



ISOPROPANOL – SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<p>1.1 Product Identifier</p> <p>Product Catalog: Isopropanol CAS or REACH Number: CAS Number: 67-63-0</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 +1-703-527-3887 (CHEMTREC)</p>	

SECTION 2 – HAZARDS IDENTIFICATION

<p>2.1 Classification of the substance or mixture</p> <p>GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)</p> <p>Flammable liquids (Category 2), H225 Eye irritation (Category 2A), H319 Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336</p> <p>For the full text of the H-Statements mentioned in this Section, see Section 16.</p>	
<p>2.2 Label elements</p> <p>2.2 GHS Label elements, including precautionary statements</p>	
Pictogram	
Signal word	Danger
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.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
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- P264 Wash skin thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/ eye protection/ face protection.
- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337 + P313 If eye irritation persists: Get medical advice/ attention.
- 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.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS
May form explosive peroxides.

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
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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

8.1 Control parameters

Compounds with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis	
2-Propanol	67-63-0	TWA	200 ppm	USA. ACGIH Threshold Limit Values (TLV)	
	Remarks	Central Nervous System impairment Upper Respiratory Tract irritation Eye irritation Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Not classifiable as a human carcinogen			
		STEL	400 ppm	USA. ACGIH Threshold Limit Values (TLV)	
		Central Nervous System impairment Upper Respiratory Tract irritation Eye irritation Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Not classifiable as a human carcinogen			
		TWA	400 ppm 980 mg/m ³	USA. NIOSH Recommended Exposure Limits	
		ST	500 ppm 1,225 mg/m ³	USA. NIOSH Recommended Exposure Limits	
		TWA	400 ppm 980 mg/m ³	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants	
		The value in mg/m ³ is approximate.			
		PEL	400 ppm 980 mg/m ³	California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
		STEL	500 ppm 1,225 mg/m ³	California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
Component	CAS-No.	Parameters	Value	Biological specimen	Basis
alcohol	-	Acetone	40 mg/l	Urine	ACGIH - Biological Exposure Indices (BEI)

	Remarks	End of shift at end of workweek
8.2 Exposure controls		
Appropriate engineering controls: General industrial hygiene practice.		
<u>Personal protective equipment</u>		
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
<u>Appearance:</u>
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 (-129,1°F)
Boiling point/Boiling range: 82 °C (179,5°F) at 1.013 hPa
Flash point: 12°C (53,6°F)
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 (68°F) 58,7 hPa at 25,0 °C (77°F).
Vapour density: No data available
Relative density: 0,785 g/cm³ at 25 °C (77°F).
Density: 1.0108 g/cm³ 20°C, (68°F).
Solubilities: Completely soluble in hot and cold water.
Partition coefficient: n-octanol/water: log P_{ow} = 0,05
Auto-ignition temperature: 425°C (797°F).
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 (77°F)

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 ($\log P_{ow} \leq 4$).

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

DOT (US)

UN number: 1219 Class: 3 Packing group: II

Proper shipping name: Isopropanol

Reportable Quantity (RQ): Poison Inhalation Hazard: No

IMDG

UN number: 1219 Class: 3 Packing group: II EMS-No: F-E, S-D

Proper shipping name: ISOPROPANOL

IATA

UN number: 1219 Class: 3 Packing group: II

Proper shipping name: Isopropanol

SECTION 15 – REGULATORY INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard.

Massachusetts Right To Know Components

2-propanol CAS-No. 67-63-0 Revision Date: 2007-03-31

Pennsylvania Right To Know Components

2-propanol CAS-No. 67-63-0 Revision Date: 2007-03-31

New Jersey Right To Know Components

2-propanol CAS-No. 67-63-0 Revision Date: 2007-03-31

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16 – OTHER INFORMATION

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

HMIS Rating

Health hazard:
 Chronic Health Hazard: *
 Flammability: 3
 Physical Hazard

NFPA Rating

Health hazard:
 Fire Hazard: 3
 Reactivity Hazard:

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

Disclaimer

This SDS is intended for research use only and to be used in laboratories. The SDS is intended to provide a

	<p>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.</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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