

SAFETY DATA SHEET

SDS DATE: February 3, 2021

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BrdU cell proliferation Assay Kit

PRODUCT CODES: Cat# K306-200, -1000

RESTRICTIONS ON USE: For laboratory research purposes. Not for drug or household use.

MANUFACTURER: BioVision, Inc.
DIVISION:
ADDRESS: 155 S. Milpitas Blvd. Milpitas, CA 95035

EMERGENCY PHONE: 858-373-8066
OTHER CALLS: 408-493-1800
FAX PHONE: 408-493-1801

SECTION 2: HAZARDS IDENTIFICATION

Component	Description	Volume (-200)	Volume (-1000)	Safety Information
BrdU	Liquid (contains 5-Bromo-2'-deoxyuridine)	20 µl	100 µl	See below
Fixing/Denaturing Solution	Proprietary (contains Ethanol & NaOH)	20 ml	100 ml	See below
BrdU Detection Antibody	Liquid	70 µl	350 µl	No hazards
Anti-mouse HRP-linked Antibody	Liquid	10 µl	50 µl	No hazards
Antibody Diluent	Liquid (contains BSA)	50 ml	250 ml	See below
Wash Buffer	Liquid	40 ml	200 ml	No hazards
TMB Substrate	Liquid	20 ml	100 ml	No hazards
Stop Solution	Liquid (contains HCl)	20 ml	100 ml	See below

5-Bromo-2'-deoxyuridine:

Emergency Overview

GHS Classification: Germ cell mutagenicity (Category 1B)
Reproductive toxicity (Category 2)

GHS Label elements, including precautionary statements

Pictogram:



Signal word: Danger

Hazard statement(s): H340 May cause genetic defects.
H361 Suspected of damaging fertility or the unborn child.

Precautionary statement(s): P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P281 Use personal protective equipment as required.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

HMIS Classification

Health hazard: 0
Chronic Health Hazard: *
Flammability: 0
Physical hazards: 0

NFPA Rating
Health Hazard: 0
Fire: 0
Reactivity Hazard: 0

Ethanol:

Emergency Overview

OSHA Hazards: Highly flammable liquid, Target organ effect, Irritant, Carcinogen

Target Organs: Nerves, Liver, Heart

GHS Classification: Flammable liquids (Category 2)
Skin irritation (Category 2)

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Eye irritation (Category 2B)
Specific target organ toxicity – single exposure (Category 3)

GHS Label elements, including precautionary statements

Pictogram:



Signal word: Danger
Hazard statement(s): H225 Highly flammable liquid and vapor
H315+H320 Causes skin and eye irritation.
H335 May cause respiratory irritation.

Precautionary statement(s): P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

HMIS Classification

Health hazard: 2
Chronic health hazard: *
Flammability: 3
Physical hazards: 0

NFPA Rating

Health Hazard: 2
Fire: 3
Reactivity Hazard: 0

Sodium hydroxide (NaOH):

Emergency Overview (According to Regulation (EC) No 1272/2008)

GHS Classification:

Corrosive to metals (Category 1)
Skin corrosion (Category 1A)
Serious eye damage (Category 1)
Acute aquatic toxicity (Category 3)

GHS Label elements, including precautionary statements



Pictogram:

Signal word: Danger
Hazard statement(s): H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H402 Harmful to aquatic life.

Precautionary statement(s): P234 Keep only in original container.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
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.
P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.
P405 Store locked up.
P406 Store in corrosive resistant stainless steel container with a resistant inner liner.
P501 Dispose of contents/ container to an approved waste disposal plant.

HMIS Classification

Health hazard: 3
Flammability: 0
Physical hazards: 1

NFPA Rating

Health Hazard: 3
Fire: 0
Reactivity Hazard: 0

Potential Health Effects

Inhalation: May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Skin: May be harmful if absorbed through skin. Causes skin burns.

Eyes: Causes severe eye burns.

Ingestion: May be harmful if swallowed

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Bovine Serum Albumin (BSA):

Emergency Overview:

GHS Classification: Acute Toxicity; Oral, Category 4

GHS Label elements, including precautionary statements



Pictogram:

Signal word: Warning

Hazard statement(s): H302: Harmful if swallowed.

Precautionary statement(s): P264: Wash {hands} thoroughly after handling.
P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330: Rinse mouth.

Adverse Human Health: Harmful if swallowed.

Effects and Symptoms: Material may be irritating to the mucous membranes and upper respiratory tract.

May be harmful by inhalation or skin absorption.

May cause eye, skin, or respiratory system irritation.

To the best of our knowledge, the toxicological properties have not been thoroughly investigated

HMIS Classification

Health hazard: 1

Flammability: 0

Physical hazards: 0

NFPA Rating

Health Hazard: 1

Fire: 0

Reactivity Hazard: 0

Potential Health Effects

Inhalation: May be harmful by inhalation. Material may be irritating to the mucous membranes and upper respiratory tract.

Skin: Harmful if absorbed through skin. May cause skin irritation.

Eyes: Cause eye irritation.

Ingestion: Harmful if swallowed

Hydrochloric acid:

Emergency Overview

GHS Classification: Flammable liquids (Category 2), H225

Corrosive to metals (Category 1), H290

Skin corrosion (Category 1B), H314

Serious eye damage (Category 1), H318

Carcinogenicity (Category 2), H351

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

GHS Label elements, including precautionary statements



Pictogram:

Signal word: Warning

Hazard statement(s): H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

Precautionary statement(s): 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.

P233 Keep container tightly closed.

P234 Keep only in original container.

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.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

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

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/ physician.
P321 Specific treatment (see supplemental first aid instructions on this label).
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P390 Absorb spillage to prevent material damage.
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.
P406 Store in corrosive resistant stainless steel container with a resistant inner liner.
P501 Dispose of contents/ container to an approved waste disposal plant.

HMIS Classification

Health hazard: 3
Chronic Health Hazard: *
Flammability: 3
Physical hazards: 0

NFPA Rating

Health Hazard: 3
Fire: 3
Reactivity Hazard: 0

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	EC-No.	Molecular Weight	Chemical Formula	Concentration
Ethanol	64-17-5	200-578-6	46.07	C ₂ H ₆ O	<75%
Sodium hydroxide	1310-73-2	215-185-5	40.00	NaOH	<15%
5-Bromo-2'-deoxyuridine	59-14-3	--	--	--	<0.5%
BSA	9048-46-8	232-936-2	--	--	<2%
Hydrochloric acid	7647-01-0	231-595-7	36.46	HCl	<10%

SECTION 4: FIRST AID MEASURES

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

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

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5: FIRE-FIGHTING MEASURES

Ethanol:

Condition of flammability: Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.

Hazardous combustion products: Hazardous decomposition products formed under fire conditions— see section 10.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods for cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Keep away from sources of ignition (no smoking). Take measures to prevent the buildup of electrostatic charge.

Conditions for safe storage

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.

Recommended storage temperature: -20 °C.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Ethanol:

Components	CAS-No.	Value	Control parameters	Basis
Ethanol	64-17-5	TWA	1,000 ppm	USA. ACGIH Threshold Limit Values (TLV)
Remarks: Upper respiratory tract irritation. Confirmed animal carcinogen with unknown relevance to humans.				
		TWA	1,000 ppm 1,900 mg/m ³	USA. OSHA: TABLE Z-1 Limits for Air Contaminants – 1910.1000
		TWA	1,000 ppm 1,900 mg/m ³	USA. Occupational Exposure Limits (OSHA): Table Z-1 Limits for Air Contaminants
The value in mg/m ³ is approximate.				
		TWA	1,000 ppm 1,900 mg/m ³	USA. NIOSH recommended exposure limits

Sodium hydroxide

Components	CAS-No.	Value	Control parameters	Basis
Sodium hydroxide	1310-73-2	CEIL	2 mg/m ³	USA. ACGIH Threshold Values (TLV)
		C	2 mg/m ³	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
		TWA	2 mg/m ³	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		C	2 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)
Eye, skin, & Upper Respiratory Tract irritation				
		C	1 ppm 1.4 mg/m ³	USA. NIOSH Recommended Exposure Limits

Hydrochloric acid:

Components	CAS-No.	Value	Control parameters	Basis
Hydrochloric acid	7647-01-0	C	2 ppm	USA. ACGIH Threshold Limit Values (TLV)
Upper Respiratory Tract irritation Not classifiable as a human carcinogen				
		C	5 ppm 7 mg/m ³	USA. NIOSH Recommended Exposure Limits
Often used in an aqueous solution.				
		C	5 ppm 7 mg/m ³	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
The value in mg/m ³ is approximate. Ceiling limit is to be determined from breathing-zone air samples.				
		C	5 ppm 7 mg/m ³	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000

BSA, 5-Bromo-2'-deoxyuridine & TMB:

Contains no substances with occupational exposure limit values.

Personal protective equipment

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).

Hand 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.

Eye protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Ethanol	BSA	Sodium hydroxide	5-Bromo-2'-deoxyuridine	HCl
Appearance:	Clear liquid	Lyophilized powder	Pellets	Lyophilized powder	Yellow liquid
pH:	No data available	4.8-7.5	No data available	No data available	No data available
Water Solubility:	Completely soluble	Slightly soluble	No data available	No data available	soluble

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Other Solubility:	No data available	No data available	No data available	No data available	No data available
Boiling Point (°C)	78-80 °C (172.4-176 °F)	No data available	No data available	No data available	> 100 °C > 212 °F
Melting Point (°C)	-144 °C (-227.2 °F)	No data available	No data available	No data available	-30 °C (-22 °F)
Flash Point (°C)	14 °C (57.2 °F)	No data available	No data available	No data available	Not applicable
Ignition Temp. (°C)	363 °C (685 °F)	No data available	No data available	No data available	No data available
Density:	0.79 g/cm ³	No data available	No data available	No data available	1.18 g/mL at 25 °C

SECTION 10: STABILITY AND REACTIVITY

Property	Ethanol	BSA	Sodium hydroxide	5-Bromo-2'-deoxyuridine	HCl
Chemical Stability:	Stable under recommended storage conditions				
Conditions to Avoid:	Heat, flames, sparks, direct sunlight	No data available	No data available	No data available	No data available
Materials to Avoid:	Alkali metals, ammonia, oxidizing agents, peroxides	Strong oxidizing agents	Strong oxidizing agents	Strong oxidizing agents	Strong oxidizing agents, Bases, Amines, Alkali metals, Copper, Copper alloys
Hazardous decomposition products:	Carbon oxides	No data available	No data available	No data available	No data available

SECTION 11: TOXICOLOGICAL INFORMATION

Ethanol:

Acute toxicity: LD50 Oral – rat – 7,060 mg/kg → Remarks: Lungs, thorax, or respiration : other changes

LC50 Inhalation – rat – 10 h – 20000 ppm

Skin corrosion/irritation: Skin – rabbit – irritating to skin – 24 h

Serious eye damage/eye irritation: Eyes – rabbit – mild eye irritation – 24 h (Draize test)

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: Carcinogenicity – mouse – oral → Tumorigenic: equivocal tumorigenic agent by RTECS criteria. Liver: tumors. Blood: Lymphomas including Hodgkin's disease.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Reproductive toxicity – human – female – oral → Effects on newborn: apgar score (human only), other neonatal measures or effects, and drug dependence.

Teratogenicity: no data available

Specific target organ toxicity – single exposure (GHS): Inhalation – may cause respiratory irritation.

Specific target organ toxicity – repeated exposure (GHS): no data available

Aspiration hazard: no data available

Potential Health Effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Ingestion: May be harmful if swallowed.

Signs and Symptoms of Exposure: Exposure may cause central nervous system depression, narcosis, and/or damage to the heart. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects: no data available

Additional information: RTECS: KQ6300000

Sodium hydroxide:

Acute toxicity: no data available

Skin corrosion/irritation: Skin - rabbit

Result: Causes severe burns. - 24 h

Serious eye damage/eye irritation: Eyes - rabbit

Result: Corrosive - 24 h

Respiratory or skin sensitization: Will not occur

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity – single exposure (GHS): no data available

Specific target organ toxicity – repeated exposure (GHS): no data available

Aspiration hazard: no data available

Synergistic effects: no data available

Additional information: RTECS: WB4900000

5-Bromo-2'-deoxyuridine:

Acute toxicity: LD50 Oral - rat - 8,400 mg/kg

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: May cause sensitization by inhalation.

Germ cell mutagenicity: In vivo tests showed mutagenic effects

rat

Embryo

DNA damage

rat

DNA inhibition

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity – single exposure (GHS): May cause respiratory irritation.

Specific target organ toxicity – repeated exposure (GHS): no data available

Potential Health Effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Ingestion: May be harmful if swallowed.

Signs and Symptoms of Exposure: Prolonged or repeated exposure can cause asthma.

Additional information: RTECS: YU7350000

Liver - Irregularities - Based on Human Evidence

Liver - Irregularities - Based on Human Evidence

TMB, Ultrasensitive:

Acute toxicity:

Oral LD50: no data available

Inhalation LC50: no data available

Dermal LD50: no data available

Other information on acute toxicity: no data available

Skin corrosion/irritation: hazardous in case of skin contact (irritant)

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Aspiration hazard: no data available

Potential Health Effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

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Ingestion: May be harmful if swallowed.

Additional information: RTECS: DV2300000



Bovine Serum Albumin (BSA):

The toxicological effects of this product have not been thoroughly studied

Hydrochloric acid:

Acute toxicity: no data available

Irritation and corrosion: no data available

Sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: no data available

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity – single exposure (GHS): Inhalation – may cause respiratory irritation.

Specific target organ toxicity – repeated exposure (GHS): no data available

Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional information: RTECS: not available

SECTION 12: ECOLOGICAL INFORMATION

Sodium hydroxide:

Persistence and degradability: no data available

Toxicity: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

SECTION 13: DISPOSAL CONSIDERATIONS

Product: Observe all federal, state, and local environmental regulations.

Contaminated packaging: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

Ethanol:

DOT (US): UN-number: 1170, Class: 3, Packing group: II; Proper shipping name: Ethanol; Marine pollutant: No; Poison inhalation hazard: No

IMDG: UN-number: 1170, Class: 3, Packing group: II; EMS-No: F-E, S-D; Proper shipping name: ETHANOL; Marine pollutant: No

IATA: UN-number: 1170, Class: 3, Packing group: II; Proper shipping name: Ethanol

Sodium hydroxide:

DOT (US): UN number: 1823 Class: 8 Packing group: II

Proper shipping name: Sodium hydroxide, solid

Reportable Quantity (RQ): 1000 lbs

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG: UN number: 1823 Class: 8 Packing group: II EMS-No: F-A, S-B

Proper shipping name: SODIUM HYDROXIDE, SOLID

Marine pollutant: No

IATA: UN number: 1823 Class: 8 Packing group: II

Proper shipping name: Sodium hydroxide, solid

Hydrochloric acid:

DOT (US): UN number: 1789 Class: 8 Packing group: III

Proper shipping name: Hydrochloric acid

Reportable Quantity (RQ): 104 lbs

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG: UN number: 1789 Class: 8 Packing group: III

EMS-No: F-E, S-C

Proper shipping name: Hydrochloric acid

Marine pollutant: No

IATA: UN number: 1789 Class: 8 Packing group: III

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Proper shipping name: Hydrochloric acid



BSA, 5-Bromo-2'-deoxyuridine & TMB:

DOT (US): Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

SECTION 15: REGULATORY INFORMATION

OSHA Hazards: Ethanol: Highly flammable liquid, Target organ effect, Irritant, Carcinogen

Sodium hydroxide: Target organ effect, Harmful by ingestion, Corrosive

5-Bromo-2'-deoxyuridine: Target organ effect, Carcinogen, Mutagen

TMB: Irritant

Hydrochloric acid: corrosive liquid, Target organ effect, Irritant

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

SARA 313 Components: Hydrogen chloride, CAS-No. 7647-01-0

SARA 311/312 Hazards: Ethanol, Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Sodium hydroxide, Acute Health Hazard

5-Bromo-2'-deoxyuridine, Chronic Health Hazard

TMB, Acute Health Hazard

Hydrogen chloride, Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components: Ethanol, CAS-No. 64-17-5, Revision Date: 2007-03-01

Sodium hydroxide, CAS-No. 1310-73-2; Revision Date: 2007-03-01

Hydrogen chloride, CAS-No. 7647-01-0

Pennsylvania Right To Know Components: Ethanol, CAS-No. 64-17-5, Revision Date: 2007-03-01

Serum albumin (BSA), CAS-No. 9048-46-8

Sodium hydroxide, CAS-No. 1310-73-2; Revision Date: 2007-03-01

5-Bromo-2'-deoxyuridine, CAS-No. 59-14-3

TMB, CAS-No. 30901-67-0

Hydrogen chloride, CAS-No. 7647-01-0

New Jersey Right To Know Components: Ethanol, CAS-No. 64-17-5, Revision Date: 2007-03-01


Serum albumin (BSA), CAS-No. 9048-46-8

Sodium hydroxide, CAS-No. 1310-73-2; Revision Date: 2007-03-01

5-Bromo-2'-deoxyuridine, CAS-No. 59-14-3

TMB, CAS-No. 30901-67-0

Hydrogen chloride, CAS-No. 7647-01-0

California Prop. 65 Components:  **WARNING:** This product can expose you to chemicals including TMB, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

EU regulations:

Component	Risk Phrases	Safety Phrases
Ethanol	R11, R20/21/22	S16, S36/37/39, S45
BSA	--	--
Sodium hydroxide	--	--
5-Bromo-2'-deoxyuridine	--	--
TMB	R20/21/36/61	S26/36/37/39/45/53/60
Hydrochloric acid	R20/34	S26/45

SECTION 16: OTHER INFORMATION:

OTHER INFORMATION:

PREPARATION INFORMATION:

DISCLAIMER:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. BioVision, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.