

SAFETY DATA SHEET

Imaging Buffer Kit, Diluent

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Imaging Buffer Kit, Diluent	: Product name
BU09	: Product code
Liquid.	: Product type
Not available.	: Other means of identification

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

Professional use. Use in laboratories: Research.	: Product use
--	---------------

1.3 Details of the supplier of the safety data sheet

Lunaphore Technologies SA Route de Lully 5C, CH-1131 Tolochenaz, Switzerland + 41 800 84 86 89 support-tech@lunaphore.com	: Supplier's details
	: e-mail address of person responsible for this SDS

1.4 Emergency telephone number

Supplier

CHEMTREC: +972 3-763-0639 (Local)	: Emergency telephone number
--------------------------------------	------------------------------

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Mixture	: Product definition
---------	----------------------

Classification according to SI 2302 Part 1 – Dangerous Substances and Mixtures: Classification, Labelling, Marking and Packaging

Not classified.

The product is not classified as hazardous according to SI 2302 Part 1 – Dangerous Substances and Mixtures: Classification, Labelling, Marking and Packaging.

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

2.2 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
Safety data sheet available on request.	: Supplemental label elements

Special packaging requirements

SECTION 2: Hazards identification

Not applicable.

: Containers to be fitted with child-resistant fastenings

Not applicable.

: Tactile warning of danger

2.3 Other hazards

: Product meets the criteria for PBT or vPvB

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

None known.

: Other hazards which do not result in classification

SECTION 3: Composition/information on ingredients

Mixture

: 3.2 Mixtures

Type	Classification	%	Identifiers	Product/ingredient name
[1] [2]	SKIN CORROSION/IRRITATION - Category 1B SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 See Section 16 for the full text of the H statements declared above.	≤2	EC: 231-595-7 CAS: 7647-01-0 Index: 017-002-01-X	Hydrochloric acid
Specific Conc. Limits, M-factors and ATEs			Product/ingredient name	
Skin Corr. 1B, H314: C ≥ 25% Skin Irrit. 2, H315: 10% ≤ C < 25% Eye Dam. 1, H318: C ≥ 25% Eye Irrit. 2, H319: 10% ≤ C < 25% STOT SE 3, H335: C ≥ 10%			Hydrochloric acid	

There are no additional 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.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

SECTION 4: First aid measures**4.1 Description of 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

: Inhalation

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

: Skin contact

SECTION 4: First aid measures

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**

No action shall be taken involving any personal risk or without suitable training. : **Protection of first-aiders**

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

No specific data. : **Eye contact**

No specific data. : **Inhalation**

No specific data. : **Skin contact**

No specific data. : **Ingestion**

4.3 Indication of any immediate medical attention and special treatment needed

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. : **Notes to physician**

No specific treatment. : **Specific treatments**

See toxicological information (Section 11)

SECTION 5: Firefighting measures

5.1 Extinguishing media

Use dry chemical, CO₂, 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**

5.2 Special hazards arising from the substance or mixture

In a fire or if heated, a pressure increase will occur and the container may burst. : **Hazards from the substance or mixture**

Decomposition products may include the following materials: : **Hazardous combustion products**

carbon dioxide

carbon monoxide

nitrogen oxides

halogenated compounds

metal oxide/oxides

5.3 Advice for firefighters

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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. : **Special protective equipment for fire-fighters**

Not considered to be a product presenting a risk of explosion. : **Additional information**

SECTION 6: Accidental release measures

6.1 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). **: 6.2 Environmental precautions**

6.3 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. Dispose of via a licensed waste disposal contractor. 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. **: Large spill**

See Section 1 for emergency contact information. **: 6.4 Reference to other sections**
 See Section 8 for information on appropriate personal protective equipment.
 See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 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**

7.2 Conditions for safe storage, including any incompatibilities

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.

7.3 Specific end use(s)

Not available. **: Recommendations**
 Not available. **: Industrial sector specific solutions**

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Exposure limit values	Product/ingredient name
EU OEL (Europe, 1/2022) TWA 8 hours: 5 ppm. TWA 8 hours: 8 mg/m ³ . STEL 15 minutes: 10 ppm. STEL 15 minutes: 15 mg/m ³ .	Hydrochloric acid

Biological exposure indices

No exposure indices known.

Reference should be made to monitoring standards, such as the following:
 European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

: **Recommended monitoring procedures**

DNELs/DMELs

Not applicable.

: **DNEL/DMEL Summary**

PNECs

Not applicable.

: **PNEC Summary**

8.2 Exposure controls

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

: **Appropriate engineering 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**

SECTION 8: Exposure controls/personal 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**

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**

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.

9.1 Information on basic physical and chemical properties

Appearance

Liquid.

: **Physical state**

Colorless. [Transparent]

: **Color**

Odorless.

: **Odor**

Not applicable.

: **Odor threshold**

7.4

: **pH**

Not available.

: **Melting point/freezing point**

Not available.

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

Not available.

: **Flammability**

Not available.

: **Flash point**

Not available.

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

Not available.

: **Auto-ignition temperature**

Not available.

: **Decomposition temperature**

Dynamic (room temperature): Not available.

: **Viscosity**

Kinematic (room temperature): Not available.

Kinematic (40°C): Not available.

Not available.

: **Solubility in water**

Yes.

: **Miscible with water**

Not applicable.

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

Not available.

: **Vapor pressure**

Not available.

: **Relative density**

Not available.

: **Vapor density**

Particle characteristics

Not applicable.

: **Median particle size**

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Not considered to be a product presenting a risk of explosion.

: **Explosive properties**

Not available.

: **Oxidizing properties**

9.2.2 Other safety characteristics

SECTION 10: Stability and reactivity

- No specific test data related to reactivity available for this product or its ingredients. : **10.1 Reactivity**
- The product is stable. : **10.2 Chemical stability**
- Under normal conditions of storage and use, hazardous reactions will not occur. : **10.3 Possibility of hazardous reactions**
- Keep away from heat, sparks and flame. : **10.4 Conditions to avoid**
- No specific data. : **10.5 Incompatible materials**
- Under normal conditions of storage and use, hazardous decomposition products should not be produced. : **10.6 Hazardous decomposition products**

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not available. : **Conclusion/Summary**

Acute toxicity estimates

Irritation/Corrosion

Not available. : **Conclusion/Summary**
 Not available. : **Skin**
 Not available. : **Eyes**
 Not available. : **Respiratory**

Respiratory or skin sensitization

Not available. : **Conclusion/Summary**
 Not available. : **Skin**
 Not available. : **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)

Target organs	Route of exposure	Category	Product/ingredient name
Respiratory tract irritation	-	Category 3	hydrochloric acid

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Not available. : **Information on the likely routes of exposure**

SECTION 11: Toxicological information

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
Not available.	: Potential delayed effects

Long term exposure

Not available.	: Potential immediate effects
Not available.	: Potential delayed effects

Potential chronic health effects

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

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Not available.	: Conclusion/Summary
----------------	----------------------

12.2 Persistence and degradability

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

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Not available.	: Soil/water partition coefficient (K _{oc})
Not available.	: Mobility

SECTION 12: Ecological information

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

The generation of waste should be avoided or minimized wherever possible. 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.

: **Methods of disposal**

Within the present knowledge of the supplier, this product is not regarded as a hazardous waste, as defined by regulation on waste management.

: **Hazardous waste**

Packaging

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

: **Methods of disposal**

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.

: **Special precautions**

SECTION 14: Transport information

IATA	IMDG	ADN	ADR/RID	
Not regulated.	Not regulated.	Not regulated.	Not regulated.	14.1 UN number or ID number
-	-	-	-	14.2 UN proper shipping name
-	-	-	-	14.3 Transport hazard class(es)
-	-	-	-	14.4 Packing group
No.	Marine Pollutant: No	No.	No.	14.5 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.

: **14.6 Special precautions for user**

SECTION 14: Transport information

Not applicable. : 14.7 Maritime transport in bulk according to IMO instruments

SECTION 15: Regulatory information

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

Other EU regulations

Listed : Industrial emissions (integrated pollution prevention and control) - Air

Not listed : Industrial emissions (integrated pollution prevention and control) - Water

Not applicable. : Explosive precursors

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

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.

Inventory list

All components are listed or exempted.	: Australia
All components are listed or exempted.	: Canada
All components are listed or exempted.	: China
Russian Federation inventory: All components are listed or exempted.	: Eurasian Economic Union
Japan inventory (CSCL):	: Japan
All components are listed or exempted.	: New Zealand
All components are listed or exempted.	: Philippines
All components are listed or exempted.	: Republic of Korea
All components are listed or exempted.	: Taiwan
All components are listed or exempted.	: Thailand
All components are listed or exempted.	: Turkey

SECTION 15: Regulatory information

All components are active or exempted. : **United States**
All components are listed or exempted. : **Viet Nam**

SECTION 16: Other information

Indicates information that has changed from previously issued version. 

ATE = Acute Toxicity Estimate : **Abbreviations and acronyms**
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Not classified.

19/04/2024 : **Date of printing**
19/04/2024 : **Date of issue/ Date of revision**
08/02/2024 : **Date of previous issue**
3.1 : **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.