

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)
Classifications according to Regulation (EC) No 1272/2008.
Printdate 05 Jun 2023

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product name:

1-Propanol

1.1. Catalog No.:

678321

1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical
uses: R&D

1.3. Uses advised against:

HPC Standards GmbH
Am Wieseneck 7

04451 Cunnersdorf
Deutschland

Tel. +49 34291 3372-36
Fax. +49 34291 3372-39
contact@hpc-standards.com

1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36
This number is only available during office hours.

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Flammable liquids (Category 2), H225
Serious eye damage (Category 1), H318
Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

2.2. Label elements

2.2.1. Pictogram



2.2.2.

2.2 Label elements
Labelling according Regulation (EC) No 1272/2008
Pictogram Signal word Danger
Hazard statement(s)

H225 Highly flammable liquid and vapour.

H318 Causes serious eye damage.

H336 May cause drowsiness or dizziness.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No Smoking P261 Avoid breathing vapours.

P280 Wear protective gloves/ eye protection/ face protection.

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 Hazard

Statements

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms : Propyl alcohol

Formula : C_3H_8O

Molecular weight : 60.10 g/mol

CAS-No. : 71-23-8

EC-No. : 200-746-9

Index-No. : 603-003-00-0

Registration number : 01-2119486761-29-XXXX

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

Component Classification Concentration

n-Propanol

CAS-No.

EC-No.

Index-No.

71-23-8

200-746-9

603-003-00-0

Flam. Liq. 2; Eye Dam. 1;

STOT SE 3; H225, H318,

H336

<= 100 %

3.1.1. Formula

C_3H_8O

3.1.2. Molecular Weight (g/mol)

60.10

3.1.3. CAS-No.

71-23-8

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

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.

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

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. 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.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

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

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.

Storage class (TRGS 510): Flammable liquids

7.3 Specific end use(s)

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form: clear, liquid

Colour: colourless

b) Odour alcohol-like

c) Odour Threshold No data available

d) pH 8.5 at 200 g/l at 20 °C

e) Melting point/freezing point

Melting point/range: -127 °C - lit.

f) Initial boiling point and boiling range

97 °C - lit.

g) Flash point 22 °C - closed cup

h) Evaporation rate 1

i) Flammability (solid, gas) No data available

j) Upper/lower Upper explosion limit: 13.7 %(V) flammability or explosive limits

Lower explosion limit: 2.1 %(V)

k) Vapour pressure 14.5 mmHg at 20 °C

l) Vapour density 2.07 - (Air = 1.0)

m) Relative density 0.804 g/cm³ at 25 °C

n) Water solubility completely miscible

o) Partition coefficient: noctanol/water

log Pow: 0.25 - 0.34

p) Auto-ignition

temperature

400 °C

q) Decomposition

temperature

No data available

r) Viscosity No data available

s) Explosive properties No data available

t) Oxidizing properties The substance or mixture is not classified as oxidizing.

9.2 Other safety information

Surface tension 23.45 mN/m at 20 °C

Relative vapour density 2.07 - (Air = 1.0)

10. STABILITY AND REACTIVITY

- 10.1 Reactivity
No data available
- 10.2 Chemical stability
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
Strong oxidizing agents
- 10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects
Acute toxicity
LD50 Oral - Rat - 8,038 mg/kg(n-Propanol)
(OECD Test Guideline 401)
LC50 Inhalation - Rat - 1 h - 20000 ppm(n-Propanol)
LC50 Dermal - Rabbit - 4,000 mg/kg(n-Propanol)
(OECD Test Guideline 402)
Skin corrosion/irritation
Skin - Rabbit(n-Propanol)
Result: No skin Irritation (OECD Test Guideline 404)
Serious eye damage/eye irritation
Eyes - Rabbit(n-Propanol)
Result: Severe eye irritation
(OECD Test Guideline 405)
Respiratory or skin sensitisation
Maximisation Test - Guinea pig(n-Propanol)
Result: Did not cause sensitisation on laboratory animals.
Germ cell mutagenicity
No data available(n-Propanol)
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.
Reproductive toxicity
No data available(n-Propanol)
Specific target organ toxicity - single exposure
May cause drowsiness or dizziness.(n-Propanol)
Specific target organ toxicity - repeated exposure
No data available
Aspiration hazard
No data available(n-Propanol)
Additional Information
RTECS: UH8225000
Central nervous system depression, prolonged or repeated exposure can cause:, narcosis, Skin irritation(n-Propanol)

12. ECOLOGICAL INFORMATION

- 12.1 Toxicity
Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 4,555 mg/l - 96 h(n-Propanol)
(OECD Test Guideline 203)
Toxicity to daphnia and other aquatic

invertebrates

EC50 - Daphnia magna (Water flea) - 3,642 mg/l - 48 h(n-Propanol)
(DIN 38412)

Toxicity to algae EC50 - Pseudokirchneriella subcapitata (green algae) - 9,170 mg/l - 48 h(n-Propanol)

12.2 Persistence and degradability

Biodegradability Result: 75 % - Readily biodegradable

Ratio BOD/ThBOD < 2 % (n-Propanol)

12.3 Bioaccumulative potential

The product is miscible in water and readily biodegradable in both water and soil. Accumulation is not expected.

12.4 Mobility in soil

No data available (n-Propanol)

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 data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 1274 IMDG: 1274 IATA: 1274

14.2 UN proper shipping name

ADR/RID: n-PROPANOL

IMDG: n-PROPANOL

IATA: n-Propanol

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

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 a chemical safety assessment was not carried out

16. OTHER INFORMATION

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. For lab use only!