



CHEMICAL REMOVAL REAGENT A – SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifier Product Catalog: Chemical Removal Reagent A CAS or REACH Number: CAS: 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

2.1 Classification of the mixture Classification according to Regulation (EC) No 1272/2008 Acute Tox. (Category 4) H302 Aquatic Chron (Category 3) H412 Eye Dam. (Category 1) H318 For the full text of the H-Statements mentioned in this Section, see Section 16.
2.2 Label elements <div style="text-align: center;">  </div> Hazard pictograms Signal word: Danger Hazard statement(s) H302 Harmful if swallowed.

H318 Causes serious eye damage.

H412 Harmful to aquatic life with long-lasting effects.

Precautionary statement(s)

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

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately consult local poison centre and physician

Supplemental hazards

EUH032 Contact with acids liberates very toxic gas.

Hazardous components which must be listed on the label: guanidinium thiocyanate

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	>= 30 - < 50	593-84-0	209-812-1		H302 Acute Tox. 4, H332 Acute Tox. 4, H312 Acute Tox. 4, H412 Aquatic Chron. 3, H314 Skin Corr. 1C, H318 Eye Dam. 1 H301 Acute Tox. 3, H331 Acute Tox. 3, H402 Aquatic Acute 3,

						H314 Skin Corr. 1B, H319 Eye Irrit. 2 H315, Skin Irrit. 2 H335 STOT SE 3
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SECTION 4 – FIRST AID MEASURES

4.1 Description of first aid measures

After eye contact

Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses. Protect unharmed eye.

After inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult physician in case of complaints.

After skin contact

Immediately wash with water and soap and rinse thoroughly. Consult physician.

Ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

Harmful if swallowed, causes serious eye damage.

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. Hazardous combustion products: Carbon oxides and sulfur oxides.

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. 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. Unsuitable: Sodium hypochlorite.

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

Do not breathe vapours or dust. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Dispose of rinse water according to local regulations. Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Keep container tightly closed in a dry and well-ventilated place.

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

8.2 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.

Control of environmental exposure Do not let product enter drains.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:

Physical state: Liquid

Colour: No data available

Odour: Characteristic

Odour threshold: N.A.

pH-value at 20 °C: 7, neutral

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: 1,09 g/cm³

Solubilities: No data available

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

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity: No data available

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. Thiocyanates can develop poisonous gas in contact with strong acids. 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

Acute toxicity estimate: 1,578 mg/kg

Method: Calculation method

Acute inhalation toxicity

Acute toxicity estimate: > 20 mg/l

Exposure time: 4 hours

Test atmosphere: vapour

Method: Calculation method

Acute dermal toxicity

Acute toxicity estimate: > 2,000 mg/kg

Method: Calculation method

Acute toxicity component (guanidinium thiocyanate)

LD50 Oral - Rat - 593 mg/kg

Acute toxicity estimate: 1,100 mg/kg

Method: Converted acute toxicity point estimate

Skin corrosion/irritation

May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

Causes serious eye damage. Product may cause irreversible eye damage.

Respiratory or skin sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

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.

Aspiration 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

EC50 - Daphnia magna (Water flea) – 42,4 mg/l. Exposure: 48 hours.

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

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.

SECTION 13 – DISPOSAL CONSIDERATION

13.1 Waste treatment methods

Product The product should not be allowed to enter drains, water courses or the soil. 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

For this product no Chemical Safety Assessment was carried out.

SECTION 16 – OTHER INFORMATION

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

- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H332 Harmful if inhaled.
- H412 Harmful to aquatic life with long lasting effects.

Acute Tox.: Acute toxicity

Aquatic Chronic: Chronic aquatic toxicity

Skin Corr.: Skin corrosion

STOT SE: Specific target organ toxicity – Single Exposure

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 N.A. = 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 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. 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.

Safety Data Sheet (SDS) – Chemical Removal Reagent A

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