

Revision Date 11-Nov-2010

Revision Number 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**

**Product Description:** Allyl alcohol  
**Cat No.** 102860000; 102860010; 102862500  
**Synonyms** 2-Propen-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 2
Serious Eye Damage/Eye Irritation	Category 2A
Specific target organ systemic toxicity (single exposure)	Category 3
Acute aquatic toxicity	Category 1
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)** T - Toxic  
 N - Dangerous for the environment

**R -phrase(s)** R10 - Flammable  
 R50 - Very toxic to aquatic organisms

**Risk Combination Phrases** R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed  
 R36/37/38 - Irritating to eyes, respiratory system and skin

## 2. HAZARDS IDENTIFICATION

### Label Elements



### Signal Word

**Danger**

### Hazard Statements

H319 - Causes serious eye irritation  
 H335 - May cause respiratory irritation  
 H315 - Causes skin irritation  
 H301 - Toxic if swallowed  
 H311 - Toxic in contact with skin  
 H331 - Toxic if inhaled  
 H400 - Very toxic to aquatic life  
 H225 - Highly flammable liquid and vapor

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

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  
 P310 - Immediately call a POISON CENTER or doctor/physician  
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
 P273 - Avoid release to the environment  
 P302+ P352 - IF ON SKIN: Wash with plenty of soap and water  
 P280 - Wear protective gloves/protective clothing/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  
 P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 P240 - Ground/Bond container and receiving equipment

### Other Hazards

Lachrymator (substance which increases the flow of tears).

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
-----------	--------	----------	--------	----------------	---------	----------------

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Allyl alcohol	EEC No. 203-470-7	99	107-18-6	R10 T;R23/24/25 Xi;R36/37/38 N;R50	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) Aquatic Acute 1 (H400) Flam. Liq. 2 (H225)
---------------	-------------------	----	----------	---	---

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**

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**

Water spray Carbon dioxide (CO<sub>2</sub>) 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 Do not let this chemical enter the environment

## 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, cool and well-ventilated place Keep container tightly closed Keep away from heat and sources of ignition Flammables area Keep under nitrogen

**Specific End Uses**

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

Allyl alcohol

European Union	The United Kingdom	France	Belgium	Spain
		VME: 0.2 ppm VME: 0.48 mg/m <sup>3</sup> VLCT: 2 ppm VLCT: 4.8 mg/m <sup>3</sup>	STEL: 4 ppm STEL: 9.6 mg/m <sup>3</sup> TWA: 2 ppm TWA: 4.8 mg/m <sup>3</sup>	VLA-EC: 12 mg/m <sup>3</sup> VLA-EC: 5 ppm VLA-ED: 2 ppm VLA-ED: 5 mg/m <sup>3</sup>

**Component**

Allyl alcohol

Italy	Portugal	The Netherlands	Finland	Denmark
TWA: 2 ppm TWA: 4.8 mg/m <sup>3</sup> STEL: 12.1 mg/m <sup>3</sup> STEL: 5 ppm	TWA: 0.5 ppm	STEL: 12.1 mg/m <sup>3</sup> TWA: 4.8 mg/m <sup>3</sup>	TWA: 0.5 ppm TWA: 1.2 mg/m <sup>3</sup> STEL: 4.8 mg/m <sup>3</sup> STEL: 2 ppm	TWA: 2 ppm TWA: 5 mg/m <sup>3</sup>

**Component**

Allyl alcohol

Austria	Switzerland	Poland	Norway	Ireland
STEL: 12 mg/m <sup>3</sup> STEL: 5 ppm MAK: 2 ppm MAK: 4.8 mg/m <sup>3</sup>	STEL: 4 ppm STEL: 10 mg/m <sup>3</sup> MAK: 2 ppm MAK: 5 mg/m <sup>3</sup>	NDSch: 10 mg/m <sup>3</sup> NDS: 2 mg/m <sup>3</sup>	TWA: 2 ppm TWA: 5 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> TWA: 0.5 ppm STEL: 4 ppm STEL: 10 mg/m <sup>3</sup> 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

<b>Physical State</b>	Liquid
<b>Appearance</b>	Colorless
<b>Vapor Pressure</b>	17.3 mmHg @ 20 °C
<b>Boiling Point/Range</b>	96 - 98°C / 204.8 - 208.4°F
<b>Melting Point/Range</b>	-129°C / -200.2°F
<b>Flash Point</b>	21°C / 69.8°F
<b>Explosion Limits</b>	
<b>Lower</b>	2.5
<b>Upper</b>	18
<b>Water Solubility</b>	miscible
<b>Specific Gravity</b>	0.850
<b>Molecular Formula</b>	C3 H6 O
<b>Molecular Weight</b>	58.08

## 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, Metals.

**Hazardous Decomposition Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## 11. TOXICOLOGICAL INFORMATION

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

No acute toxicity information is available for this product

**Component Information****Component**

	LD50 Oral	LD50 Dermal	LC50 Inhalation

### 11. TOXICOLOGICAL INFORMATION

Allyl alcohol	64 mg/kg ( Rat )	45 mg/kg ( Rabbit )	1.76 mg/L ( Rat ) 1 h 1060 ppm ( Rat ) 1 h 165 ppm ( Rat ) 4 h
---------------	------------------	---------------------	--

**Chronic Toxicity****Carcinogenicity**

There are no known carcinogenic chemicals in this product

**Sensitization**

No information available.

**Mutagenic Effects**

Not mutagenic in AMES Test

**Reproductive Effects**

No information available.

**Developmental Effects**

No information available.

**Target Organs**

No information available.

**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
Allyl alcohol		0.32 mg/L LC50 96 h 0.28-0.37 mg/L LC50 96 h	EC50 = 216 mg/L 30 min EC50 = 342 mg/L 15 min EC50 = 608 mg/L 5 min	0.25 mg/L EC50 = 96 h

**Persistence and degradability**

No information available

**Bioaccumulative potential**

No information available.

Component	log Pow
Allyl alcohol	0.17

**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** 1098  
**Hazard Class** 6.1  
**Subsidiary Hazard Class** 3  
**Packing Group** I  
**Proper Shipping Name** ALLYL ALCOHOL

**ADR**

**UN-No** 1098  
**Hazard Class** 6.1  
**Subsidiary Class** 3  
**Packing Group** I  
**Proper Shipping Name** ALLYL ALCOHOL

**IATA**

**UN-No** 1098  
**Hazard Class** 6.1  
**Subsidiary Hazard Class** 3  
**Proper Shipping Name** ALLYL ALCOHOL

## 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
Allyl alcohol	203-470-7	-		X	X	-	X	X	X	X	KE-29732 X

**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**

R10 - Flammable

R50 - Very toxic to aquatic organisms

**16. OTHER INFORMATION**

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

R36/37/38 - Irritating to eyes, respiratory system and skin

**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