

Revision Date 16-Nov-2010

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Description:

Propargyl alcohol

Cat No.

131450000; 131450050; 131452500; 131455000

Synonyms

2-Propyn-1-ol

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: 800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number, US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

CHEMTREC Phone Number, Europe: 703-527-3887

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 3
Acute dermal toxicity	Category 3
Acute Inhalation Toxicity - Vapors	Category 3
Skin Corrosion / irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Skin Sensitization	Category 1
Chronic aquatic toxicity	Category 2
Flammable liquids.	Category 3

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)

T - Toxic

N - Dangerous for the environment

R - phrase(s)

R10 - Flammable

R34 - Causes burns

R43 - May cause sensitization by skin contact

Risk Combination Phrases

R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

2. HAZARDS IDENTIFICATION

Label Elements



Signal Word

Danger

Hazard Statements

H411 - Toxic to aquatic life with long lasting effects
 H301 - Toxic if swallowed
 H311 - Toxic in contact with skin
 H331 - Toxic if inhaled
 H314 - Causes severe skin burns and eye damage
 H317 - May cause an allergic skin reaction
 H226 - Flammable liquid and vapor

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

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P361 - Remove/Take off immediately all contaminated clothing
 P302 + P350 - IF ON SKIN: Gently wash with plenty of soap and water
 P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
 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
 P201 - Obtain special instructions before use
 P308 + P313 - IF exposed or concerned: Get medical advice/attention
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 P273 - Avoid release to the environment
 P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Other Hazards

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
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3. COMPOSITION/INFORMATION ON INGREDIENTS

Formaldehyde		0.5	50-00-0	Carc.Cat.3;R40 T;R23/24/25 C;R34 R43	Skin Corr. 1B (H314) Skin Sens. 1 (H317) Carc. 2 (H351) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331)	
Propargyl alcohol	EEC No. 203-471-2	99	107-19-7	R10 T;R23/24/25 C;R34 N;R51-53	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Aquatic Chronic 2 (H411) Flam. Liq. 3 (H226)	

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

Immediate medical attention is required Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes

Skin Contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes Immediate medical attention is required

Ingestion

Do not induce vomiting Call a physician immediately Clean mouth with water

Inhalation

Remove from exposure, lie down Move to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration Immediate medical attention is required

Notes to Physician

Treat symptomatically

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Carbon dioxide (CO₂) Dry chemical chemical foam

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Flammable

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust) Keep in suitable and closed containers for disposal Remove all sources of ignition Use spark-proof tools and explosion-proof equipment

7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not breathe dust Do not breathe vapors or spray mist Do not get in eyes, on skin, or on clothing Use only in area provided with appropriate exhaust ventilation Use explosion-proof equipment Use only non-sparking tools

Conditions for safe storage, including any incompatibilities

Keep in a dry place Keep container tightly closed Keep away from heat and sources of ignition Refrigerator/flammables

Specific End Uses

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters**Exposure limits****Component**

Formaldehyde

Propargyl alcohol

European Union	The United Kingdom	France	Belgium	Spain
		VME: 0.5 ppm VLCT: 1 ppm		VLA-EC: 0.37 mg/m ³ VLA-EC: 0.3 ppm
		VME: 1 ppm VME: 2 mg/m ³	TWA: 2.3 mg/m ³ TWA: 1 ppm	VLA-ED: 2.3 mg/m ³ VLA-ED: 1 ppm

Component

Formaldehyde

Propargyl alcohol

Italy	Portugal	The Netherlands	Finland	Denmark
	Ceiling: 0.3 ppm	STEL: 0.5 mg/m ³ TWA: 0.15 mg/m ³	TWA: 0.37 mg/m ³ TWA: 0.3 ppm STEL: 1.2 mg/m ³ STEL: 1 ppm Ceiling: 1 ppm Ceiling: 1.2 mg/m ³	Ceiling: 0.3 ppm Ceiling: 0.4 mg/m ³
	TWA: 1 ppm		TWA: 2.3 mg/m ³ TWA: 1 ppm STEL: 7 mg/m ³ STEL: 3 ppm	TWA: 1 ppm TWA: 2.5 mg/m ³

Component

Formaldehyde

Austria	Switzerland	Poland	Norway	Ireland
STEL: 0.5 ppm STEL: 0.6 mg/m ³ MAK: 0.5 ppm MAK: 0.6 mg/m ³ Ceiling: 0.5 ppm Ceiling: 0.6 mg/m ³	STEL: 0.6 ppm STEL: 0.74 mg/m ³ MAK: 0.3 ppm MAK: 0.37 mg/m ³	NDSCh: 1 mg/m ³ NDS: 0.5 mg/m ³	TWA: 0.5 ppm TWA: 0.6 mg/m ³ Ceiling: 1 ppm Ceiling: 1.2 mg/m ³	TWA: 2.5 mg/m ³ TWA: 2 ppm STEL: 2.5 mg/m ³ STEL: 2 ppm

Component	Austria	Switzerland	Poland	Norway	Ireland
Propargyl alcohol	STEL: 4 ppm STEL: 9.4 mg/m ³ MAK: 2 ppm MAK: 4.7 mg/m ³	STEL: 9.4 mg/m ³ STEL: 4 ppm MAK: 2 ppm MAK: 4.7 mg/m ³	NDS: 3 mg/m ³	TWA: 1 ppm TWA: 2.5 mg/m ³	TWA: 2 mg/m ³ TWA: 1 ppm STEL: 6 mg/m ³ STEL: 3 ppm Skin

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and safety showers are close to the workstation location

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

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	Clear
odor	slight
pH	7 33% aq.sol.
Vapor Pressure	10 mbar @ 20 °C
Vapor Density	1.93
Viscosity	1.58 mPa.s at 20 °C
Boiling Point/Range	114 - 115°C / 237.2 - 239°F
Melting Point/Range	-53 - 52°C / -63.4 - 125.6°F
Decomposition temperature	> 120°C
Flash Point	34°C / 93.2°F
Explosion Limits	
Lower	2.2
Upper	98
Water Solubility	miscible
Specific Gravity	0.949
Molecular Formula	C3 H4 O
Molecular Weight	56.06

10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous Polymerization

No information available.

Hazardous Reactions .

No information available.

Conditions to Avoid

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

Incompatible Materials

Acids, Strong oxidizing agents.

Hazardous Decomposition Products

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

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects**Acute Toxicity****Product Information**

No acute toxicity information is available for this product

Component Information**Component**

Formaldehyde

Propargyl alcohol

LD50 Oral	LD50 Dermal	LC50 Inhalation
500 mg/kg (Rat)		0.578 mg/L (Rat) 4 h
20 mg/kg (Rat)	16 mg/kg (Rabbit)	

Chronic Toxicity**Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen

Sensitization

May cause sensitization by skin contact

Mutagenic Effects

No information available

Reproductive Effects

No information available.

Developmental Effects

No information available.

Target Organs

No information available.

Other Adverse Effects

The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information

Endocrine Disruptor Information

None known

12. ECOLOGICAL INFORMATION

Toxicity**Ecotoxicity effects**

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Formaldehyde		Leuciscus idus: LC50 = 15 mg/L 96h		EC50 = 20 mg/L 96h EC50 = 2 mg/L 48h
Propargyl alcohol		1.49-1.56 mg/L LC50 96 h		32 mg/L EC50 = 24 h

Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Component	log Pow
Formaldehyde	0.35

Mobility in soil**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 2929
Hazard Class 6.1
Subsidiary Hazard Class 3
Packing Group II
Proper Shipping Name TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.

ADR

UN-No 2929
Hazard Class 6.1
Subsidiary Class 3
Packing Group II
Proper Shipping Name TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.

IATA

UN-No 2929
Hazard Class 6.1
Subsidiary Hazard Class 3
Packing Group II
Proper Shipping Name TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.*

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
Formaldehyde	200-001-8	-		X	X	-	X	X	X	X	KE-17074 X

Propargyl alcohol	203-471-2	-		X	X	-	X	X	X	X	KE-29870 X
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Legend**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**EINECS/ELINCS** - European Inventory Lists**DSL/NDL** - 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**

R10 - Flammable

R34 - Causes burns

R43 - May cause sensitization by skin contact

R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Revision Date

16-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