



PRE-PERMEABILIZATION REAGENT – SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<p>1.1 Product Identifier Product Catalog: Pre-Permeabilization Reagent CAS or REACH Number: Collagenase: 9001-12-1; BSA: 9048-46-8</p>	
<p>1.2 Product use Laboratory research.</p>	
<p>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</p>	
<p>1.4 Emergency telephone number +44 (0)870 8200418 (CHEMTREC)</p>	

SECTION 2 – HAZARDS IDENTIFICATION

<p>2.1 Classification of the mixture</p>	
<p>Classification according to Regulation (EC) No 1272/2008 The product is classified and labelled in accordance with Directive 1999/45/EC. REGULATION (EC) No 1272/2008.</p>	
<p>Classification according to EU Directives 67/548/EEC or 1999/45/EC F Highly flammable R11 Xi Irritant R36 R67</p>	
<p>2.2 Label elements</p>	
<p>Hazard pictograms</p>	
<p>Signal word:</p>	<p>Danger</p>
<p>Hazard statement(s) H315 H319 H335</p>	<p>Causes skin irritation (Category 2) Causes serious eye irritation (Category 2) May cause respiratory irritation (Category 1)</p>

H334 difficulties	May cause allergy or asthma symptoms or breathing if inhaled. (Category 3).
Precautionary statement(s)	
Prevention:	
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P280 protection/face	Wear protective gloves/protective clothing/eye protection.
P284	Wear respiratory protection
Response:	
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - P332 + P313 advice/attention	Call a POISON CENTRE or doctor/physician if you feel unwell If skin irritation occurs: Get medical
P337 + P313 P362	If eye irritation persists: Get medical advice/attention Take off contaminated clothing and wash before reuse
EU Specific Statements	
R42	May cause sensitization by inhalation
R36/37/38	Irritating to eyes, respiratory system and skin
S-phrases(s)	
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S22	Do not breathe dust
S24/25	Avoid contact with skin and eyes
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
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 Mixtures

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

Ingredient	Concentration, % (v/v)	Cas #	EC Number	Index number	Classification
Collagenase	0,4	9001-12-1			Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 STOT SE 3; H335
BSA (Bovine Serum Albumine)	1,0	9048-46-8			
HBSS (Hank's Balanced Salt Solution)					

SECTION 4 – FIRST AID MEASURES

4.1 Description of first aid measures

General advice for physician

Treat symptomatically.

After eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

After inhalation

Move to fresh air. If not breathing, give artificial respiration. Call a physician or Poison Control Centre immediately.

After skin contact

Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Immediate medical attention is required.

Ingestion

Call a physician or Poison Control Centre immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

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

No information available.

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

No information available.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional information.

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.

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. Ensure adequate ventilation.

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 case of insufficient ventilation wear suitable respiratory equipment.

Environmental exposure controls Prevent product from entering drains. Do not allow material to contaminate ground water system.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:

Physical state: Liquid

Colour: Beige

Odour: No data available

Odour threshold: No data available

pH-value at 20 °C: No data available

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: No data available

Solubilities: Soluble in water

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

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity: Dynamic: No data available. **Kinematic:** 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.

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.

Serious eye damage/eye irritation

Irritating to eyes.

Ingestion

May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea

Respiratory sensitisation

Irritating to respiratory system.

Skin sensitisation

Irritating to skin.

Sensitisation

R42 - May cause sensitization by inhalation

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.

Respiration hazard

Not classified based on available information.

Additional Information (BSA)

53,9% of the product consists of ingredients of unknown toxicity.

ATEmix (oral) 21,817.00 mg/kg

ATEmix (dermal) 20,000.00 mg/kg

ATEmix (inhalation-vapor) 1,140.00 mg/l

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Glycerol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m ³ (Rat) 1h
Water	Water > 90 mL/kg (Rat)	-	-
Potassium chloride	2600 mg/kg (Rat)		
Ethylenediamine tetraacetic acid	1700 mg/kg (Rat)		

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

For this product no Chemical Safety Assessment was carried out.

SECTION 16 – OTHER INFORMATION

<p>Full text of H-Statements referred to under sections 2 and 3.</p> <p>Eye Irrit. Eye irritation Resp. Sens. Respiratory sensitisation Skin Irrit. Skin irritation STOT SE Specific target organ toxicity - single exposure</p> <p>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. The information in Sections 2 and 11 is based on pure collagenase.</p> <p>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</p>	
<p>Disclaimer</p>	<p>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.</p>

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