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

1.1. Product identifier

iST RFP-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

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 RFP-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 (CO₂).

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

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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.

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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.

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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.

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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

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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)

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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.

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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.

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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.

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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.

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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.

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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.

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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

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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.

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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**

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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).

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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

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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.

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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

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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

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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.

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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

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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

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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

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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.

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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 (CO₂), 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.

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Version: 1.1

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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

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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

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Print Date: 24.07.2017

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

CO₂, 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 (CO₂), 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

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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 (CO₂), 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.

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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

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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.

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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

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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. CO₂, 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 (CO₂), 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).

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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_x), Carbon monoxide (CO), Carbon dioxide (CO₂).

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

Hazard statements	:	None
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Precautionary statements	:	None
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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

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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.

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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.

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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

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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.

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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

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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)

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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.

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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.

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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.

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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.

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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.

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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.

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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.

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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

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 19th, 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.
P303+P361+P353:	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with 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.
P309+P310:	IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.
P391:	Collect spillage.
P308+P313:	IF exposed or concerned: Get medical advice/attention.
P310:	Immediately call a POISON CENTRE or doctor/physician.
P311:	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.