

---

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

### 1.1. Product identifier

# iST Myc-Trap Kit

CAS No.:  
EC No.:  
INDEX No.:  
REACH No.:

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

Relevant identified uses: Laboratory use  
Uses advised against: Other

### 1.3. Details of the supplier of the safety data sheet

#### Manufacturer

ChromoTek GmbH

Telephone: +49 89 124 148 80

Am Klopferspitz 19  
D 82152 Planegg-Martinsried

Telefax: +49 89 124 148 811

#### Supplier (manufacturer/importer/only representative/downstream user/distributor)

ChromoTek GmbH

Telephone: +49 89 124 148 80

Am Klopferspitz 19  
D 82152 Planegg-Martinsried

Telefax: +49 89 124 148 811

#### Information contact

ChromoTek GmbH

Information telephone: +49 89 124 148 80

Information telefax: +49 89 124 148 811

E-mail (competent person): [info@chromotek.com](mailto:info@chromotek.com)

Website: <http://www.chromotek.com/>

#### Dept. responsible for information:

ChromoTek GmbH

### 1.4. Emergency telephone number

Giftnotrufzentrale München

Telephone: +49 89 19 240

---

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008: -

### 2.2. Label elements

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

**Hazard pictograms:** -

**Signal word:** -

**Hazard statements:** -

**Precautionary statements:** -

#### Labeling

**Hazardous component(s) for labelling**

-

#### Special labelling of particular preparations

Safety data sheet available for professional user on request.

### 2.3. Other hazards

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

---

## SECTION 3: Composition / information on ingredients

### 3.1. Substances

not applicable

### 3.2. Mixtures

iST Myc-Trap Kit is a mixture

#### Composition/information on ingredients

Substance:	EC-no.:	CAS-No.:	INDEX no.:	REACH-no.:	Concentration:	Classification: EC 1272/2008(CLP):
Ethanol	200-578-6	64-17-5	603-002-00-5	01-2119457610-43-0000	20 % (v/v)	Flamm. Liqu. 2; H226

(Full text of H- and EUH-phrases: see section 16.)

#### Additional information

none

---

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General information:** In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

**Following inhalation:** No special measures are necessary. Seek medical attention if problems persist.

**Following skin contact:** After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

**After eye contact:** In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Seek medical attention if problems persist.

**After ingestion:** Rinse mouth immediately and drink plenty of water. Seek medical attention if problems persist.

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms:** No known symptoms to date.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Notes for the doctor:** No special measures are necessary.  
**Special treatment:** No special measures are necessary.

---

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media:** Water fog. alcohol resistant foam. dry extinguishing powder. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media:** High power water jet.

### 5.2. Special hazards arising from the substance or mixture

Pyrolysis products, toxic. Carbon dioxide. Carbon monoxide.

### 5.3. Advice for firefighters

#### General information

Co-ordinate fire-fighting measures to the fire surroundings.

#### Special protective equipment for firefighters:

In case of fire: Wear self-contained breathing apparatus.

---

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment. Remove persons to safety. Provide adequate ventilation.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

### 6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Avoid generation of dust. Clear contaminated areas thoroughly. Wash with plenty of water.

### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

---

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advices on safe handling

Avoid contact with skin and eyes.

#### Precautions against fire and explosion

Usual measures for fire prevention.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

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

### Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

**Storage class:** 10-13

### 7.3. Specific end use(s)

Observe instructions for use.

---

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### occupational exposure limit value

Substance:	CAS-No.:	Source:	Occupational exposure limit value:	Limitation of exposure peaks:	Remark:
------------	----------	---------	------------------------------------	-------------------------------	---------

#### Substance with a common (EC) occupational exposure limit value

Substance:	CAS-No.:	Source:	Occupational exposure limit value:	Limitation of exposure peaks:	Remark:
------------	----------	---------	------------------------------------	-------------------------------	---------

#### DNEL-/PNEC-values

##### DNEL value

Substance:	CAS-No.:	DNEL/DMEL	Industry	Professional	consumer
------------	----------	-----------	----------	--------------	----------

##### PNEC Value

Substance:	CAS-No.:	PNEC	Worker, industry	Worker, professional	consumer
------------	----------	------	------------------	----------------------	----------

#### Risk management measures according to used control banding approach

none

#### Additional information

none

### 8.2. Exposure controls

#### Occupational exposure controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

#### General protection and hygiene measures

When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Apply skin care products after work. Wash contaminated clothing prior to re-use.

#### Personal protection equipment

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

#### Respiratory protection

Respiratory protection not required.

#### Hand protection

Tested protective gloves are to be worn: DIN-/EN-Norms: DIN EN 374

#### Eye/face protection

Tightly sealed safety glasses.

#### Body protection

For the protection against direct skin contact, body protective clothing is essential (in addition to the usual

working clothes). Only wear fitting, comfortable and clean protective clothing. Barrier creams are not substitutes for body protection.

#### Environmental exposure controls

refer to chapter 7. No further action is necessary.

#### Consumer exposure controls

refer to chapter 7. No further action is necessary.

#### Exposure Scenario

none

---

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

Physical state:	Suspension
Colour:	White / colourless
Odour:	No data available
Odour threshold:	No data available

#### Safety relevant basis data

	parameter	unit	remark
Density:			No data available
Bulk density:			No data available
pH:			No data available
Melting point/freezing point:			No data available
Initial boiling point and boiling range:			No data available
Flash point:			No data available
Flammability (solid, gas):			No data available
Explosivity:			No data available
Lower explosion limit:			No data available
Upper explosion limit:			No data available
Ignition temperature:			No data available
Decomposition temperature:			No data available
Oxidizing potential:			Combustible.
Vapour pressure:			not applicable
Vapour density:			not applicable
Evaporation rate:			not applicable
Water solubility:			insoluble
Fat solubility:			No data available
Soluble in:	:		No data available
Partition coefficient: n-octanol/water:			No data available
Viscosity:			not applicable
Solvent separation test:			not applicable
Solvent content:			not applicable

### 9.2. Other information

There are no data available on the mixture itself.

---

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

none

## 10.2. Chemical stability

The substance is chemically stable under recommended conditions of storage, use and temperature.

## 10.3. Possibility of hazardous reactions

No data available

## 10.4. Conditions to avoid

heat. UV-radiation/sunlight.

## 10.5. Incompatible materials

Oxidizing agents. Reducing agent. Acid. Alkalis (alkalis).

## 10.6. Hazardous decomposition products

Pyrolysis products, toxic. Carbon monoxide. Carbon dioxide.

---

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

There are no data available on the mixture itself.

#### Acute toxicity

Substance:	CAS-No.:	Toxicological information
Ethanol	64-17-5	Acute toxicity, oral LD50: 7060 mg/kg (Rat)

#### Irritation and etching

Irritant effect on the skin

slightly irritant but not relevant for classification.

Irritant effect on the eye

slightly irritant but not relevant for classification.

#### Sensitization

not sensitising.

#### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No indications of human carcinogenicity exist.

Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

Reproductive toxicity

No indications of human reproductive toxicity exist.

#### STOT-single exposure

No information available.

#### STOT-repeated exposure

none

Aspiration hazard

Not an irritant.

---

## SECTION 12: Ecological information

## 12.1. Toxicity

There are no data available on the mixture itself.

### Ecotoxicity

Substance:	CAS-No.:	Ecotoxicity
Ethanol	64-17-5	Acute fish toxicity LC50: 11000 mg/l/96 h Acute daphnia toxicity LC50: 9280 mg/l/48 h

## 12.2. Persistence and degradability

Product is biodegradable.

## 12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

## 12.4. Mobility in soil

No information available.

## 12.5. Results of PBT and vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

## 12.6. Other adverse effects

No information available.

---

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Appropriate disposal/Product

Waste disposal according to EC Directives 75/442/EEC and 91/689/EEC on waste and hazardous waste in their latest versions. May be disposed of in household waste landfill.

#### Appropriate disposal / Package

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

#### List of proposed waste codes/waste designations in accordance with EWC

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

**Waste code product:** 18 02 05 - chemicals consisting of or containing dangerous substances

**Waste code packaging:** 15 01 10 - packaging containing residues of or contaminated by dangerous substances

---

## SECTION 14: Transport information

### 14.1. UN number

UN No.: -

### 14.2. UN proper shipping name

ADR / RID

-

IMDG / ICAO-TI / IATA-DGR

-

### 14.3. Transport hazard class(es)

Hazard label(s): -

Classification code: -

### 14.4. Packing group

Packing group: -

### 14.5. Environmental hazards

Environmental hazards: none

### 14.6. Special precautions for user

Land transport (ADR/RID)

Transport category: -

Special provisions: -

Tunnel restriction code: -

Limited quantity (LQ): --

Sea transport (IMDG)

EmS-No: -

Special provisions: -

Limited quantity (LQ): --

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remark: none

---

## SECTION 15: Regulatory information

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

#### EU legislation

Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).

none

Regulation (EC) No 2037/2000 concerning materials, which cause damage to the ozone layer.

none

Regulation (EC) No. 648/2004 (Detergents regulation)

none

#### National regulations

Observe in addition any national regulations!

#### Restrictions of occupation

none

#### Storage class

10-13

#### Water hazard class (WGK)

0 not a water pollutant

#### Other regulations, restrictions and prohibition regulations

none

### 15.2. Chemical Safety Assessment



**For this preparation a chemical safety assessment has been carried out:**  
Chemical safety assessments for substances in this mixture were not carried out.

---

## **SECTION 16: Other information**

### **Relevant H- and EUH-phrases (Number and full text)**

#### **Hazard statements**

H226 Flammable liquid and vapour.

#### **Training advice**

none

#### **Recommended restrictions of use**

refer to chapter 1.

#### **Further remarks**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

#### **Documentation of changes**

none

#### **Key literature references and sources for data**

Data arise from reference works and literature.

#### **Abbreviations and acronyms**

none

---

**LYSE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

Product name : LYSE buffer  
Product code : B170001  
Product type : liquid

**Manufacturer or supplier's details**

Company : PreOmics GmbH  
Am Klopferspitz 19  
82152 Planegg  
Germany

Telephone : +49-89-2314163-0

Responsible Department : PreOmics Technical Service,  
PreOmics GmbH,  
Am Klopferspitz 19,  
82152 Planegg,  
Germany,  
Tel.: +49-89-2314163-10,  
Email: reg@preomics.com

Emergency telephone : CHEMTREC  
USA & Canada 1-800-424-9300 and +1

**Recommended use of the chemical and restriction on use**

Recommended use : Laboratory reagent.  
For research use only.

Uses advised against : Not for consumer use.

**LYSE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 2: HAZARDS IDENTIFICATION****Classification of the substance or mixture****GHS Classification**

Serious eye damage/Eye irritation, Category 1, H318 (Eye Dam. 1).

Skin sensitisation, Category 1, H317 (Skin Sens. 1). The mixture is considered as Liquid.

**GHS Label Elements**

Hazard pictograms



Signal word

: Danger

**Hazard statements**

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage

**Precautionary statements**

P280: Wear protective gloves/protective clothing/eye protection/face protection

P302 + P352: IF ON SKIN: Wash with plenty of Water.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call POISON CENTER/doctor.

P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.

P363: Wash contaminated clothing before reuse.

**Potential Health Effects**

Aggravated Medical Condition

: None known.

Symptoms of Overexposure

: No information available.

**Carcinogenicity:****IARC**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by IARC.

**ACGIH**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by ACGIH.

**OSHA**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by OSHA.

**NTP**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by NTP.

**LYSE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**Precautionary statements****Prevention**

Wear protective gloves. In case of inadequate ventilation wear respiratory protection. Avoid breathing dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

**Response**

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention

**Storage**

Not applicable.

**Disposal**

Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified**

None known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture

:

Mixture

**Hazardous ingredients****CAS number/other identifiers**

Ingredient name	%	CAS number
Acetamide	<5%	60-35-5
2-Chloracetamide	<2%	79-07-2
Deoxycholate salt	<10%	302-95-4
Sodium chloride	<2%	7647-14-5
2,2,2-Trifluoroethanol	<15%	75-89-8
Tris(2-carboxyethyl)phosphine hydrochloride	<5%	51805-45-9

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 as hazardous to health or the environment and hence require reporting in this section.**

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

**LYSE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 4: FIRST AID MEASURES****Description of first aid measures****General advice**

Show this material safety sheet to the doctor in attendance.

**If inhaled**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.

**In case of skin contact**

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**In case of eye contact**

Protect unharmed eye. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**If swallowed**

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms and effects, both acute and delayed**

No information available.

**Most important symptoms and effects, both acute and delayed****If inhaled**

No known significant effects or critical hazards

**In case of skin contact**

No known significant effects or critical hazards

**In case of eye contact**

No known significant effects or critical hazards

**LYSE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**If swallowed**

No known significant effects or critical hazards

**Over-exposure signs/symptoms**

**If inhaled**

No specific data.

**In case of skin contact**

No specific data.

**In case of eye contact**

No specific data.

**If swallowed**

No specific data.

**Indication of any immediate medical attention and special treatment needed**

**Notes to physician**

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.

**Specific treatments**

No specific treatment.

**Protection of first-aiders**

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**See toxicology information (Section 11)**

**LYSE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 5: FIREFIGHTING MEASURES****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Specific hazards during fire fighting**

No specific fire or explosion hazard. Exposure to decomposition products may be a hazard to health.

**Hazardous combustion products**

No hazardous combustion products are known.

**Specific extinguishing methods**

No unsuitable extinguishing media known.

**Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus for firefighting if necessary with a full face-piece operated in positive pressure mode.

**SECTION 6: ACCIDENTAL RELEASE MEASURE****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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 nonemergency 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**

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilled product.

Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

**LYSE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 7: HANDLING AND STORAGE****Precautions for safe handling**

For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Personal protective equipment****Hand protection remarks**

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

**Eye protection**

Safety glasses.

**Skin and body protection**

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Footwear protecting against chemicals.

**Hygiene measures**

Keep away from food and drink.

When using do not eat, drink or smoke.



**LYSE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	: Liquid
Odor	: No data available.
Odor Threshold	: No data available.
pH	: 7-9
Melting point/range	: No data available.
Boiling point/boiling range	: No data available.
Flash point	: No data available.
Evaporation rate	: No data available.
Burning rate	: No data available.
Upper explosion limit	: No data available.
Lower explosion limit	: No data available.
Vapor pressure	: No data available.
Relative vapor density	: No data available.
Relative density	: No data available.
Density	: No data available.
Solubility	: No data available.
Partition coefficient: n-octanol/water	: No data available.
Autoignition temperature	: No data available.
Thermal decomposition	: No data available.
Viscosity, dynamic	: No data available.
Viscosity, kinematic	: No data available.
Explosive properties	: No data available.
Oxidizing properties	: No data available.

**LYSE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 10: STABILITY AND REACTIVITY**

**Reactivity**

No decomposition if stored and applied as directed.

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

Hazardous decomposition products formed under fire conditions.

**Conditions to avoid**

No data available.

**Incompatible materials**

No data available.

**Hazardous decomposition products**

No decomposition if stored and applied as directed.

**LYSE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 11: TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity : No data available.

Acute inhalation toxicity : No data available.

Acute dermal toxicity : No data available.

**Skin corrosion/irritation****Product:**

May cause skin irritation in susceptible persons.

**Serious eye damage/eye irritation****Product:**

Remarks : May irritate eyes.

**Respiratory or skin sensitization**

No data available.

**Germ cell mutagenicity**

No data available.

**Carcinogenicity**

No data available.

**Reproductive toxicity**

No data available.

**STOT-single exposure**

No data available.

**STOT-repeated exposure**

No data available.

**Aspiration toxicity**

No data available.

**Further information**

No data available.

**LYSE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 12: ECOLOGICAL INFORMATION****Ecotoxicity****Product:**

Toxicity to fish : No data available.

Toxicity to algae : No data available.

Toxicity to bacteria : No data available.

**Persistence and degradability**

No data available

**Bioaccumulative potential****Product:**

Bioaccumulation : No data available.

Partition coefficient: n-octanol/water : No data available.

**Mobility in soil**

No data available.

**Other adverse effects**

No data available.

**SECTION 13: DISPOSAL CONSIDERATIONS****Disposal methods****Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal.

**SECTION 14: TRANSPORT INFORMATION****IATA-DGR**

UN number : UN2810  
UN proper shipping name : Toxic, organic liquid, N.O.S.  
Transport hazard class(es) : 6.1  
Packing group : III

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

**LYSE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 15: REGULATORY INFORMATION****OSHA Hazards**

No OSHA Hazards

**EPCRA - Emergency Planning and Community Right-to-Know****SARA 311/312 Hazards**

No SARA Hazards

**SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations****California Prop 65**

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

**SECTION 16: OTHER INFORMATION**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**RESUSPEND buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

Product name : RESUSPEND buffer  
Product code : B170002  
Product type : liquid

**Manufacturer or supplier's details**

Company : PreOmics GmbH  
Am Klopferspitz 19  
82152 Planegg  
Germany

Telephone : +49-89-2314163-0

Responsible Department : PreOmics Technical Service,  
PreOmics GmbH,  
Am Klopferspitz 19,  
82152 Planegg,  
Germany,  
Tel.: +49-89-2314163-10,  
Email: reg@preomics.com

Emergency telephone : CHEMTREC  
USA & Canada 1-800-424-9300 and +1

**Recommended use of the chemical and restriction on use**

Recommended use : Laboratory reagent.  
For research use only.

Uses advised against : Not for consumer use.

**RESUSPEND buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 2: HAZARDS IDENTIFICATION****Classification of the substance or mixture****GHS Classification**

Not a hazardous substance or mixture

**GHS Label Elements**

Hazard pictograms : None  
Signal word : No signal word

**Hazard statements** : None

**Precautionary statements** : None

**Potential Health Effects**

Aggravated Medical Condition : None known.  
Symptoms of Overexposure : No information available.

**Carcinogenicity:****IARC**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by IARC.

**ACGIH**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by ACGIH.

**OSHA**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by OSHA.

**NTP**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by NTP.

**Precautionary statements****Prevention**

Wear protective gloves. In case of inadequate ventilation wear respiratory protection. Avoid breathing dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

**Response**

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician.  
IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse.  
If skin irritation or rash occurs: Get medical attention

**RESUSPEND buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**Storage**

Not applicable.

**Disposal**

Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified**

None known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Substance

**Hazardous ingredients**

No hazardous ingredients.

**CAS number/other identifiers****CAS number** : Not applicable.

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 as hazardous to health or the environment and hence require reporting in this section.****Occupational exposure limits, if available, are listed in Section 8.****SECTION 4: FIRST AID MEASURES****Description of first aid measures****General advice**

Show this material safety sheet to the doctor in attendance.

**If inhaled**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.

**In case of skin contact**

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.



**RESUSPEND buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**In case of eye contact**

Protect unharmed eye. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**If swallowed**

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms and effects, both acute and delayed**

No information available.

**Most important symptoms and effects, both acute and delayed****If inhaled**

No known significant effects or critical hazards

**In case of skin contact**

No known significant effects or critical hazards

**In case of eye contact**

No known significant effects or critical hazards

**If swallowed**

No known significant effects or critical hazards

**Over-exposure signs/symptoms****If inhaled**

No specific data.

**In case of skin contact**

No specific data.

**In case of eye contact**

No specific data.

**If swallowed**

No specific data.

**Indication of any immediate medical attention and special treatment needed****Notes to physician**

**RESUSPEND buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

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.

**Specific treatments**

No specific treatment.

**Protection of first-aiders**

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**See toxicology information (Section 11)****SECTION 5: FIREFIGHTING MEASURES****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Specific hazards during fire fighting**

Exposure to decomposition products may be a hazard to health.

**Hazardous combustion products**

No data available.

**Specific extinguishing methods**

No data available.

**Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus for firefighting if necessary with a full face-piece operated in positive pressure mode.

**SECTION 6: ACCIDENTAL RELEASE MEASURE****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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 nonemergency 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).

**RESUSPEND buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**Methods and materials for containment and cleaning up**

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilled product.

Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

**SECTION 7: HANDLING AND STORAGE****Precautions for safe handling**

For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Personal protective equipment**

Hand protection remarks

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

**Eye protection**

Safety glasses

**Skin and body protection**

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Footwear protecting against chemicals.

**Hygiene measures**

Keep away from food and drink.

When using do not eat, drink or smoke.

**RESUSPEND buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	: Liquid
Odor	: No data available.
Odor Threshold	: No data available.
pH	: 7
Melting point/range	: No data available.
Boiling point/boiling range	: No data available.
Flash point	: No data available.
Evaporation rate	: No data available.
Burning rate	: No data available.
Upper explosion limit	: No data available.
Lower explosion limit	: No data available.
Vapor pressure	: No data available.
Relative vapor density	: No data available.
Relative density	: No data available.
Density	: No data available.
Solubility	: Miscible in water
Partition coefficient: n-octanol/water	: No data available.
Autoignition temperature	: No data available.
Thermal decomposition	: No data available.
Viscosity, dynamic	: No data available.
Viscosity, kinematic	: No data available.
Explosive properties	: No data available.
Oxidizing properties	: No data available.

**RESUSPEND buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 10: STABILITY AND REACTIVITY**

**Reactivity**

No decomposition if stored and applied as directed.

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

Hazardous decomposition products formed under fire conditions.

**Conditions to avoid**

No data available.

**Incompatible materials**

No data available.

**Hazardous decomposition products**

No decomposition if stored and applied as directed.

**RESUSPEND buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 11: TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity : No data available.

Acute inhalation toxicity : No data available.

Acute dermal toxicity : No data available.

**Skin corrosion/irritation****Product:**

May cause skin irritation in susceptible persons.

**Serious eye damage/eye irritation****Product:**

Remarks : No data available.

**Respiratory or skin sensitization**

No data available.

**Germ cell mutagenicity**

No data available.

**Carcinogenicity**

No data available.

**Reproductive toxicity**

No data available.

**STOT-single exposure**

No data available.

**STOT-repeated exposure**

No data available.

**Aspiration toxicity**

No data available.

**Further information**

No data available.

**RESUSPEND buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 12: ECOLOGICAL INFORMATION****Ecotoxicity****Product:**

Toxicity to fish : No data available.

Toxicity to algae : No data available.

Toxicity to bacteria : No data available.

**Persistence and degradability**

No data available

**Bioaccumulative potential****Product:**

Bioaccumulation : No data available.

Partition coefficient: n-octanol/water : No data available.

**Mobility in soil**

No data available.

**Other adverse effects**

No data available.

**SECTION 13: DISPOSAL CONSIDERATIONS****Disposal methods****Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal.

**SECTION 14: TRANSPORT INFORMATION****IATA-DGR**

UN number : not dangerous goods

UN proper shipping name : -

Transport hazard class(es) : -

Packing group : -

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

**RESUSPEND buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 15: REGULATORY INFORMATION****OSHA Hazards**

No OSHA Hazards

**EPCRA - Emergency Planning and Community Right-to-Know****SARA 311/312 Hazards**

No SARA Hazards

**SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations****California Prop 65**

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

**SECTION 16: OTHER INFORMATION**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



**STOP buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

Product name : STOP buffer  
Product code : B170003  
Product type : liquid

**Manufacturer or supplier's details**

Company : PreOmics GmbH  
Am Klopferspitz 19  
82152 Planegg  
Germany

Telephone : +49-89-2314163-0

Responsible Department : PreOmics Technical Service,  
PreOmics GmbH,  
Am Klopferspitz 19,  
82152 Planegg,  
Germany,  
Tel.: +49-89-2314163-10,  
Email: reg@preomics.com

Emergency telephone : CHEMTREC  
USA & Canada 1-800-424-9300 and +1

**Recommended use of the chemical and restriction on use**

Recommended use : Laboratory reagent.  
For research use only.

Uses advised against : Not for consumer use.

**STOP buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 2: HAZARDS IDENTIFICATION****Classification of the substance or mixture****GHS Classification**

Flam. Liq. 2 (Flammable liquids, Category 2, H225)

Skin Corr. 1A (Skin corrosion/irritation, Category 1A, H314)

Eye Dam. 1 (Serious eye damage/Eye irritation, Category 1, H318)

STOT SE 3 (Specific Target Organ Toxicity - Single exposure: Narcotic effects, Category 3, H336)

**GHS Label Elements**

Hazard pictograms



Signal word

: Danger

**Hazard statements**

H225: Highly flammable liquid and vapour.

H314: Causes severe skin burns and eye damage.

H336: May cause drowsiness or dizziness.

**Precautionary statements**

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260: Do not breathe vapours.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Potential Health Effects**

Aggravated Medical Condition : None known.

Symptoms of Overexposure : No information available.

**Carcinogenicity:****IARC**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by IARC.

**ACGIH**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by ACGIH.

**OSHA**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by OSHA.

**STOP buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**NTP**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by NTP.

**Precautionary statements****Prevention**

Wear protective gloves. In case of inadequate ventilation wear respiratory protection. Avoid breathing dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

**Response**

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention

**Storage**

Not applicable.

**Disposal**

Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified**

None known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture

:

Mixture

**Hazardous ingredients****CAS number/other identifiers**

Ingredient name	%	CAS number
1-Hydroxypropane	<6%	71-23-8
Isopropyl alcohol	80-99%	67-63-0
Propan-2-yl 2,2,2-trifluoroacetate	<3%	400-38-4
2,2,2-Trifluoroacetic acid	<6%	76-05-1

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 as hazardous to health or the environment and hence require reporting in this section.**

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

**STOP buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 4: FIRST AID MEASURES****Description of first aid measures****General advice**

Show this material safety sheet to the doctor in attendance.

**If inhaled**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.

**In case of skin contact**

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**In case of eye contact**

Protect unharmed eye. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**If swallowed**

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms and effects, both acute and delayed**

No information available.

**Most important symptoms and effects, both acute and delayed****If inhaled**

No known significant effects or critical hazards

**In case of skin contact**

No known significant effects or critical hazards

**STOP buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**In case of eye contact**

No known significant effects or critical hazards

**If swallowed**

No known significant effects or critical hazards

**Over-exposure signs/symptoms****If inhaled**

No specific data.

**In case of skin contact**

No specific data.

**In case of eye contact**

No specific data.

**If swallowed**

No specific data.

**Indication of any immediate medical attention and special treatment needed****Notes to physician**

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.

**Specific treatments**

No specific treatment.

**Protection of first-aiders**

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**See toxicology information (Section 11)**

**STOP buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 5: FIREFIGHTING MEASURES****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Specific hazards during fire fighting**

No specific fire or explosion hazard. Exposure to decomposition products may be a hazard to health.

**Hazardous combustion products**

No hazardous combustion products are known.

**Specific extinguishing methods**

No unsuitable extinguishing media known.

**Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus for firefighting if necessary with a full face-piece operated in positive pressure mode.

**SECTION 6: ACCIDENTAL RELEASE MEASURE****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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 nonemergency 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**

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilled product.

Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

**STOP buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 7: HANDLING AND STORAGE****Precautions for safe handling**

For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Personal protective equipment****Hand protection remarks**

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

**Eye protection**

Safety glasses.

**Skin and body protection**

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Footwear protecting against chemicals.

**Hygiene measures**

Keep away from food and drink.

When using do not eat, drink or smoke.

**STOP buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	: Liquid
Odor	: Alcohol-like
Odor Threshold	: No data available.
pH	: <3
Melting point/range	: No data available.
Boiling point/boiling range	: No data available.
Flash point	: No data available.
Evaporation rate	: No data available.
Burning rate	: No data available.
Upper explosion limit	: No data available.
Lower explosion limit	: No data available.
Vapor pressure	: No data available.
Relative vapor density	: No data available.
Relative density	: No data available.
Density	: No data available.
Solubility	: Water miscible
Partition coefficient: n-octanol/water	: No data available.
Autoignition temperature	: No data available.
Thermal decomposition	: No data available.
Viscosity, dynamic	: No data available.
Viscosity, kinematic	: No data available.
Explosive properties	: No data available.
Oxidizing properties	: No data available.



**STOP buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

---

**SECTION 10: STABILITY AND REACTIVITY**

**Reactivity**

No decomposition if stored and applied as directed.

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

Hazardous decomposition products formed under fire conditions.

**Conditions to avoid**

Heat, flames and sparks, Keep away from open flames, hot surfaces and sources of ignition.

**Incompatible materials**

No data available.

**Hazardous decomposition products**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), peroxides.

---

**STOP buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 11: TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity : No data available.

Acute inhalation toxicity : No data available.

Acute dermal toxicity : No data available.

**Skin corrosion/irritation****Product:**

May cause skin irritation in susceptible persons.

**Serious eye damage/eye irritation****Product:**

Remarks : May irritate eyes.

**Respiratory or skin sensitization**

No data available.

**Germ cell mutagenicity**

No data available.

**Carcinogenicity**

No data available.

**Reproductive toxicity**

No data available.

**STOT-single exposure**

No data available.

**STOT-repeated exposure**

No data available.

**Aspiration toxicity**

No data available.

**Further information**

No data available.

**STOP buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 12: ECOLOGICAL INFORMATION****Ecotoxicity****Product:**

Toxicity to fish : No data available.

Toxicity to algae : No data available.

Toxicity to bacteria : No data available.

**Persistence and degradability**

No data available

**Bioaccumulative potential****Product:**

Bioaccumulation : No data available.

Partition coefficient: n-octanol/water : No data available.

**Mobility in soil**

No data available.

**Other adverse effects**

No data available.

**SECTION 13: DISPOSAL CONSIDERATIONS****Disposal methods****Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal.

**SECTION 14: TRANSPORT INFORMATION****IATA-DGR**

UN number	:	UN2924
UN proper shipping name	:	Flammable liquid, corrosive, N.O.S.
Transport hazard class(es)	:	3(8)
Packing group	:	II

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

**STOP buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 15: REGULATORY INFORMATION****OSHA Hazards**

No OSHA Hazards

**EPCRA - Emergency Planning and Community Right-to-Know****SARA 311/312 Hazards**

No SARA Hazards

**SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations****California Prop 65**

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

**SECTION 16: OTHER INFORMATION**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**WASH 1 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

Product name : WASH 1 buffer  
Product code : B170004  
Product type : liquid

**Manufacturer or supplier's details**

Company : PreOmics GmbH  
Am Klopferspitz 19  
82152 Planegg  
Germany

Telephone : +49-89-2314163-0

Responsible Department : PreOmics Technical Service,  
PreOmics GmbH,  
Am Klopferspitz 19,  
82152 Planegg,  
Germany,  
Tel.: +49-89-2314163-10,  
Email: reg@preomics.com

Emergency telephone : CHEMTREC  
USA & Canada 1-800-424-9300 and +1

**Recommended use of the chemical and restriction on use**

Recommended use : Laboratory reagent.  
For research use only.

Uses advised against : Not for consumer use.

**WASH 1 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 2: HAZARDS IDENTIFICATION****Classification of the substance or mixture****GHS Classification**

Flam. Liq. 2 (Flammable liquids, Category 2, H225)

Skin Corr. 1A (Skin corrosion/irritation, Category 1A, H314)

Eye Dam. 1 (Serious eye damage/Eye irritation, Category 1, H318)

STOT SE 3 (Specific Target Organ Toxicity - Single exposure: Narcotic effects, Category 3, H336)

**GHS Label Elements**

Hazard pictograms



Signal word

: Danger

**Hazard statements**

H225: Highly flammable liquid and vapour.

H314: Causes severe skin burns and eye damage.

H336: May cause drowsiness or dizziness.

**Precautionary statements**

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260: Do not breathe vapours.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Potential Health Effects**

Aggravated Medical Condition : None known.

Symptoms of Overexposure : No information available.

**Carcinogenicity:****IARC**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by IARC.

**ACGIH**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by ACGIH.

**OSHA**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by OSHA.

**WASH 1 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**NTP**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by NTP.

**Precautionary statements****Prevention**

Wear protective gloves. In case of inadequate ventilation wear respiratory protection. Avoid breathing dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

**Response**

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention

**Storage**

Not applicable.

**Disposal**

Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified**

None known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture

:

Mixture

**Hazardous ingredients****CAS number/other identifiers**

Ingredient name	%	CAS number
1-Hydroxypropane	<6%	71-23-8
Isopropyl alcohol	80-99%	67-63-0
Propan-2-yl 2,2,2-trifluoroacetate	<3%	400-38-4
2,2,2-Trifluoroacetic acid	<6%	76-05-1

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 as hazardous to health or the environment and hence require reporting in this section.**

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

**WASH 1 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 4: FIRST AID MEASURES****Description of first aid measures****General advice**

Show this material safety sheet to the doctor in attendance.

**If inhaled**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.

**In case of skin contact**

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**In case of eye contact**

Protect unharmed eye. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**If swallowed**

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms and effects, both acute and delayed**

No information available.

**Most important symptoms and effects, both acute and delayed****If inhaled**

No known significant effects or critical hazards

**In case of skin contact**

No known significant effects or critical hazards

**In case of eye contact**



**WASH 1 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

No known significant effects or critical hazards

**If swallowed**

No known significant effects or critical hazards

**Over-exposure signs/symptoms****If inhaled**

No specific data.

**In case of skin contact**

No specific data.

**In case of eye contact**

No specific data.

**If swallowed**

No specific data.

**Indication of any immediate medical attention and special treatment needed****Notes to physician**

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.

**Specific treatments**

No specific treatment.

**Protection of first-aiders**

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**See toxicology information (Section 11)**

**WASH 1 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 5: FIREFIGHTING MEASURES****Suitable extinguishing media**

CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam. Cool closed containers exposed to fire with water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Specific hazards during fire fighting**

Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Exposure to decomposition products may be a hazard to health.

**Hazardous combustion products**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), peroxides.

**Specific extinguishing methods**

Do not use water jet.

**Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus for firefighting if necessary with a full face-piece operated in positive pressure mode.

**SECTION 6: ACCIDENTAL RELEASE MEASURE****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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 nonemergency 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).

**WASH 1 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**Methods and materials for containment and cleaning up**

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilled product.

Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

**SECTION 7: HANDLING AND STORAGE****Precautions for safe handling**

For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Personal protective equipment****Hand protection remarks**

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

**Eye protection**

Safety glasses.

**Skin and body protection**

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Footwear protecting against chemicals.

**Hygiene measures**

Keep away from food and drink.

When using do not eat, drink or smoke.

**WASH 1 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	:	Liquid
Odor	:	Alcohol-like
Odor Threshold	:	No data available.
pH	:	<3
Melting point/range	:	No data available.
Boiling point/boiling range	:	No data available.
Flash point	:	No data available.
Evaporation rate	:	No data available.
Burning rate	:	No data available.
Upper explosion limit	:	No data available.
Lower explosion limit	:	No data available.
Vapor pressure	:	No data available.
Relative vapor density	:	No data available.
Relative density	:	No data available.
Density	:	No data available.
Solubility	:	Water miscible
Partition coefficient: n-octanol/water	:	No data available.
Autoignition temperature	:	No data available.
Thermal decomposition	:	No data available.
Viscosity, dynamic	:	No data available.
Viscosity, kinematic	:	No data available.
Explosive properties	:	No data available.
Oxidizing properties	:	No data available.

## WASH 1 buffer

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

### SECTION 10: STABILITY AND REACTIVITY

#### Reactivity

No decomposition if stored and applied as directed.

#### Chemical stability

Stable under recommended storage conditions.

#### Possibility of hazardous reactions

Hazardous decomposition products formed under fire conditions.

#### Conditions to avoid

Heat, flames and sparks, Keep away from open flames, hot surfaces and sources of ignition.

#### Incompatible materials

No data available.

#### Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), peroxides.

**WASH 1 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 11: TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity : No data available.

Acute inhalation toxicity : No data available.

Acute dermal toxicity : No data available.

**Skin corrosion/irritation****Product:**

May cause skin irritation in susceptible persons.

**Serious eye damage/eye irritation****Product:**

Remarks : May irritate eyes.

**Respiratory or skin sensitization**

No data available.

**Germ cell mutagenicity**

No data available.

**Carcinogenicity**

No data available.

**Reproductive toxicity**

No data available.

**STOT-single exposure**

No data available.

**STOT-repeated exposure**

No data available.

**Aspiration toxicity**

No data available.

**Further information**

No data available.

**SECTION 12: ECOLOGICAL INFORMATION**

**WASH 1 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**Ecotoxicity****Product:**

Toxicity to fish	:	No data available.
Toxicity to algae	:	No data available.
Toxicity to bacteria	:	No data available.

**Persistence and degradability**

No data available

**Bioaccumulative potential****Product:**

Bioaccumulation	:	No data available.
Partition coefficient: n-octanol/water	:	No data available.

**Mobility in soil**

No data available.

**Other adverse effects**

No data available.

**SECTION 13: DISPOSAL CONSIDERATIONS****Disposal methods****Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal.

**SECTION 14: TRANSPORT INFORMATION****IATA-DGR**

UN number	:	UN2924
UN proper shipping name	:	Flammable liquid, corrosive, N.O.S.
Transport hazard class(es)	:	3(8)
Packing group	:	II

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

**WASH 1 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 15: REGULATORY INFORMATION****OSHA Hazards**

No OSHA Hazards

**EPCRA - Emergency Planning and Community Right-to-Know****SARA 311/312 Hazards**

No SARA Hazards

**SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations****California Prop 65**

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

**SECTION 16: OTHER INFORMATION**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



**WASH 2 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

Product name : WASH 2 buffer  
Product code : B170005  
Product type : liquid

**Manufacturer or supplier's details**

Company : PreOmics GmbH  
Am Klopferspitz 19  
82152 Planegg  
Germany

Telephone : +49-89-2314163-0

Responsible Department : PreOmics Technical Service,  
PreOmics GmbH,  
Am Klopferspitz 19,  
82152 Planegg,  
Germany,  
Tel.: +49-89-2314163-10,  
Email: reg@preomics.com

Emergency telephone : CHEMTREC  
USA & Canada 1-800-424-9300 and +1

**Recommended use of the chemical and restriction on use**

Recommended use : Laboratory reagent.  
For research use only.

Uses advised against : Not for consumer use.

**WASH 2 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 2: HAZARDS IDENTIFICATION****Classification of the substance or mixture****GHS Classification**

Skin Corr. 1A (Ätz-/Reizwirkung auf die Haut, Kategorie 1A, H314)

Eye Dam. 1 (Schwere Augenschädigung/-reizung, Kategorie 1, H318)

**GHS Label Elements**

Hazard pictograms

:



Signal word

:

Danger

**Hazard statements**

H314: Causes severe skin burns and eye damage.

**Precautionary statements**

P260: Do not breathe vapours.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

**Potential Health Effects**

Aggravated Medical Condition : None known.

Symptoms of Overexposure : No information available.

**Carcinogenicity:****IARC**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by IARC.

**ACGIH**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by ACGIH.

**OSHA**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by OSHA.

**NTP**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by NTP.

**WASH 2 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**Precautionary statements****Prevention**

Wear protective gloves. In case of inadequate ventilation wear respiratory protection. Avoid breathing dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

**Response**

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention

**Storage**

Not applicable.

**Disposal**

Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified**

None known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture

:

Mixture

**Hazardous ingredients****CAS number/other identifiers**

Ingredient name	%	CAS number
2,2,2-Trifluoroacetic acid	<6%	76-05-1

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 as hazardous to health or the environment and hence require reporting in this section.**

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

**WASH 2 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 4: FIRST AID MEASURES****Description of first aid measures****General advice**

Show this material safety sheet to the doctor in attendance.

**If inhaled**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.

**In case of skin contact**

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**In case of eye contact**

Protect unharmed eye. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**If swallowed**

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms and effects, both acute and delayed**

No information available.

**Most important symptoms and effects, both acute and delayed****If inhaled**

No known significant effects or critical hazards

**In case of skin contact**

No known significant effects or critical hazards

**WASH 2 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**In case of eye contact**

No known significant effects or critical hazards

**If swallowed**

No known significant effects or critical hazards

**Over-exposure signs/symptoms****If inhaled**

No specific data.

**In case of skin contact**

No specific data.

**In case of eye contact**

No specific data.

**If swallowed**

No specific data.

**Indication of any immediate medical attention and special treatment needed****Notes to physician**

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.

**Specific treatments**

No specific treatment.

**Protection of first-aiders**

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**See toxicology information (Section 11)**

**WASH 2 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 5: FIREFIGHTING MEASURES****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Specific hazards during fire fighting**

No specific fire or explosion hazard. Exposure to decomposition products may be a hazard to health.

**Hazardous combustion products**

No hazardous combustion products are known.

**Specific extinguishing methods**

No unsuitable extinguishing media known.

**Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus for firefighting if necessary with a full face-piece operated in positive pressure mode.

**SECTION 6: ACCIDENTAL RELEASE MEASURE****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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 nonemergency 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**

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilled product.

Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

**WASH 2 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 7: HANDLING AND STORAGE****Precautions for safe handling**

For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Personal protective equipment****Hand protection remarks**

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

**Eye protection**

Safety glasses.

**Skin and body protection**

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Footwear protecting against chemicals.

**Hygiene measures**

Keep away from food and drink.

When using do not eat, drink or smoke.

**WASH 2 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	:	Liquid
Odor	:	No data available
Odor Threshold	:	No data available.
pH	:	<3
Melting point/range	:	No data available.
Boiling point/boiling range	:	No data available.
Flash point	:	No data available.
Evaporation rate	:	No data available.
Burning rate	:	No data available.
Upper explosion limit	:	No data available.
Lower explosion limit	:	No data available.
Vapor pressure	:	No data available.
Relative vapor density	:	No data available.
Relative density	:	No data available.
Density	:	No data available.
Solubility	:	Water miscible
Partition coefficient: n-octanol/water	:	No data available.
Autoignition temperature	:	No data available.
Thermal decomposition	:	No data available.
Viscosity, dynamic	:	No data available.
Viscosity, kinematic	:	No data available.
Explosive properties	:	No data available.
Oxidizing properties	:	No data available.



## WASH 2 buffer

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

### SECTION 10: STABILITY AND REACTIVITY

#### Reactivity

No decomposition if stored and applied as directed.

#### Chemical stability

Stable under recommended storage conditions.

#### Possibility of hazardous reactions

Hazardous decomposition products formed under fire conditions.

#### Conditions to avoid

No data available.

#### Incompatible materials

No data available.

#### Hazardous decomposition products

No decomposition if stored and applied as directed.

**WASH 2 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 11: TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity : No data available.

Acute inhalation toxicity : No data available.

Acute dermal toxicity : No data available.

**Skin corrosion/irritation****Product:**

May cause skin irritation in susceptible persons.

**Serious eye damage/eye irritation****Product:**

Remarks : May irritate eyes.

**Respiratory or skin sensitization**

No data available.

**Germ cell mutagenicity**

No data available.

**Carcinogenicity**

No data available.

**Reproductive toxicity**

No data available.

**STOT-single exposure**

No data available.

**STOT-repeated exposure**

No data available.

**Aspiration toxicity**

No data available.

**Further information**

No data available.

**WASH 2 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 12: ECOLOGICAL INFORMATION****Ecotoxicity****Product:**

Toxicity to fish : No data available.

Toxicity to algae : No data available.

Toxicity to bacteria : No data available.

**Persistence and degradability**

No data available

**Bioaccumulative potential****Product:**

Bioaccumulation : No data available.

Partition coefficient: n-octanol/water : No data available.

**Mobility in soil**

No data available.

**Other adverse effects**

No data available.

**SECTION 13: DISPOSAL CONSIDERATIONS****Disposal methods****Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal.

**SECTION 14: TRANSPORT INFORMATION****IATA-DGR**

UN number	:	UN3265
UN proper shipping name	:	Corrosive, acidic, organic liquid N.O.S.
Transport hazard class(es)	:	3(8)
Packing group	:	III

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

**WASH 2 buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 15: REGULATORY INFORMATION****OSHA Hazards**

No OSHA Hazards

**EPCRA - Emergency Planning and Community Right-to-Know****SARA 311/312 Hazards**

No SARA Hazards

**SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations****California Prop 65**

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

**SECTION 16: OTHER INFORMATION**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**ELUTE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

Product name : ELUTE buffer  
Product code : B170006  
Product type : liquid

**Manufacturer or supplier's details**

Company : PreOmics GmbH  
Am Klopferspitz 19  
82152 Planegg  
Germany

Telephone : +49-89-2314163-0

Responsible Department : PreOmics Technical Service,  
PreOmics GmbH,  
Am Klopferspitz 19,  
82152 Planegg,  
Germany,  
Tel.: +49-89-2314163-10,  
Email: reg@preomics.com

Emergency telephone : CHEMTREC  
USA & Canada 1-800-424-9300 and +1

**Recommended use of the chemical and restriction on use**

Recommended use : Laboratory reagent.  
For research use only.

Uses advised against : Not for consumer use.

**ELUTE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 2: HAZARDS IDENTIFICATION****Classification of the substance or mixture****GHS Classification**

Flam. Liq. 2 (Flammable liquids, Category 2, H225)

Skin Corr. 1A (Skin corrosion/irritation, Category 1A, H314)

Eye Dam. 1 (Serious eye damage/Eye irritation, Category 1, H318)

**GHS Label Elements**

Hazard pictograms



Signal word

: Danger

**Hazard statements**

H225: Highly flammable liquid and vapour.

H314: Causes severe skin burns and eye damage.

**Precautionary statements**

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260: Do not breathe vapours.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P403 + P235: Store in a well-ventilated place. Keep cool.

**Potential Health Effects**

Aggravated Medical Condition : None known.

Symptoms of Overexposure : No information available.

**Carcinogenicity:****IARC**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by IARC.

**ACGIH**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by ACGIH.

**OSHA**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by OSHA.

**ELUTE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**NTP**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by NTP.

**Precautionary statements****Prevention**

Wear protective gloves. In case of inadequate ventilation wear respiratory protection. Avoid breathing dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

**Response**

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention

**Storage**

Not applicable.

**Disposal**

Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified**

None known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture

:

Mixture

**Hazardous ingredients****CAS number/other identifiers**

Ingredient name	%	CAS number
Acetonitrile	50-99%	75-05-8
Ammonia solution	1-20%	1336-21-6

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 as hazardous to health or the environment and hence require reporting in this section.**

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

**ELUTE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 4: FIRST AID MEASURES****Description of first aid measures****General advice**

Show this material safety sheet to the doctor in attendance.

**If inhaled**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.

**In case of skin contact**

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**In case of eye contact**

Protect unharmed eye. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**If swallowed**

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms and effects, both acute and delayed**

No information available.

**Most important symptoms and effects, both acute and delayed****If inhaled**

No known significant effects or critical hazards

**In case of skin contact**

No known significant effects or critical hazards



**ELUTE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**In case of eye contact**

No known significant effects or critical hazards

**If swallowed**

No known significant effects or critical hazards

**Over-exposure signs/symptoms****If inhaled**

No specific data.

**In case of skin contact**

No specific data.

**In case of eye contact**

No specific data.

**If swallowed**

No specific data.

**Indication of any immediate medical attention and special treatment needed****Notes to physician**

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.

**Specific treatments**

No specific treatment.

**Protection of first-aiders**

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**See toxicology information (Section 11)**

**ELUTE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 5: FIREFIGHTING MEASURES****Suitable extinguishing media**

Water spray. CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam. Cool closed containers exposed to fire with water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Specific hazards during fire fighting**

Flammable. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Vapors may form explosive mixtures with air. Exposure to decomposition products may be a hazard to health.

**Hazardous combustion products**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), peroxides.

**Specific extinguishing methods**

Do not use a solid water stream as it may scatter and spread fire.

**Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus for firefighting if necessary with a full face-piece operated in positive pressure mode.

**SECTION 6: ACCIDENTAL RELEASE MEASURE****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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 nonemergency 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).

**ELUTE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**Methods and materials for containment and cleaning up**

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilled product.

Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

**SECTION 7: HANDLING AND STORAGE****Precautions for safe handling**

For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Personal protective equipment****Hand protection remarks**

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

**Eye protection**

Safety glasses.

**Skin and body protection**

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Footwear protecting against chemicals.

**Hygiene measures**

Keep away from food and drink.

When using do not eat, drink or smoke.

**ELUTE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	:	Liquid
Odor	:	No data available.
Odor Threshold	:	No data available.
pH	:	>9
Melting point/range	:	No data available.
Boiling point/boiling range	:	No data available.
Flash point	:	No data available.
Evaporation rate	:	No data available.
Burning rate	:	No data available.
Upper explosion limit	:	No data available.
Lower explosion limit	:	No data available.
Vapor pressure	:	No data available.
Relative vapor density	:	No data available.
Relative density	:	No data available.
Density	:	No data available.
Solubility	:	Water miscible
Partition coefficient: n-octanol/water	:	No data available.
Autoignition temperature	:	No data available.
Thermal decomposition	:	No data available.
Viscosity, dynamic	:	No data available.
Viscosity, kinematic	:	No data available.
Explosive properties	:	No data available.
Oxidizing properties	:	No data available.

**ELUTE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 10: STABILITY AND REACTIVITY****Reactivity**

No decomposition if stored and applied as directed.

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

Hazardous decomposition products formed under fire conditions.

**Conditions to avoid**

Heat, flames and sparks, Keep away from open flames, hot surfaces and sources of ignition.

**Incompatible materials**

No data available.

**Hazardous decomposition products**

Hydrogen cyanide (hydrocyanic acid), Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

**ELUTE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 11: TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity : No data available.

Acute inhalation toxicity : No data available.

Acute dermal toxicity : No data available.

**Skin corrosion/irritation****Product:**

May cause skin irritation in susceptible persons.

**Serious eye damage/eye irritation****Product:**

Remarks : May irritate eyes.

**Respiratory or skin sensitization**

No data available.

**Germ cell mutagenicity**

No data available.

**Carcinogenicity**

No data available.

**Reproductive toxicity**

No data available.

**STOT-single exposure**

No data available.

**STOT-repeated exposure**

No data available.

**Aspiration toxicity**

No data available.

**Further information**

No data available.

**ELUTE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 12: ECOLOGICAL INFORMATION****Ecotoxicity****Product:**

Toxicity to fish : No data available.

Toxicity to algae : No data available.

Toxicity to bacteria : No data available.

**Persistence and degradability**

No data available

**Bioaccumulative potential****Product:**

Bioaccumulation : No data available.

Partition coefficient: n-octanol/water : No data available.

**Mobility in soil**

No data available.

**Other adverse effects**

No data available.

**SECTION 13: DISPOSAL CONSIDERATIONS****Disposal methods****Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal.

**SECTION 14: TRANSPORT INFORMATION****IATA-DGR**

UN number	:	UN 1648
UN proper shipping name	:	Acetonitrile
Transport hazard class(es)	:	3
Packing group	:	II

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

**ELUTE buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 15: REGULATORY INFORMATION****OSHA Hazards**

No OSHA Hazards

**EPCRA - Emergency Planning and Community Right-to-Know****SARA 311/312 Hazards**

No SARA Hazards

**SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**CERCLA**

This material does not contain any chemical components in quantities equal to or greater than their reportable quantity (RQ), and is therefore not subject to reporting to the National Response Center under CERCLA.

**US State Regulations****California Prop 65**

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

**SECTION 16: OTHER INFORMATION**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



**LC-LOAD buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

Product name : LC-LOAD buffer  
Product code : B170007  
Product type : liquid

**Manufacturer or supplier's details**

Company : PreOmics GmbH  
Am Klopferspitz 19  
82152 Planegg  
Germany

Telephone : +49-89-2314163-0

Responsible Department : PreOmics Technical Service,  
PreOmics GmbH,  
Am Klopferspitz 19,  
82152 Planegg,  
Germany,  
Tel.: +49-89-2314163-10,  
Email: reg@preomics.com

Emergency telephone : CHEMTREC  
USA & Canada 1-800-424-9300 and +1

**Recommended use of the chemical and restriction on use**

Recommended use : Laboratory reagent.  
For research use only.

Uses advised against : Not for consumer use.

**LC-LOAD buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 2: HAZARDS IDENTIFICATION****Classification of the substance or mixture****GHS Classification**

Not a hazardous substance or mixture

**GHS Label Elements**

Hazard pictograms	:	None
Signal word	:	No signal word

<b>Hazard statements</b>	:	None
--------------------------	---	------

<b>Precautionary statements</b>	:	None
---------------------------------	---	------

**Potential Health Effects**

Aggravated Medical Condition	:	None known.
Symptoms of Overexposure	:	No information available.

**Carcinogenicity:****IARC**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by IARC.

**ACGIH**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by ACGIH.

**OSHA**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by OSHA.

**NTP**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by NTP.

**Precautionary statements****Prevention**

Wear protective gloves. In case of inadequate ventilation wear respiratory protection. Avoid breathing dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

**Response**

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention

**LC-LOAD buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**Storage**

Not applicable.

**Disposal**

Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified**

None known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous ingredients**

No hazardous ingredients.

**CAS number/other identifiers**

CAS number : Not applicable.

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 as hazardous to health or the environment and hence require reporting in this section.**

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

**SECTION 4: FIRST AID MEASURES****Description of first aid measures****General advice**

Show this material safety sheet to the doctor in attendance.

**If inhaled**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.

**In case of skin contact**

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**LC-LOAD buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**In case of eye contact**

Protect unharmed eye. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**If swallowed**

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms and effects, both acute and delayed**

No information available.

**Most important symptoms and effects, both acute and delayed****If inhaled**

No known significant effects or critical hazards

**In case of skin contact**

No known significant effects or critical hazards

**In case of eye contact**

No known significant effects or critical hazards

**If swallowed**

No known significant effects or critical hazards

**Over-exposure signs/symptoms****If inhaled**

No specific data.

**In case of skin contact**

No specific data.

**In case of eye contact**

No specific data.

**If swallowed**

No specific data.

**LC-LOAD buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**Indication of any immediate medical attention and special treatment needed****Notes to physician**

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.

**Specific treatments**

No specific treatment.

**Protection of first-aiders**

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**See toxicology information (Section 11)****SECTION 5: FIREFIGHTING MEASURES****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Specific hazards during fire fighting**

No specific fire or explosion hazard. Exposure to decomposition products may be a hazard to health.

**Hazardous combustion products**

No hazardous combustion products are known.

**Specific extinguishing methods**

No unsuitable extinguishing media known.

**Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus for firefighting if necessary with a full face-piece operated in positive pressure mode.

**SECTION 6: ACCIDENTAL RELEASE MEASURE****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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 nonemergency personnel".

**LC-LOAD buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**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**

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilled product.

Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

**SECTION 7: HANDLING AND STORAGE****Precautions for safe handling**

For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Personal protective equipment****Hand protection remarks**

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

**Eye protection**

Safety glasses.

**Skin and body protection**

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Footwear protecting against chemicals.

**Hygiene measures**

Keep away from food and drink.

When using do not eat, drink or smoke.

**LC-LOAD buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	:	Liquid
Odor	:	No data available.
Odor Threshold	:	No data available.
pH	:	<7
Melting point/range	:	No data available.
Boiling point/boiling range	:	No data available.
Flash point	:	No data available.
Evaporation rate	:	No data available.
Burning rate	:	No data available.
Upper explosion limit	:	No data available.
Lower explosion limit	:	No data available.
Vapor pressure	:	No data available.
Relative vapor density	:	No data available.
Relative density	:	No data available.
Density	:	No data available.
Solubility	:	Water miscible
Partition coefficient: n-octanol/water	:	No data available.
Autoignition temperature	:	No data available.
Thermal decomposition	:	No data available.
Viscosity, dynamic	:	No data available.
Viscosity, kinematic	:	No data available.
Explosive properties	:	No data available.
Oxidizing properties	:	No data available.

**LC-LOAD buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

---

**SECTION 10: STABILITY AND REACTIVITY**

**Reactivity**

No decomposition if stored and applied as directed.

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

Hazardous decomposition products formed under fire conditions.

**Conditions to avoid**

No data available.

**Incompatible materials**

No data available.

**Hazardous decomposition products**

No decomposition if stored and applied as directed.



**LC-LOAD buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 11: TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity : No data available.

Acute inhalation toxicity : No data available.

Acute dermal toxicity : No data available.

**Skin corrosion/irritation****Product:**

May cause skin irritation in susceptible persons.

**Serious eye damage/eye irritation****Product:**

Remarks : May irritate eyes.

**Respiratory or skin sensitization**

No data available.

**Germ cell mutagenicity**

No data available.

**Carcinogenicity**

No data available.

**Reproductive toxicity**

No data available.

**STOT-single exposure**

No data available.

**STOT-repeated exposure**

No data available.

**Aspiration toxicity**

No data available.

**Further information**

No data available.

**LC-LOAD buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 12: ECOLOGICAL INFORMATION****Ecotoxicity****Product:**

Toxicity to fish : No data available.

Toxicity to algae : No data available.

Toxicity to bacteria : No data available.

**Persistence and degradability**

No data available

**Bioaccumulative potential****Product:**

Bioaccumulation : No data available.

Partition coefficient: n-octanol/water : No data available.

**Mobility in soil**

No data available.

**Other adverse effects**

No data available.

**SECTION 13: DISPOSAL CONSIDERATIONS****Disposal methods****Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal.

**SECTION 14: TRANSPORT INFORMATION****IATA-DGR**

UN number	:	UN 3265
UN proper shipping name	:	Corrosive, acidic, organic liquid N.O.S.
Transport hazard class(es)	:	3(8)
Packing group	:	III

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

**LC-LOAD buffer**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 15: REGULATORY INFORMATION****OSHA Hazards**

No OSHA Hazards

**EPCRA - Emergency Planning and Community Right-to-Know****SARA 311/312 Hazards**

No SARA Hazards

**SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations****California Prop 65**

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

**SECTION 16: OTHER INFORMATION**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**DIGEST**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

Product name : DIGEST  
Product code : B170008  
Product type : solid

**Manufacturer or supplier's details**

Company : PreOmics GmbH  
Am Klopferspitz 19  
82152 Planegg  
Germany

Telephone : +49-89-2314163-0

Responsible Department : PreOmics Technical Service,  
PreOmics GmbH,  
Am Klopferspitz 19,  
82152 Planegg,  
Germany,  
Tel.: +49-89-2314163-10,  
Email: reg@preomics.com

Emergency telephone : CHEMTREC  
USA & Canada 1-800-424-9300 and +1

**Recommended use of the chemical and restriction on use**

Recommended use : Laboratory reagent.  
For research use only.

Uses advised against : Not for consumer use.

**DIGEST**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 2: HAZARDS IDENTIFICATION****Classification of the substance or mixture****GHS Classification**

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

Respiratory sensitisation (Category 1), H334

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

**GHS Label Elements**

Hazard pictograms



Signal word

: Danger

**Hazard statements**

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335: May cause respiratory irritation.

**Precautionary statements**

P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P280: Wear eye protection/ face protection.

P284: Wear respiratory protection.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P337 + P313: If eye irritation persists: Get medical advice/ attention.

P342 + P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

**Potential Health Effects**

Aggravated Medical Condition : None known.

Symptoms of Overexposure : No information available.

**Carcinogenicity:****IARC**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by IARC.

**ACGIH**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by ACGIH.

**OSHA**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by OSHA.

**DIGEST**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**NTP**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or conformed human carcinogen by NTP.

**Precautionary statements****Prevention**

Wear protective gloves. In case of inadequate ventilation wear respiratory protection. Avoid breathing dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

**Response**

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention

**Storage**

Not applicable.

**Disposal**

Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified**

None known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture

:

Mixture

**Hazardous ingredients****CAS number/other identifiers**

Ingredient name	%	CAS number
Trypsin	10-90%	9002-07-7
Endopeptidase Lys-C	10-90%	78642-25-8

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 as hazardous to health or the environment and hence require reporting in this section.**

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

**DIGEST**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 4: FIRST AID MEASURES****Description of first aid measures****General advice**

Show this material safety sheet to the doctor in attendance.

**If inhaled**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.

**In case of skin contact**

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**In case of eye contact**

Protect unharmed eye. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**If swallowed**

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms and effects, both acute and delayed**

No information available.

**Most important symptoms and effects, both acute and delayed****If inhaled**

No known significant effects or critical hazards

**In case of skin contact**

No known significant effects or critical hazards

**DIGEST**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**In case of eye contact**

No known significant effects or critical hazards

**If swallowed**

No known significant effects or critical hazards

**Over-exposure signs/symptoms****If inhaled**

No specific data.

**In case of skin contact**

No specific data.

**In case of eye contact**

No specific data.

**If swallowed**

No specific data.

**Indication of any immediate medical attention and special treatment needed****Notes to physician**

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.

**Specific treatments**

No specific treatment.

**Protection of first-aiders**

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**See toxicology information (Section 11)**



**DIGEST**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 5: FIREFIGHTING MEASURES****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Specific hazards during fire fighting**

Exposure to decomposition products may be a hazard to health.

**Hazardous combustion products**

No data available.

**Specific extinguishing methods**

No data available.

**Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus for firefighting if necessary with a full face-piece operated in positive pressure mode.

**SECTION 6: ACCIDENTAL RELEASE MEASURE****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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 nonemergency 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**

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilled product.

Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

**DIGEST**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 7: HANDLING AND STORAGE****Precautions for safe handling**

For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Personal protective equipment****Hand protection remarks**

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

**Eye protection**

Safety glasses.

**Skin and body protection**

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Footwear protecting against chemicals.

**Hygiene measures**

Keep away from food and drink.

When using do not eat, drink or smoke.

**DIGEST**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	:	Solid
Odor	:	No data available.
Odor Threshold	:	No data available.
pH	:	No data available.
Melting point/range	:	No data available.
Boiling point/boiling range	:	No data available.
Flash point	:	No data available.
Evaporation rate	:	No data available.
Burning rate	:	No data available.
Upper explosion limit	:	No data available.
Lower explosion limit	:	No data available.
Vapor pressure	:	No data available.
Relative vapor density	:	No data available.
Relative density	:	No data available.
Density	:	No data available.
Solubility	:	Water miscible
Partition coefficient: n-octanol/water	:	No data available.
Autoignition temperature	:	No data available.
Thermal decomposition	:	No data available.
Viscosity, dynamic	:	No data available.
Viscosity, kinematic	:	No data available.
Explosive properties	:	No data available.
Oxidizing properties	:	No data available.

## DIGEST

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

---

### SECTION 10: STABILITY AND REACTIVITY

#### Reactivity

No decomposition if stored and applied as directed.

#### Chemical stability

Stable under recommended storage conditions.

#### Possibility of hazardous reactions

Hazardous decomposition products formed under fire conditions.

#### Conditions to avoid

No data available.

#### Incompatible materials

No data available.

#### Hazardous decomposition products

No data available.

---

**DIGEST**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 11: TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity : No data available.

Acute inhalation toxicity : No data available.

Acute dermal toxicity : No data available.

**Skin corrosion/irritation****Product:**

May cause skin irritation in susceptible persons.

**Serious eye damage/eye irritation****Product:**

Remarks : No data available.

**Respiratory or skin sensitization**

No data available.

**Germ cell mutagenicity**

No data available.

**Carcinogenicity**

No data available.

**Reproductive toxicity**

No data available.

**STOT-single exposure**

No data available.

**STOT-repeated exposure**

No data available.

**Aspiration toxicity**

No data available.

**Further information**

No data available.

**DIGEST**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 12: ECOLOGICAL INFORMATION****Ecotoxicity****Product:**

Toxicity to fish : No data available.

Toxicity to algae : No data available.

Toxicity to bacteria : No data available.

**Persistence and degradability**

No data available

**Bioaccumulative potential****Product:**

Bioaccumulation : No data available.

Partition coefficient: n-octanol/water : No data available.

**Mobility in soil**

No data available.

**Other adverse effects**

No data available.

**SECTION 13: DISPOSAL CONSIDERATIONS****Disposal methods****Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal.

**SECTION 14: TRANSPORT INFORMATION****IATA-DGR**

UN number : -

UN proper shipping name : -

Transport hazard class(es) : -

Packing group : -

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

**DIGEST**

Version: 1.1

Revision Date: 24.07.2017

Print Date: 24.07.2017

**SECTION 15: REGULATORY INFORMATION****OSHA Hazards**

No OSHA Hazards

**EPCRA - Emergency Planning and Community Right-to-Know****SARA 311/312 Hazards**

No SARA Hazards

**SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations****California Prop 65**

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

**SECTION 16: OTHER INFORMATION**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Manufacturer:  
PreOmics GmbH  
Am Klopferspitz 19  
82152 Martinsried  
Germany



Phone: +49 (0) 89/23 14 163 – 0

[www.preomics.com](http://www.preomics.com)  
[info@preomics.com](mailto:info@preomics.com)

## Datasheet overview - iST Kits

### Bottom-up proteomic sample preparation

**Description:** laboratory reagents (see Table 3) and accessories for proteomic sample preparation.

**End use:** proteomic sample preparation. For research use only.

Table 1: Overview of shipped articles.

Article	Description	Quantities		
		Test iST Kit 4x	iST Kit 8x	iST Kit 96x
Resuspend	Protease reconstitution buffer for enzymes.	1 x 2 ml	1 x 2 ml	4 x 2 ml
Digest	Enzyme <i>Trypsin</i> -mix to digest proteins ( <i>non-hazardous, non-toxic, non-infectious</i> ).	1 pc (<50µg/tube)	2 pcs (<50µg/tube)	24 pcs (<50µg/tube)
Lyse	Buffer to denature, reduce and alkylate proteins.	1 x 1 ml	1 x 1 ml	12 x 1 ml
Stop	Buffer to stop the enzymatic activity.	1 x 1 ml	1 x 1 ml	12 x 1 ml
Wash 1	Buffer to clean up peptides from hydrophobic materials.	1 x 2 ml	1 x 2 ml	12 x 2 ml
Wash 2	Buffer to clean up peptides from hydrophilic materials.	1 x 2 ml	1 x 2 ml	12 x 2 ml
Elute	Buffer to elute the peptides from cartridge.	1 x 2 ml	1 x 2 ml	12 x 2 ml
LC-Load	Buffer to load peptides on LC-MS column.	1 x 1 ml	1 x 1 ml	12 x 1 ml
Cartridges	Cartridges for up to 100 µg protein starting material.	4 pcs	8 pcs	96 pcs
Waste plate	96 well plate for waste buffers.	-	-	1 pc
Waste tubes	Plastic tubes for buffer waste.	4 pcs	8 pcs	-
Collection plate	96 well plate to collect peptides.	-	-	1 pc
Collection tubes	Plastic tubes for the collection of peptides.	4 pcs	8 pcs	-
Adapter plate	96 well adapter to place cartridges on Waste/Collection plate.	-	-	1 pc
Adapters	Adapters to place cartridges in tubes.	4 pcs	8 pcs	8 pc
Caps	Caps to optionally close cartridges.	4 pcs	8 pcs	96 pcs

Table 2: Transport information for single components provided in the kit. The volumes of used chemicals fulfill IATA's regulations for **dangerous goods in exempted quantities**.

Article name	Proper shipping name	UN number	Class	PG	EQ code
DIGEST	-	not dangerous goods	n.r.	-	-
RESUSPEND	-	not dangerous goods	n.r.	-	-
LYSE	Toxic, organic liquid, N.O.S.	UN 2810	6.1	III	E1
STOP	Flammable liquid, corrosive, N.O.S.	UN 2924	3(8)	II	E2
WASH 1	Flammable liquid, corrosive, N.O.S.	UN 2924	3(8)	II	E2
WASH 2	Corrosive, acidic, organic liquid N.O.S.	UN 3265	3(8)	III	E1
ELUTE	Acetonitrile	UN 1648	3	II	E2
LC-LOAD	-	not dangerous goods	n.r.	-	-

Table 3: Safety data overview\* of the pure chemicals that are used to create solutions in the kit.

Chemical	Appearance (form)	Concentration range	CAS-No:	EC-No.:	Precautionary statements	Hazard statements
Water	Liquid	-	7732-18-5	231-791-2	-	-
Acetonitrile	Liquid	50-99%	75-05-8	200-835-2	P210 P280 P305+P351+P338 P309+P310	H225 H302+H312+H332 H319
2-Chloroacetamide	Liquid	<2%	79-07-2	201-174-2	P201 P281 P302+P352 P309+P310	H361f H301 H317
Trifluoroacetic Acid	Liquid	<6%	76-05-1	200-929-3	P280 P273 P301+P330+P331 P304+P340 P309+P310	H332 H314 H412
Ammonia solution	Liquid	1-20%	1336-21-6	215-647-6	P280 P273 P301+P330+P331 P305+P351+P338 P309+P310	H314 H335 H400
Isopropyl alcohol	Liquid	20-99%	67-63-0	200-661-7	P210 P240 P261 P280 P305+P351+P338	H225 H336 H319
Deoxycholate salt	Solid	<10%	302-95-4	206-132-7	P301+P312	H302
Tris(2-Carboxyethyl) Phosphine Hydrochloride	Liquid	<5%	51805-45-9	-	P303+P361+P353 P305+P351+P338 P310 P301+P330+P331 P280	H314
2,2,2-Trifluoroethanol	Liquid	<15%	75-89-8	200-913-6	P261 P280 P301 + P310 P305+P351+P338 P311	H226 H301 H312 H315 H318 H331 H335
Trypsin	Solid	10-90%	9002-07-7	-	P261 P280 P284 P304 + P340 P337 + P313 P342 + P311	H315 H319 H334 H335
Endopeptidase Lys-C	Solid	10-90%	78642-25-8	-	-	-
1-Hydroxypropane	Liquid	<6%	71-23-8	200-746-9	P210 P261 P280 P305+P351+P338	H225 H318 H336
Propan-2-yl 2,2,2-trifluoroacetate	Liquid	<3%	400-38-4	206-922-1	P210 P233 P240 P241 P242 P243 P260 P261 P264 P271 P280 P301+P330+P331 P303+P361+P353 P304+P340 P305+P351+P338 P310, P312, P321 P363 P370+P378 P403+P233 P403+P235 P405 P501	H225 H314 H335
Sodium chloride	Solid	<2%	7647-14-5	231-598-3	-	-
Acetamide	Liquid	<5%	60-35-5	200-473-5	P201 P202 P281 P308+P313 P405 P501	H351

\*Complete safety data sheets of each buffer can be found at: [www.preomics.com/msds](http://www.preomics.com/msds)



### Hazardous identification and first-aid measures:

Adverse health effects are not expected from the recommended use of this product.

Inhalation: If breathing becomes difficult, remove victim to fresh air. Seek medical assistance immediately.

Skin contact: Avoid skin contact. If skin contact occurs, wash contaminated skin with soap and water and remove contaminated clothing. Get medical attention if the skin become irritated.

Eye contact: Flush contaminated eye(s) with large volumes of water for at least 15 minutes

Ingestion: No adverse effects are reasonably anticipated, however if ANY symptoms occur, keep victim warm and calm. Get medical attention immediately.

### Handling and Storage:

Observe all federal state and local regulations when storing this Kit. Store in a cool dry place. Store Digest at -20°C.

### Regulatory Information:

N/A

### Transport Information:

The volumes of used chemicals fulfill IATA's regulations for **dangerous goods in excepted quantities**. The Kit can be shipped (street, ship, air) without any restrictions. The Kit is not non-hazardous for air, sea and road freight.

### Disposal Information:

Please consult local, state and federal regulations for additional guidance on disposal.

### Other Information:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. PreOmics shall not be held liable for any damage resulting from handling or from contact with the product.

Last updated: October 19<sup>th</sup>, 2017

### Precaution statements:

P201:	Obtain special instructions before use.
P202:	Do not handle until all safety precautions have been read and understood.
P210:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233:	Keep container tightly closed.
P240:	Ground/bond container and receiving equipment.
P241:	Use explosion-proof [electrical/ventilating/lighting/...] equipment.
P242:	Use only non-sparking tools.
P243:	Take precautionary measures against static discharge.
P260:	Do not breathe dust/fume/gas/mist/vapors/spray.
P261:	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264:	Wash ... thoroughly after handling.
P270:	Do not eat, drink or smoke when using this product.
P271:	Use only outdoors or in a well-ventilated area.
P273:	Avoid release to the environment.
P280:	Wear protective gloves/ protective clothing.
P281:	Use personal protective equipment as required.
P301+P310:	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P301+P330+P331:	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P302+P352:	IF ON SKIN: Wash with plenty of water/...
P305+P351+P338:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with
P303+P361+P353:	water/shower.
P304 +P340+P310:	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
	IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.
P309+P310:	Collect spillage.
P391:	IF exposed or concerned: Get medical advice/attention.
P308+P313:	Immediately call a POISON CENTRE or doctor/physician.
P310:	Call a POISON CENTER or doctor/ physician.
P312:	Call a POISON CENTER or doctor/... if you feel unwell.
P314:	Get medical advice/attention if you feel unwell.
P337+P313:	IF eye irritation persists: Get medical advice/attention.
P370+P378:	In case of fire: Use ... to extinguish.
P403+P233:	Store in a well-ventilated place. Keep container tightly closed.
P403+P235:	Store in a well-ventilated place. Keep cool.
P405:	Store locked up.
P501:	Dispose of contents/container in accordance with local/regional/national/ international regulations.

### Hazard statements:

H225:	Flammable liquid.
H226:	Flammable liquid and vapour.
H290:	Substance or mixture corrosive to metals.
H301:	Toxic if swallowed.
H302:	Acute toxicity oral.
H312:	Acute toxicity dermal.
H314:	Causes severe skin burns and eye damage.
H315:	Causes skin irritation.
H317:	May cause an allergic skin reaction.
H318:	Causes serious eye damage.
H319:	Causes serious eye irritation.
H320:	Causes eye irritation.
H331:	Toxic if inhaled.
H332:	Harmful if inhaled.
H335:	May cause respiratory irritation.
H350:	May cause cancer.
H360:	May damage fertility or the unborn child.
H361:	Suspected of damaging fertility or the unborn child.
H372:	Causes damage to organs through prolonged or repeated exposure.