



## FIXATION REAGENT – SAFETY DATA SHEET

### SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

|                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <p><b>1.1 Product Identifier</b><br/> <b>Product Catalog:</b> Fixation Reagent<br/> <b>CAS and REACH Number:</b> Formaldehyde: CAS-No: 50-00-0 REACH: 01-2119488953-20-XXXX Methanol: CAS-No: 67-56-1</p>                                                                                                                                                                           |  |
| <p><b>1.2 Product use</b><br/>                 Laboratory research.</p>                                                                                                                                                                                                                                                                                                             |                                                                                     |
| <p><b>1.3 Details of the Supplier of the Safety Data Sheet</b><br/>                 Spatial Transcriptomics AB<br/> <b>Street Address:</b><br/>                 Södra Fiskartorpsvägen 15 C<br/> <b>City:</b> Stockholm<br/> <b>Province:</b> Stockholm<br/> <b>Postal Code:</b> 114 33<br/> <b>Phone number:</b> +46736697828<br/> <b>Email:</b> sg@spatialtranscriptomics.com</p> |                                                                                     |
| <p><b>1.4 Emergency telephone number</b>      <b>+44 (0)870 8200418 (CHEMTREC)</b></p>                                                                                                                                                                                                                                                                                              |                                                                                     |

### SECTION 2 – HAZARDS IDENTIFICATION

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| <p><b>2.1 Classification of the substance or mixture</b></p> <p><b>Classification according to Regulation (EC) No 1272/2008</b><br/>                 Acute toxicity, Oral (Category 3), H301<br/>                 Acute toxicity, Inhalation (Category 3), H331<br/>                 Acute toxicity, Dermal (Category 3), H311<br/>                 Skin corrosion (Category 1B), H314<br/>                 Skin sensitisation (Category 1), H317<br/>                 Germ cell mutagenicity (Category 2), H341<br/>                 Carcinogenicity (Category 1B), H350<br/>                 Specific target organ toxicity - single exposure (Category 1), H370<br/>                 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335<br/>                 For the full text of the H-Statements mentioned in this Section, see Section 16.</p> |                                                                                                  |
| <p><b>2.2 Label elements</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                  |
| <p><b>Hazard pictograms</b><br/> <b>Signal word:</b><br/> <b>Hazard statement(s)</b><br/>                 H227</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <p style="text-align: center;">Danger</p> <p style="text-align: center;">Combustible liquid.</p> |

|                                   |                                                                                                                                                                                         |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| H301 + H311 + H331                | Toxic if swallowed, in contact with skin or if inhaled.                                                                                                                                 |
| H314                              | Causes severe skin burns and eye damage.                                                                                                                                                |
| H317                              | May cause an allergic skin reaction.                                                                                                                                                    |
| H335                              | May cause respiratory irritation.                                                                                                                                                       |
| H341                              | Suspected of causing genetic defects.                                                                                                                                                   |
| H350                              | May cause cancer.                                                                                                                                                                       |
| H370                              | Causes damage to organs                                                                                                                                                                 |
| H402                              | Harmful to aquatic life.                                                                                                                                                                |
| <b>Precautionary statement(s)</b> |                                                                                                                                                                                         |
| P201                              | Obtain special instructions before use.                                                                                                                                                 |
| P202                              | Do not handle until all safety precautions have been read and understood.                                                                                                               |
| P210                              | Keep away from heat/sparks/open flames/hot surfaces. - No smoking.                                                                                                                      |
| P260                              | Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.                                                                                                                                    |
| P264                              | Wash skin thoroughly after handling.                                                                                                                                                    |
| P270                              | Do not eat, drink or smoke when using this product.                                                                                                                                     |
| P271                              | Use only outdoors or in a well-ventilated area.                                                                                                                                         |
| P272                              | Contaminated work clothing should not be allowed out of the workplace.                                                                                                                  |
| P273                              | Avoid release to the environment.                                                                                                                                                       |
| P280                              | Wear protective gloves/ protective clothing/ eye protection/ face protection.                                                                                                           |
| P301 + P310 + P330                | IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth.                                                                                                       |
| 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.                                                                                     |
| P304 + P340 + P310                | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.                                                        |
| 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 call a POISON CENTER or doctor/ physician. |
| P307 + P311                       | IF exposed: Call a POISON CENTER or doctor/ physician.                                                                                                                                  |
| P333 + P313                       | If skin irritation or rash occurs: Get medical advice/ attention.                                                                                                                       |
| P362                              | Take off contaminated clothing and wash before reuse.                                                                                                                                   |
| P370 + P378                       | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam 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 to an approved waste disposal plant.

**Supplemental hazards** None

**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                                                                                                                                                                                                                                                                                 |
|--------------|------------------------|---------|-----------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Formaldehyde | 3,0                    | 50-00-0 | 200-001-8 | 605-001-00-5 | Acute Tox. 3;<br>Skin Corr. 1B;<br>Skin Sens. 1;<br>Muta. 2; Carc. 1B; H301, H331, H311, H314, H317, H341, H350<br>Concentration limits: >= 25 %: Skin Corr. 1B, H314; 5 - < 25 %: Skin Irrit. 2, H315; 5 - < 25 %: Eye Irrit. 2, H319; >= 5 %: STOT SE 3, H335; >= 0,2 %: Skin Sens. 1, H317; |
| Methanol     | 6,0                    | 67-56-1 | 200-659-6 | 603-001-00-X | Flam. Liq. 2;<br>Acute Tox. 3;<br>STOT SE 1;<br>H225, H301, H331, H311, H370                                                                                                                                                                                                                   |

|                           |  |  |  |  |                                                                                                        |
|---------------------------|--|--|--|--|--------------------------------------------------------------------------------------------------------|
|                           |  |  |  |  | Concentration limits: $\geq 10 - < 20\%$ $\geq 10\%$ : STOT SE 1, H370; $3 - < 10\%$ : STOT SE 2, H371 |
| Phosphate Buffered Saline |  |  |  |  |                                                                                                        |

## SECTION 4 – FIRST AID MEASURES

### 4.1 Description of first aid measures

#### After eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### After inhalation

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

#### After skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a 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

To be treated symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

## 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. Do NOT use water jet.

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

No data 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**

Use water spray to cool unopened containers.

## **SECTION 6 – ACCIDENTAL RELEASE MEASURES**

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

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

**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**

Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge. For precautions see section 2.2.

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

#### **Storage**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

### **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** 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. Full contact Material: Nitrile rubber Minimum layer thickness: 0,4 mm Break through time: 480 min Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M) Splash contact Material: Nitrile rubber Minimum layer thickness: 0,2 mm Break through time: 60 min Material tested:Dermatril® P (KCL 743 / Aldrich Z677388, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario

**Body Protection** impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**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:** Clear

**Odour:** No data available.

**Odour threshold:** N.A.

**pH-value at 20 °C:** No data available.

**Melting point:** 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.  
**Solubilities:** No data available.  
**Partition coefficient: n-octanol/water:** No data available.  
**Auto-ignition temperature:** No data available.  
**Decomposition temperature:** No data available.  
**Viscosity: Dynamic:** Not determined. **Kinematic:** Not determined.  
**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 specific test data related to reactivity available for this product or its ingredients.

### 10.2 Chemical stability

The product is stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available.

### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.5 Incompatible materials

No data available.

**10.6 Hazardous decomposition products** Hazardous decomposition products formed under fire conditions. - Carbon oxides In the event of fire: see section 5.

## SECTION 11 – TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

#### Skin corrosion/irritation

Skin - Rabbit Result: Corrosive after 3 minutes to 1 hour of exposure - 20 h (OECD Test Guideline 404)

**Serious eye damage/eye irritation**

Eyes - Rabbit Result: Corrosive - 7 d (OECD Test Guideline 405)

**Respiratory or skin sensitisation**

Maximisation Test - Guinea pig Result: Causes sensitisation. May cause allergic skin reaction. (OECD Test Guideline 406)

**Germ cell mutagenicity**

No data available.

**Carcinogenicity**

IARC: 1 - Group 1: Carcinogenic to humans (Formaldehyde)

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: LP8925000.

**SECTION 12 – ECOLOGICAL INFORMATION**

**12.1 Toxicity**

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**

Harmful to aquatic life.



## SECTION 13 – DISPOSAL CONSIDERATION

### 13.1 Waste treatment methods

**Product** Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

**Contaminated packaging** Dispose of as unused product.

## SECTION 14 – TRANSPORT INFORMATION

### 14.1 UN number

ADR/RID: 1198 IMDG: 1198 IATA: 1198

### 14.2 UN proper shipping name

ADR/RID: FORMALDEHYDE SOLUTION

IMDG: FORMALDEHYDE SOLUTION

IATA: Formaldehyde solution

### 14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

### 14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

### 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

### 14.6 Special precautions for user

No data available.

## 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.**

|                    |                                                         |
|--------------------|---------------------------------------------------------|
| H225               | Highly flammable liquid and vapour.                     |
| H301               | Toxic if swallowed.                                     |
| H301 + H311 + H331 | Toxic if swallowed, in contact with skin or if inhaled. |
| H311               | Toxic in contact with skin.                             |
| H314               | Causes severe skin burns and eye damage.                |
| H315               | Causes skin irritation.                                 |
| H317               | May cause an allergic skin reaction.                    |
| H319               | Causes serious eye irritation.                          |
| H331               | Toxic if inhaled.                                       |
| H335               | May cause respiratory irritation.                       |
| H341               | Suspected of causing genetic defects.                   |
| H350               | May cause cancer.                                       |
| H370               | Causes damage to organs.                                |
| H371               | May cause damage to organs.                             |

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 Section 11 and 12 is based on 37 % formaldehyde dissolved in methanol.

**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.

Safety Data Sheet (SDS) – Fixation Reagent

|  |                                                                                                                                                                    |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | 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. |
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