

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



70823 n-Propanol

Page 1

Revised edition: 10.03.2020

Version: 4.0

Printed: 17.05.2021

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product Name: n-Propanol

Article No.: 70823

UFI:

1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:
Industrial application

Uses advised against:

1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company: Kremer Pigmente GmbH & Co. KG

Address: Hauptstr. 41-47, 88317 Aichstetten, Germany

Tel./Fax.: Tel +49 7565 914480, Fax +49 7565 1606

Internet: www.kremer-pigmente.com

E-Mail: info@kremer-pigmente.com

Importer: --

1.4. Emergency No.

Emergency No.: +49 7565 914480 (Mon-Fri 8:00 - 17:00)

1.4.2 Poison Center:

2. Hazards Identification

2.1. Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

Flammable liquids, hazard category 2
Serious eye damage, hazard category 1
Specific Target Organ Toxicity (single exposure), hazard category 3

H225 Highly flammable liquid and vapour.

Cat.: 2

H318 Causes serious eye damage.

Cat.: 1

H336 May cause drowsiness or dizziness.

Cat.: 3

Possible Environmental Effects:

See Section 12.

2.2. Label Elements

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

Hazard designation:

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



70823 n-Propanol

Page 2

Revised edition: 10.03.2020

Version: 4.0

Printed: 17.05.2021



GHS05

GHS07

Signal word:

Danger

Hazard designation:

H225	Highly flammable liquid and vapour.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.

Safety designation:

P210	Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses and continue rinsing.
P370+P378	In case of fire: use water spray, foam, carbon dioxide or dry extinguishing powder for extinction.
P403+P233	Store in a well ventilated place. Keep container tightly closed.
P403+P235	Store in a well ventilated place. Keep cool.
P501	Dispose of contents/ container according to regional, national and international regulations.

Hazardous components for labelling:

Propan-1-ol

2.3. Other Hazards

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization:

Information on Components / Hazardous Ingredients:

Propan-1-ol (H225-318-336); REACH Reg. No. 01-2119486761-29-xxxx	100 %	CAS-Nr: 71-23-8 EINECS-Nr: 200-746-9 EC-Nr: 603-003-00-0
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Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

next page: 3

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



70823 n-Propanol

Page 3

Revised edition: 10.03.2020

Version: 4.0

Printed: 17.05.2021

*Take person away from hazardous area.
Remove contaminated clothes.*

After inhalation:

*Supply fresh air and keep patient calm.
Give artificial respiration in case breathing is not regular or if it has stopped.
In case of unconsciousness place patient stable in side position for transportation.*

After skin contact:

Wash off with plenty of water and soap. Consult a physician if irritation persists.

After eye contact:

*Rinse open eyes with plenty of water for at least 15 minutes.
Consult a physician immediately.*

After ingestion:

*Rinse mouth with water, do not swallow, drink plenty of water.
Do NOT induce vomiting. Consult a doctor.*

4.2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

Dizziness and drowsiness.

Effects:

Risk of serious damage to eyes.

4.3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

Treat symptomatically.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

Foam, carbon dioxide (CO₂), extinguishing powder, water spray jet.

Unsuitable extinguishing media:

Water with full jet.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

*Vapor is heavier than air and spreads along the ground.
Fumes can form an explosive mixture with air.
Risk of bursting of closed containers due to strong heating.
In case of fire: formation of carbon monoxide and dioxide.*

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device and full protective gear.

Further information:

next page: 4

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



70823 n-Propanol

Page 4

Revised edition: 10.03.2020

Version: 4.0

Printed: 17.05.2021

*Cool exposed containers with water spray.
Collect contaminated extinguishing water and debris separately;
avoid contamination of sewage system.*

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

*Wear appropriate protective equipment. Keep spectators away.
Wear protective clothing.
Keep away from sources of heat and ignition.*

6.2. Environmental Precautions

Environmental precautions:

*Prevent contamination of soils, drains and surface water.
Contact local authorities if product pollutes soil or vegetation.*

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

*Ensure adequate ventilation.
Contain with absorbent material (sand, diatomaceous earth, acid binder, universal absorbent) and dispose accordingly.
Clean contaminated area thoroughly.*

6.4. Reference to other Sections

Protective clothing, see Section 8.

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

*Keep containers tightly closed.
Provide adequate ventilation, also in floor area (vapors are heavier than air).
A nearby eyewash facility should be available for emergencies.
Use suitable respiratory protection in case of inadequate ventilation. Handle and open container with care.*

Hygienic measures:

*Take off contaminated clothing immediately.
Do not inhale gas/fumes/vapours/aerosols.
Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.*

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

*Store in tightly sealed containers in a dry and well ventilated location.
Protect product from direct sunlight.*

Requirements for storage areas and containers:

*Store the product in the original container.
Store in a room with a solvent-proof floor.*

Information on fire and explosion

next page: 5

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



70823 n-Propanol

Page 5

Revised edition: 10.03.2020

Version: 4.0

Printed: 17.05.2021

protection:

Keep away from sources of ignition - do not smoke. Take measures to prevent electrostatic discharge.

Ensure electrical continuity by bonding and grounding (earthing) all equipment.

Do not store together with combustible and self-ignitable products.

Do not store together with inflammable products, organic peroxides, oxidants.

Storage class:

3; Flammable liquids (TRGS 510)

Further Information:

Storage temperature: 5 - 25°C.

7.3. Specific End Use(s)

Further information:

No information available.

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

none known

Parameters to be controlled:

n-Propanol (CAS 71-23-8), MAK (A; CH): Average value: 200 ppm, 500 mg/m³

Derived No-Effect Level (DNEL):

136 mg/kg (worker, skin contact, long-term exposure)

268 mg/m³ (worker, inhalation, long-term exposure)

1723 mg/m³ (worker, inhalation, short-term exposure)

81 mg/kg (consumer, skin contact, long-term exposure)

80 mg/m³ (consumer, inhalation, long-term exposure)

1036 mg/m³ (consumer, inhalation, short-term exposure)

61 mg/m³ (consumer, swallowing, long-term exposure)

Predicted No-Effect Concentration (PNEC):

Fresh water: 6.83 mg/l

Seawater: 0.683 mg/l

Fresh water sediment: 27.5 mg/kg

Seawater sediment: 2.75 mg/kg

Sporadic release: 10 mg/l

Sewage treatment system (STP): 96 mg/kg

Soil: 1.49 mg/kg

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Provide adequate ventilation/exhaust system.

Personal Protection

next page: 6

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



70823 n-Propanol

Page 6

Revised edition: 10.03.2020

Version: 4.0

Printed: 17.05.2021

General protective measures:

Remove contaminated clothing immediately.
Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.

Respiratory protection:

In case of formation of dust/vapor.
Respiratory equipment required in case of insufficient ventilation, filter type A (organic gases and vapors).
Respirator mask required if ventilation is insufficient. Wear filter respirator in case of short-term or low exposure, and wear a self-contained breathing apparatus in case of long-term or higher exposure.

Hand protection:

Protective gloves

Protective glove material:

Nitrile rubber (> 480 min, 0.35 mm)
Butyl rubber (> 480 min; 0.5 mm).

Eye protection:

Tightly fitting safety goggles (EN 166).

Body protection:

Protective clothing, solvent resistant

Environmental precautions:

Prevent contamination of open water ways and sewage system.
Avoid contamination of ground water.
Contact local authorities if large spillages cannot be contained.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form:	liquid
Color:	colorless
Odor:	characteristic
Odor threshold:	no information available
pH-Value:	not determined
Melting temperature:	-127°C (1013 hPa)
Boiling temperature:	97°C (1013 hPa)
Flash point:	23.5°C (1013 hPa)
Evaporation rate:	No information available.
Flammability (solid, gas):	not available
Upper explosion limit:	13.5 Vol.-%

next page: 7

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



70823 n-Propanol

Page 7

Revised edition: 10.03.2020

Version: 4.0

Printed: 17.05.2021

<i>Lower explosion limit:</i>	2.1 Vol.-%
<i>Vapor pressure:</i>	19.9 hPa (20°C)
<i>Vapor density:</i>	No information available.
<i>Density:</i>	0.8 g/cm ³ (20°C)
<i>Solubility in water:</i>	miscible
<i>Coefficient of variation (n-Octanol/Water):</i>	0.2 logKOW (pH 7; 25°C)
<i>Auto-ignition temperature:</i>	400°C (1013 hPa)
<i>Decomposition temperature:</i>	No decomposition if used according to specifications.
<i>Viscosity, dynamic:</i>	not determined
<i>Explosive properties:</i>	not available
<i>Oxidizing properties:</i>	no information available
<i>Bulk density:</i>	

9.2. Further Information

Solubility in solvents:
Viscosity, kinematic:
Burning class:
Solvent content:
Solid content:
Particle size:
Other information:

Temperature class: T2 (maximum temperature: 300°C)

10. Stability and Reactivity

- 10.1. **Reactivity**
Vapors in combination with air can form an explosive compound.
- 10.2. **Chemical Stability**
Stable if used according to specifications.
- 10.3. **Possibility of Hazardous Reactions**
Formation of explosive vapor-air-mixtures possible.
- 10.4. **Conditions to Avoid**
Conditions to avoid:
Avoid heat and sources of ignition.
Avoid direct sunlight.
- Thermal decomposition:*

next page: 8

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



70823 n-Propanol

Page 8

Revised edition: 10.03.2020

Version: 4.0

Printed: 17.05.2021

No decomposition if used according to specifications.

10.5. Incompatible Materials

Oxidizing agents.

10.6. Hazardous Decomposition Products

Flammable gases.

In case of fire: formation of carbon monoxide and carbon dioxide.

10.7. Further Information

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

Is not classified as acutely toxic.

LD50, oral:

LD50, dermal:

4032 mg/kg (rabbit)

LC50, inhalation:

Primary effects

Irritant effect on skin:

Non irritating

Irritant effect on eyes:

Risk of severe eye damage.

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

No sensitizing effects known.

Mutagenicity:

No mutagenic effects observed.

Reproductive toxicity:

No reproductive toxicity expected.

Carcinogenicity:

No cancerogenic effect (in animal studies).

Teratogenicity:

No relevant data found.

Specific target organ toxicity (STOT):

Single exposure: may cause drowsiness or dizziness.

Repeated exposure: the substance or mixture is not classified as specific target organ toxicant.

Additional toxicological information:

Skin contact: solvents can degrease skin.

Handle in accordance with good industrial hygiene and safety

next page: 9

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



70823 n-Propanol

Page 9

Revised edition: 10.03.2020

Version: 4.0

Printed: 17.05.2021

practice.

12. Ecological Information

12.1. Aquatic Toxicity

Fish toxicity:

LC50: 4555 mg/l (96h, fish)

Daphnia toxicity:

EC50: 3644 mg/l (48h, Daphnia magna)

NOEC: > 100 mg/l (21d; Daphnia magna; OECD 211)

Bacteria toxicity:

No data available.

Algae toxicity:

ErC50: 9170 mg/l (48h, algae)

12.2. Persistency and Degradability

83 - 92 % (28d); readily biodegradable (Method: OECD 301F)

Oxygen consumption: 64 % (5d)

12.3. Bioaccumulation

log KOW: 0.2 (pH: 7, 25°C)

12.4. Mobility

Henry Constant: 0.177 Pa.m³/mol (20°C)

12.5. Results of PBT- und vPvP Assessment

This product is neither a PBT or vPvB substance nor does it contain a PBT or vPvB substance.

12.6. Other Adverse Effects

Water hazard class:

Do not let product contaminate ground water, waterways or sewage system.

Behaviour in sewage systems:

Further ecological effects:

AOX Value:

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

Must not be disposed together with household garbage.

Product can be incinerated, when in compliance with local regulations.

Do not let product enter water systems.

European Waste Code (EWC):

The waste code must be determined together with the regional disposal service.

Uncleaned packaging:

Do not puncture, cut or weld uncleaned drums. Risk of explosion.

Uncontaminated packaging may be recycled. Completely empty

next page: 10

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



70823 n-Propanol

Page 10

Revised edition: 10.03.2020

Version: 4.0

Printed: 17.05.2021

packaging can be disposed of with the regular waste.

Contaminated packaging must be disposed like the substance.

Waste Code No.:

14. Transport Information

14.1. UN Number

ADR, IMDG, IATA 1274

14.2. UN Proper Shipping Name

ADR/RID: n-PROPANOL

IMDG/IATA: n-PROPANOL

14.3. Transport Hazard Classes

ADR Class: 3

Hazard no.: 3

Classification code: F1

Tunnel restriction code: D/E

IMDG Class (sea): 3

Hazard no.: 3

EmS No.: F-E, S-D

IATA Class: 3

Hazard no.: 3

14.4. Packaging Group

ADR/RID: II

IMDG: II

IATA: II

14.5. Environmental Hazards

Labelling according 5.2.1.8 ADR/RID: no

Labelling according 5.2.1.6.3 IMDG: no

Classification as environmentally hazardous according 2.9.3

IMDG: no

Labelled with "P" according 2.10 IMDG: no

14.6. Special Precautions for User

not applicable

14.7. Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code

IMDG: not applicable

14.8. Further Information

15. Regulatory Information

15.1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

1, slightly hazardous for water (according to the German

next page: 11

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



70823 n-Propanol

Page 11

Revised edition: 10.03.2020

Version: 4.0

Printed: 17.05.2021

Regulation AwSV)

Local regulations on chemical accidents:

Employment restrictions:

The employment restrictions for expectant and nursing mothers in accordance with the Maternity Protection Guideline are to be observed.

The employment restrictions for young workers in accordance with the Youth Employment Protection Law are to be observed.

Restriction and prohibition of application:

Technical instructions on air quality:

15.2. Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

15.3. Further Information

Listed in the following inventories:

EINECS (200-746-9), TSCA (US), AICS (AUS), DSL/NDL (CA), ENCS (JP), KECL (KR), PICCS (PH), IECSC (CN), NZIoC (NZ)

VOC Content: 100 %

Fire hazard class (German "Flammable Liquids Ordinance" (VbF)): BII (flammable liquids of group B, hazardous class II)

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.