



ENZYMATIC REMOVAL REAGENT B – SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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| 1.1 Product Identifier Product Catalog: Enzymatic Removal Reagent B CAS or REACH Number: CAS: 39450-01-6 and 593-84-0 | |  |
| 1.2 Product use Laboratory research. | | |
| 1.3 Details of the Supplier of the Safety Data Sheet Spatial Transcriptomics AB Street Address: Södra Fiskartorpsvägen 15 C City: Stockholm Province: Stockholm Postal Code: 114 33 Phone number: +46736697828 Email: sg@spatialtranscriptomics.com | | |
| 1.4 Emergency telephone number | | +44 (0)870 8200418 (CHEMTREC) |
| Date SDS prepared Apr - 2018 | SDS prepared by Stefania Giacomello | Phone Number +46736697828 |

SECTION 2 – HAZARDS IDENTIFICATION

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| <p>2.1 Classification of the mixture</p> <p>Classification according to Regulation (EC) No 1272/2008</p> <p>Acute toxicity, Inhalation (Category 3) H334</p> <p>For the full text of the H-Statements mentioned in this Section, see Section 16.</p> <p>Classification according to EU Directives 67/548/EEC or 1999/45/EC</p> <p>F Highly flammable R11 Xi Irritant R36 R67</p> <p>For the full text of the R-phrases mentioned in this Section, see Section 16</p> <p>2.2 Label elements</p> <div style="text-align: center;">  </div> <p>Hazard pictograms</p> |
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Signal word: Danger

Hazard statement(s)

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

Precautionary statement(s)

Prevention:

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

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

P284 Wear respiratory protection

Response:

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

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

Hazardous components which must be listed on the label: Proteinase K

Supplemental hazards No data available.

2.3 Other hazards This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3 – COMPOSITION /INFORMATION ON INGREDIENTS

3.2 Mixture

Hazardous ingredients according to Regulation (EC) No 1272/2008

| Ingredient | Concentration, % (w/w) | Cas # | EC Number | Index number | Classification |
|-------------------------|------------------------|------------|-----------|--------------|--|
| Guanidinium thiocyanate | >= 1 - < 3 | 593-84-0 | 254-457-8 | | Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 STOT SE 3; H335 |
| Proteinase K | >= 1 - < 10 | 39450-01-6 | | | |

SECTION 4 – FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Consult a physician.

After eye contact

Remove contact lenses. Protect unharmed eye. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician

After inhalation

If unconscious place in recovery position and seek medical advice.

Keep respiratory tract clear. If symptoms persist, call a physician.

After skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Ingestion

If accidentally swallowed obtain immediate medical attention.

Rinse mouth with water. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

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

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5 – FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Dry chemical or carbon dioxide. Use water spray or alcohol-resistant foam to fight larger fires.

5.2 Special hazards arising from the substance or mixture

Exposure to decomposition products may be a hazard to health.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for fire-fighting if necessary and protective clothing to prevent contact with skin.

5.4 Further information

Avoid breathing in fumes in case of fire/explosion.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Ensure adequate ventilation. Avoid breathing dust, vapour, gas, fumes, spray.

6.2 Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

6.3 Methods and material for containment and cleaning up

Soak with inert absorbent (silica gel, acid binder, sawdust, sand, universal binder). Place spilled material in clean, dry, sealable, labelled container.

6.4 Reference to other sections

See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7 – HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling

Avoid formation of aerosol. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Advice on protection against fire and explosion

Normal measures for preventive fire protection.

Hygiene measures

Keep away from food and drink. Wash hands before breaks and at the end of workday. Ensure adequate ventilation, especially in confined areas. Avoid contact with the skin and the eyes. When using do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Keep container tightly closed in a dry and well-ventilated place. Store at 4°C. No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls: General industrial hygiene practice.

Personal protective equipment

Eye/face protection Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing problems.

Do not wear contact lenses. Ensure that eyewash stations and safety showers are close to the workstation location. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. 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).

Body Protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place. Acid-resistant protective clothing. Footwear protecting against chemicals.

Respiratory Protection

In the case of vapour formation use a respirator with an approved filter.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:

Physical state: Liquid

Colour: Light cream

Odour: Odourless

Odour threshold: No data available

pH-value at 20 °C: 7,5

Change in condition Melting point/Melting range: No data available

Boiling point/Boiling range: No data available

Flash point: No data available

Evaporation rate: No data available

Flammability (solid, gas): No data available
Upper/lower flammability or explosive limits: No data available
Vapour pressure: No data available
Vapour density: No data available
Relative density: No data available
Density: 1,10 g/cm³
Solubilities: Soluble in other solvents
Partition coefficient: n-octanol/water: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: Dynamic: Not determined. **Kinematic:** 7.741 mm²/s (20 °C)
Method: DIN 51562
Explosive properties: No data available
Oxidizing properties: No data available

9.2 Other information No data available.

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Stable under recommended storage conditions. Hazardous decomposition products formed under fire conditions. Keep away from oxidizing agents, and acidic or alkaline products.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced. In the event of fire, see section 5.

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity

Not classified based on available information.

Acute inhalation toxicity

Not classified based on available information.

Acute dermal toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Product:

May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Causes irritation of eyes, skin and mucous membranes.

Respiratory sensitisation

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

Skin sensitisation

Not classified based on available information.

Product:

May cause sensitisation by inhalation and skin contact.

Germ cell mutagenicity

Not classified based on available information.

IARC Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

Specific target organ toxicity - single exposure

Not classified based on available information.

Specific target organ toxicity - repeated exposure

Not classified based on available information.

Respiration hazard

Not classified based on available information.

Additional Information

No data available

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish

No data available

Toxicity to daphnia and other aquatic invertebrates

No data available

Toxicity to algae

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

Soil/water partition

coefficient (K_{oc}): No data available

Mobility: No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available.

SECTION 13 – DISPOSAL CONSIDERATION

13.1 Waste treatment methods

Product Send to a licensed waste management company. Dispose of as hazardous waste in compliance with local and national regulations.

Contaminated packaging Dispose of as unused product. Do not reuse empty containers.

SECTION 14 – TRANSPORT INFORMATION

14.1 UN number

Not regulated as dangerous good.

14.2 UN proper shipping name

Not regulated as dangerous good.

14.3 Transport hazard class(es)

Not regulated as dangerous good.

14.4 Packaging group

Not regulated as dangerous good.

14.5 Environmental hazards

Not regulated as dangerous good.

14.6 Special precautions for user

Not regulated as dangerous good.

SECTION 15 – REGULATORY INFORMATION

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

This safety datasheet complies with the requirements of **Regulation (EC) No. 1907/2006**.

15.2 Chemical safety assessment

This product contains substances for which Chemical Safety Assessments might still be required.

SECTION 16 - OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

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|-------------|--|
| Eye Irrit. | Eye irritation |
| Resp. Sens. | Respiratory sensitisation |
| Skin Irrit. | Skin irritation |
| STOT SE | Specific target organ toxicity - single exposure |

| | |
|------|--|
| 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 |

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS: Spatial Transcriptomics AB

Contact: Dr. Stefania Giacomello

Abbreviations and acronyms: ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement NO DATA AVAILABLE = Not applicable/No data available PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

Disclaimer

This SDS is intended for research use only and to be used in laboratories. The SDS is intended to provide a brief summary of our knowledge and guidance regarding the use of the materials in this kit. The information

Safety Data Sheet (SDS) - Enzymatic Removal Reagent B

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| | <p>contained here has been compiled from sources considered by Spatial Transcriptomics to be dependable and is accurate to the best of the company's knowledge. It is not meant to be an all-inclusive document on worldwide hazard communication regulations. This information is offered in good Faith. Each user of this kit need to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage or release to the environment.</p> <p>Spatial Transcriptomics assumed no responsibility for injury to the recipient or third person for any damage to any property resulting from misuse or the product.</p> |
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