

Bioland Scientific LLC

Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product name **2-Propanol**

Product Number CI02
Brand Bioland Chemical

Company Bioland Scientific LLC
14925 Paramount Blvd., Suite C
Paramount, CA 90723
USA

Telephone 1-562-377-2668
Fax 1-562-733-6008
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SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

2.1 Substances

Synonyms : sec-Propyl alcohol
Isopropyl alcohol
Isopropanol

Formula : C₃H₈O
Molecular weight : 60.10 g/mol
CAS-No. : 67-63-0
EC-No. : 200-661-7
Index-No.: 603-117-00-0

Component	Classification	Concentration
2-Propanol	Flam. Liq. 2; Eye Irrit. 2A; STOT SE 3; H225, H319, H336 Concentration limits: >= 20 %: STOT SE 3, H336;	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 3 : HAZARDS IDENTIFICATION

3.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 2), H225

Eye irritation (Category 2A), H319

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

For the full text of the H-Statements mentioned in this Section, see Section 16.

3.2 GHS Label elements, including precautionary statements

Pictogram

**** INCLUDE PICTOGRAMMMMM**

Signal Word

Danger

Hazard Statements

H225

H319

H336

Highly flammable liquid and vapor.

Causes serious eye irritation.

May cause drowsiness or dizziness.

Precautionary Statements *make sure the correct right side is connected to correct left side!! Put space between each line for now so I can differentiate easier.*

Keep away from heat/ sparks/ open flames/ hot surfaces. No

smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ ventilating/ lighting/ equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing mist or vapors.

Wash skin thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/ eye protection/ face protection.

IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water/ shower.

IF INHALED: Remove person to fresh air and keep comfortable

for breathing. Call a POISON CENTER/ doctor if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/ attention.

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/ container to an
approved waste disposal
plant.

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

SECTION 4 : FIRST AID MEASURES

4.1 Description of first-aid measures

No data available

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

No data available

SECTION 5 : FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂) Foam Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special Hazards arising from the substance or mixture

Carbon oxides

Combustible.

5.3 Advice for firefighters

No data available.

5.4 Further information - No data available.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For personal protection see Section 8.

6.2 Environmental precautions

No data available.

6.3 Methods and materials for containment and cleaning up

No data available.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7 : HANDLING AND STORAGE

7.1 Precautions for safe handling

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Handle and store under inert gas. hygroscopic

Storage class

Storage class (TRGS 510): 3: Flammable liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8.1 Control parameters

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Change contaminated clothing. Wash hands after working with substance.

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). Safety glasses

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested:KCL 741 Dermatril® L

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Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested:KCL 741 Dermatril® L

Body Protection

protective clothing

Respiratory protection

Recommended Filter type: Filter type P2

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

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

a) Appearance	Form: powder Color: white
b) Odor	odorless
c) Odor Threshold	Not applicable
d) pH	8 - 10
e) Melting point/freezing point	Melting point: 775 °C (1427 °F) at 1,013 hPa
f) Initial boiling point and boiling range	1,935 °C 3,515 °F at 1,013 hPa
g) Flash point	()No data available
h) Evaporation rate	No data available
i) Flammability (solid, gas)	The product is not flammable.
j) Upper/lower flammability or explosive limits	No data available
k) Vapor pressure	0.01 hPa at 20 °C (68 °F)
l) Vapor density	No data available
m) Density	2.15 g/cm ³ at 25 °C (77 °F)
Relative density	No data available
n) Water solubility	745 g/l at 20 °C (68 °F) - soluble
o) Partition coefficient: n-octanol/water	Not applicable for inorganic substances

p) Autoignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	none

9.2 Other safety information

No data available

SECTION 10 : STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Reacts with air to form peroxides.

Test for peroxide formation before distillation or evaporation. Test for peroxide formation or discard after 1 year.

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Vapors may form explosive mixture with air.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

Rubber, various plastics, oils

10.6 Hazardous decomposition products

In the event of fire: see section 5

11.1 Information on toxicological effects**Acute toxicity**

Oral: No data available

Symptoms: After uptake of large quantities:, Stomach/intestinal disorders, Nausea

Symptoms: Possible damages:, mucosal irritations

LD50 Dermal - Rabbit - male and female - > 5,000 mg/kg

Remarks: (ECHA)

No data available

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Moderate eye irritation

(OECD Test Guideline 405)

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster fibroblasts

Metabolic activation: without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Test Type: Ames test

Test system: S. typhimurium

Metabolic activation: Metabolic activation

Method: OECD Test Guideline 471

Result: negative

Remarks: (Lit.)

Carcinogenicity

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

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

OSHA: OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

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

11.2 Additional Information

RTECS: EV9800000

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

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish

flow-through test LC50 - Pimephales promelas (fathead minnow) -
9,640 mg/l - 96 h
(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 13,299 mg/l - 48 h
Remarks: (IUCLID)

Toxicity to algae

IC50 - Desmodesmus subspicatus (green algae) - > 1,000 mg/l - 72 h
Remarks: (IUCLID)

Toxicity to bacteria

EC5 - Pseudomonas putida - 1,050 mg/l - 16 h Remarks: (Lit.)

12.2 Persistence and degradability ***MAKE THIS INTO A 2 COLUMN TABLE***

biodegradability

Theoretical oxygen

demand

Ratio BOD/ThBOD

aerobic - Exposure time 5 d

Result: 53 % - Readily biodegradable.

(Directive 67/548/EEC, Annex V, C.6)

2,400 mg/g

Remarks: (Lit.)

49 %

Remarks: (IUCLID)

12.3 Bioaccumulative potential

No bioaccumulation is to be expected (log Pow <= 4).

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

No data available

SECTION 13 : DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

no data available

SECTION 14 : TRANSPORT INFORMATION *

DOT (US)

UN number: 1219 Class: 3 Proper shipping name: Isopropanol Reportable Quantity (RQ): Poison Inhalation

Hazard: No

2nd column for dot: Packing group: II

IMDG

UN number: 1219 Class: 3

Proper shipping name: ISOPROPANOL

2nd column: Packing group: II

3rd column: EMS-No: F-E, S-D

IATA

Not dangerous goods UN number: 1219 Class: 3

Proper shipping name: Isopropanol

2nd column : Packing group: II

SECTION 15 :REGULATORY INFORMATION

SARA 302 Components

This material does not contain any components with a section 302 EHS TPQ.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

SECTION 16: OTHER INFORMATION

Further information

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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