



ISOPROPANOL – SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifier Product Catalog: Isopropanol CAS or REACH Number: CAS Number: 67-63-0		
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

<p>2.1 Classification of the substance or mixture</p> <p>Classification according to Regulation (EC) No 1272/2008</p> <p>H225 FLAMMABLE LIQUIDS - Category 2 H319 EYE IRRITATION – Category 2 H336 SPECIFIC TARGET ORGAN TOXICITY SINGLE EXPOSURE, CENTRAL NERVOUS SYSTEM - Category 3 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 F Highly flammable R11 Xi Irritant R36 R67 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 Signal word: Danger</p>
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Hazard statement(s)

H225 Highly flammable liquid and vapour.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P261 Avoid breathing vapours.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

3.1 Substances

Synonyms: 2-Propanol, sec-Propyl alcohol, Isopropyl alcohol, Isopropanol

Formula: C₃H₈O

Molecular weight: 60,10 g/mol

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

Ingredient	Concentration, %	Cas #	EC Number	Index number	Classification
2-Propanol	100	67-63-0	200-661-7	603-117-00-0	Flam. Liq. 2; Eye Irrit. 2; STOT SE 3; H225, H319, H336

Hazardous ingredients according to Directive 1999/45/EC

Ingredient	Concentration, %	Cas #	EC Number	Index number	Classification
2-Propanol	100	67-63-0	200-661-7	603-117-00-0	F, Xi, R11 - R36 - R67

SECTION 4 – FIRST AID MEASURES

4.1 Description of first aid measures

After eye contact: 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 15 minutes and consult a physician.

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

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.

5.2 Special hazards arising from the substance or mixture

Carbon 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

Use water spray to cool unopened containers.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions

Avoid dispersal of spilt 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).

6.3 Methods and material for containment and cleaning up

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

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: Provide proper ventilation/exhaustion. Information about storage in one common storage facility: keep away from oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches. Further information about storage conditions: Store in cool place. 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 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: Colourless

Odour: Alcohol-like

Odour threshold: No data available

pH-value at 20 °C: No data available

Change in condition Melting point/Melting range: -89,5°C

Boiling point/Boiling range: 82 °C at 1.013 hPa

Flash point: 12°C

Evaporation rate: 3,0

Flammability (solid, gas): No data available

Upper/lower flammability or explosive limits:

Upper explosion limit: 12,7 %(V) Lower explosion limit: 2 %(V)

Vapour pressure: 43,2 hPa at 20,0 °C 58,7 hPa at 25,0 °C

Vapour density: No data available

Relative density: 0,785 g/cm³ at 25 °C

Density: 1.0108 g/cm³ [20°C]

Solubilities: Completely soluble in hot and cold water.

Partition coefficient: n-octanol/water: log P_{ow} = 0,05

Auto-ignition temperature: 425°C

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

20,8 mN/m at 25,0 °C

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.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Oxidizing agents, Acid anhydrides, Aluminium, Halogenated compounds, Acids.

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 toxicity**

LD50 Oral - Rat - 5.045 mg/kg

Remarks: Behavioral: Altered sleep time (including change in righting reflex).

Behavioral: Somnolence (general depressed activity).

LC50 Inhalation - Rat - 8 h - 16000 ppm

LD50 Dermal - Rabbit - 12.800 mg/kg

Skin corrosion/irritation

Skin - Rabbit Result:

Mild skin irritation

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Eye irritation - 24 h

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification. IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (2-Propanol)

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Inhalation, Oral - May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: NT8050000

Central nervous system depression, prolonged or repeated exposure can cause: Nausea, Headache, Vomiting, narcosis, Drowsiness, Overexposure may cause mild, reversible liver effects., Aspiration may lead to:, Lung oedema, Pneumonia Kidney - Irregularities - Based on Human Evidence

SECTION 12 – ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 9.640,00 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 5.102,00 mg/l - 24 h Immobilization EC50 - Daphnia magna (Water flea) - 6.851 mg/l - 24 h

Toxicity to algae EC50 - Desmodesmus subspicatus (green algae) - > 2.000,00 mg/l - 72 h EC50 - Algae - > 1.000,00 mg/l - 24 h

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No bioaccumulation is to be expected ($\log Pow \leq 4$).

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 known significant effects or critical hazards.

SECTION 13 – DISPOSAL CONSIDERATION

13.1 Waste treatment methods

Product Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging Dispose of as unused product.

SECTION 14 – TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 1219 IMDG: 1219 IATA: 1219

14.2 UN proper shipping name

ADR/RID: ISOPROPANOL IMDG: ISOPROPANOL IATA: Isopropanol

14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

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

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.

Eye Irrit. Eye irritation

Flam. Liq. Flammable liquids

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

STOT SE Specific target organ toxicity - single exposure

Full text of R-phrases referred to under sections 2 and 3

F	Highly flammable
Xi	Irritant
R11	Highly flammable.
R36	Irritating to eyes.
R67	Vapours may cause drowsiness and dizziness.

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.

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