



SAFETY DATA SHEET

Creation Date 26-Aug-2010

Revision Date 11-Nov-2010

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Description: 1-Propanol
Cat No. 396940000; 396940010; 396941000
Synonyms Propyl alcohol

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Laboratory chemicals
Uses advised against No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

E-mail address begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01
For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99
Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300
CHEMTREC Phone Number, Europe: 001-703-527-3887

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Serious Eye Damage/Eye Irritation	Category 1
Specific target organ systemic toxicity (single exposure)	Category 3
Flammable liquids.	Category 2

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R phrases mentioned in this Section, see Section 16

Symbol(s) Xi - Irritant
F - Highly flammable

R -phrase(s) R11 - Highly flammable
R41 - Risk of serious damage to eyes
R67 - Vapors may cause drowsiness and dizziness

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2. HAZARDS IDENTIFICATION

Label Elements



Signal Word

Danger

Hazard Statements

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

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear 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
P310 - Immediately call a POISON CENTER or doctor/ physician
P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P240 - Ground/Bond container and receiving equipment
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

Other Hazards

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
n-Propyl alcohol 71-23-8	EEC No. 200- 746-9	>95	71-23-8	F;R11 Xi;R41 R67	Eye Dam. 1 (H318) STOT SE 3 (H336) Flam. Liq. 2 (H225)	-

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For the full text of the R phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Obtain medical attention
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes Obtain medical attention
Ingestion	Do not induce vomiting Obtain medical attention
Inhalation	Move to fresh air If breathing is difficult, give oxygen Obtain medical attention
Notes to Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide Cool closed containers exposed to fire with water spray

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Flammable Containers may explode when heated Vapors may form explosive mixtures with air Vapors may travel to source of ignition and flash back

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear Thermal decomposition can lead to release of irritating gases and vapors

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental precautions

Should not be released into the environment.

Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

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7. HANDLING AND STORAGE

Precautions for Safe Handling

Wear personal protective equipment Do not get in eyes, on skin, or on clothing Avoid ingestion and inhalation Keep away from open flames, hot surfaces and sources of ignition Use only non-sparking tools Use explosion-proof equipment Take precautionary measures against static discharges

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place Flammables area Keep away from heat and sources of ignition

Specific End Uses

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters
Exposure limits
Component

n-Propyl alcohol

European Union	The United Kingdom	France	Belgium	Spain
		VME: 200 ppm VME: 500 mg/m ³	STEL: 250 ppm STEL: 623 mg/m ³ TWA: 499 mg/m ³ TWA: 200 ppm	VLA-EC: 400 ppm VLA-EC: 1000 mg/m ³ VLA-ED: 200 ppm VLA-ED: 500 mg/m ³

Component

n-Propyl alcohol

Italy	Portugal	The Netherlands	Finland	Denmark
	STEL: 400 ppm TWA: 200 ppm		TWA: 200 ppm TWA: 500 mg/m ³ STEL: 620 mg/m ³ STEL: 250 ppm	TWA: 200 ppm TWA: 500 mg/m ³

Component

n-Propyl alcohol

Austria	Switzerland	Poland	Norway	Ireland
MAK: 200 ppm MAK: 500 mg/m ³	MAK: 200 ppm MAK: 500 mg/m ³	NDSch: 600 mg/m ³ NDS: 200 mg/m ³	TWA: 100 ppm TWA: 245 mg/m ³	TWA: 200 ppm TWA: 500 mg/m ³ STEL: 625 mg/m ³ STEL: 250 ppm Skin

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

Exposure controls
Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location Ensure adequate ventilation, especially in confined areas Use explosion-proof electrical/ventilating/lighting/equipment

Personal protective equipment
Eye Protection

Goggles

Hand Protection

Protective gloves

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

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Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Colorless
odor	Alcohol-like
pH	7 20% aq. solution
Vapor Pressure	25 mbar @ 20 °C
Vapor Density	2.07
Viscosity	2.2 mPa.s at 20 °C
Boiling Point/Range	97°C / 206.6°F @ 760 mmHg
Melting Point/Range	-127°C / -196.6°F
Flash Point	15°C / 59°F
Explosion Limits	
Lower	2 vol%
Upper	12 vol%
Water Solubility	soluble
Specific Gravity	0.800
Molecular Formula	C3 H8 O
Molecular Weight	60.1

10. STABILITY AND REACTIVITY
Reactivity
Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions
Hazardous Polymerization

Hazardous polymerization does not occur.

Hazardous Reactions .

None under normal processing..

Conditions to Avoid

Incompatible products, Excess heat, Keep away from open flames, hot surfaces and sources of ignition.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

 Carbon monoxide (CO). Carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION
Information on Toxicological Effects

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11. TOXICOLOGICAL INFORMATION
Acute Toxicity
Component Information
Component
n-Propyl alcohol

LD50 Oral	LD50 Dermal	LC50 Inhalation
1870 mg/kg (Rat)		13548 ppm (Rat) 4 h

Chronic Toxicity
Carcinogenicity

There are no known carcinogenic chemicals in this product

Sensitization

No information available.

Mutagenic Effects

No information available

Reproductive Effects

No information available.

Developmental Effects

No information available.

Target Organs

Skin Respiratory system Eyes

Other Adverse Effects

See actual entry in RTECS for complete information

Endocrine Disruptor Information

None known

12. ECOLOGICAL INFORMATION
Toxicity
Ecotoxicity effects

Do not empty into drains

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
n-Propyl alcohol		Pimephales promelas: LC50=4480 mg/L 96h	EC50 = 17700 mg/L 5 min EC50 = 45000 mg/L 5 h EC50 = 8686 mg/L 15 min EC50 = 980 mg/L 12 h	3642 mg/L EC50 = 48 h 3339 - 3977 mg/L EC50 48 h

Persistence and degradability

Expected to be biodegradable

Bioaccumulative potential

No information available.

Component	log Pow
n-Propyl alcohol	0.34

Mobility in soil

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Results of PBT and vPvB assessment

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues / Unused Products

Dispose of in accordance with local regulations

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

IMDG/IMO

UN-No 1274
 Hazard Class 3
 Packing Group II
 Proper Shipping Name PROPANOL

ADR

UN-No 1274
 Hazard Class 3
 Packing Group II
 Proper Shipping Name n-PROPANOL

IATA

UN-No 1274
 Hazard Class 3
 Packing Group II
 Proper Shipping Name n-PROPANOL

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
n-Propyl alcohol	200-746-9	-		X	X	-	X	X	X	X	KE-29362 X

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Legend**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**EINECS/ELINCS** - European Inventory Lists**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**CHINA** - China Inventory of Existing Chemical Substances**AICS** - Inventory of Chemical Substances**KECL** - Existing and Evaluated Chemical Substances**Chemical Safety Assessment****16. OTHER INFORMATION****Text of R phrases mentioned in Section 2-3**

R11 - Highly flammable

R41 - Risk of serious damage to eyes

R67 - Vapors may cause drowsiness and dizziness

Revision Date 11-Nov-2010**Revision Summary** Not applicable**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006****Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

End of Safety Data Sheet