on general occupational hygiene

Section 7. Handling and storage

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.

: **Conditions for safe storage, including any incompatibilities**

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Exposure limits	Ingredient name
None.	

Biological exposure indices

Exposure indices	Ingredient name
None known.	

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

: **Appropriate engineering 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.

: **Environmental exposure controls**

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.

: **Hygiene measures**

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.

: **Eye/face protection**

Skin protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

: **Hand protection**

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

: **Body 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.

: **Other skin protection**

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.

: **Respiratory protection**

SECTION 9: Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Liquid. [solution]

Colorless. / Red. / Yellowish.

Odorless.

Not applicable.

9

Not available.

Not available.

Not available.

ca. water

Not applicable.

Not available.

Not available.

Not available.

Not available.

Not available.

Yes.

Not applicable.

Not available.

Not available.

Not available.

Particle characteristics

Not applicable.

: **Physical state**

: **Color**

: **Odor**

: **Odor threshold**

: **pH**

: **Melting point/freezing point**

: **Boiling point, initial boiling point, and boiling range**

: **Flash point**

: **Evaporation rate**

: **Flammability**

: **Lower and upper explosion limit/flammability limit**

: **Vapor pressure**

: **Relative vapor density**

: **Relative density**

: **Solubility in water**

: **Miscible with water**

: **Partition coefficient: n-octanol/water**

: **Auto-ignition temperature**

: **Decomposition temperature**

: **Viscosity**

: **Median particle size**

Section 10. Stability and reactivity

No specific test data related to reactivity available for this product or its ingredients.

: **Reactivity**

The product is stable.

: **Chemical stability**

Under normal conditions of storage and use, hazardous reactions will not occur.

: **Possibility of hazardous reactions**

Keep away from heat, sparks and flame.

: **Conditions to avoid**

Reactive or incompatible with the following materials:
Strong oxidizing materials, strong acids, strong alkalis.

: **Incompatible materials**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

: **Hazardous decomposition products**

Section 11. Toxicological information

Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Not available.

: Conclusion/Summary

Acute toxicity estimates

Not available.

Irritation/Corrosion

Not available.

Conclusion/Summary

Not available.

: Skin

Not available.

: Eyes

: Respiratory

Sensitization

Not available.

Conclusion/Summary

Not available.

: Skin

: Respiratory

Mutagenicity

Not available.

: Conclusion/Summary

Carcinogenicity

Not available.

: Conclusion/Summary

Reproductive toxicity

Not available.

: Conclusion/Summary

Teratogenicity

Not available.

: Conclusion/Summary

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Not available.

: Information on the likely routes of exposure

Potential acute health effects

No known significant effects or critical hazards.

: 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

Symptoms related to the physical, chemical and toxicological characteristics

No specific data.

: Eye contact

No specific data.

: Inhalation

No specific data.

: Skin contact

No specific data.

: Ingestion

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Not available.

: Potential immediate effects

Section 11. Toxicological information

Not available.	: Potential delayed effects
<u>Long term exposure</u>	
Not available.	: Potential immediate effects
Not available.	: Potential delayed effects
<u>Potential chronic health effects</u>	
Not available.	
Not available.	: Conclusion/Summary
No known significant effects or critical hazards.	: 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

Information on other hazards

Endocrine disrupting properties

No known significant effects or critical hazards (Human Health).

Other information

Not available.

Section 12. Ecological information

Toxicity

Not available. : Conclusion/Summary

Persistence and degradability

There are no data available on the mixture itself. : Conclusion/Summary

Bioaccumulative potential

Not available.

Mobility in soil

Not available. : Soil/water partition coefficient (K_{oc})

Not available. : Mobility

No known significant effects or critical hazards. : Other adverse effects

Endocrine disrupting properties

No known significant effects or critical hazards (Environment).

Section 13. Disposal considerations

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

Section 14. Transport information

IATA	IMDG	UN	
Not regulated.	Not regulated.	Not regulated.	UN number
-	-	-	UN proper shipping name
-	-	-	Transport hazard class(es)
			Label
-	-	-	Packing group
No.	Marine Pollutant: No	No.	Environmental hazards

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. : **Special precautions for user**

Not applicable.

: **Transport in bulk according to IMO instruments**

Section 15. Regulatory information

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Not determined.

: **United States**

Section 16. Other information

History

02/11/2022

: **Date of printing**

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: **Date of issue/Date of revision**

24/11/2021

: **Date of previous issue**

2

: **Version**

ATE = Acute Toxicity Estimate

: **Key to abbreviations**

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,

Section 16. Other information

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available

SGG = Segregation Group

UN = United Nations

Procedure used to derive the classification

Justification	Classification
Not classified.	

Not available.

: References

Indicates information that has changed from previously issued version. 

Notice to reader

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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.