

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.04.2011

Revision: 21.04.2011

## 1 Identification of the substance/mixture and of the company/undertaking

### Product identifier

#### Trade name

**Propargyl alcohol**

#### Stock number:

A10295

#### CAS Number:

107-19-7

#### EINECS Number:

203-471-2

#### Index number:

603-078-00-X

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

#### Sector of Use

SU24 Scientific research and development

#### Details of the supplier of the safety data sheet

#### Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG  
Benzstrasse 3  
D-76185 Karlsruhe / GermanyE-mail: gcat@matthey.com  
www.alfa-chemcat.com

#### Informing department:

Product safety department.

#### Emergency telephone number:

Giftnotruf Universität Mainz / Poison Information Center Mainz  
www.giftinfo.uni-mainz.de Telefon: +49(0)6131/19240

## 2 Hazards identification

### Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

#### Classification according to Directive 67/548/EEC or Directive 1999/45/EC



T; Toxic

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



C; Corrosive

R34: Causes burns.



N; Dangerous for the environment

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

R10: Flammable.

#### Information concerning particular hazards for human and environment:

Not applicable

#### Label elements

#### Labelling according to Regulation (EC) No 1272/2008

#### Hazard pictograms

The substance is classified and labelled according to the CLP regulation.



GHS02 GHS05 GHS06 GHS09

#### Signal word

#### Hazard statements

Danger

H226 Flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H314 Causes severe skin burns and eye damage.

H411 Toxic to aquatic life with long lasting effects.

#### Precautionary statements

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Remove/Take off immediately all contaminated clothing.

P361

P405

P501

Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Other hazards

#### Results of PBT and vPvB assessment

#### PBT:

Not applicable.

#### vPvB:

Not applicable.

## 3 Composition/information on ingredients

### Chemical characterization: Substances

#### (CAS#) Designation:

107-19-7 Propargyl alcohol

#### Identification number(s):

#### EINECS Number:

203-471-2

#### Index number:

603-078-00-X

## 4 First aid measures

### Description of first aid measures

#### General information

Instantly remove any clothing soiled by the product.

Remove breathing apparatus only after soiled clothing has been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

#### After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

Seek immediate medical advice.

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<b>After skin contact</b>	Instantly wash with water and soap and rinse thoroughly.
<b>After eye contact</b>	Seek immediate medical advice.
<b>After swallowing</b>	Rinse opened eye for several minutes under running water. Then consult doctor. Do not induce vomiting; instantly call for medical help.
<b>Information for doctor</b>	Seek immediate medical advice.
<b>Most important symptoms and effects, both acute and delayed</b>	No further relevant information available.
<b>Indication of any immediate medical attention and special treatment needed</b>	No further relevant information available.

**5 Firefighting measures**

<b>Extinguishing media</b>	CO2, sand, extinguishing powder. Do not use water.
<b>Suitable extinguishing agents</b>	
<b>For safety reasons unsuitable extinguishing agents</b>	Water.
<b>Special hazards arising from the substance or mixture</b>	Can be released in case of fire: Carbon monoxide and carbon dioxide
<b>Advice for firefighters</b>	
<b>Protective equipment:</b>	Wear self-contained breathing apparatus. Wear full protective suit.

**6 Accidental release measures**

<b>Personal precautions, protective equipment and emergency procedures</b>	Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Keep away from ignition sources Do not allow material to be released to the environment without proper governmental permits.
<b>Environmental precautions:</b>	
<b>Methods and material for containment and cleaning up:</b>	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent. Dispose of contaminated material as waste according to item 13. Ensure adequate ventilation.
<b>Reference to other sections</b>	Keep away from ignition sources. See Section 7 for information on safe handling See section 8 for information on personal protection equipment. See Section 13 for information on disposal.

**7 Handling and storage**

<b>Handling</b>	
<b>Precautions for safe handling</b>	Keep containers tightly sealed. Ensure good ventilation/exhaustion at the workplace. Open and handle container with care.
<b>Information about protection against explosions and fires:</b>	Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Fumes can combine with air to form an explosive mixture.
<b>Conditions for safe storage, including any incompatibilities</b>	
<b>Storage</b>	
<b>Requirements to be met by storerooms and containers:</b>	Refrigerate
<b>Information about storage in one common storage facility:</b>	Protect from heat. Store away from oxidizing agents.
<b>Further information about storage conditions:</b>	Keep container tightly sealed. Store in a locked cabinet or with access restricted to technical experts or their assistants. Refrigerate
<b>Specific end use(s)</b>	No further relevant information available.

**8 Exposure controls/personal protection**

<b>Additional information about design of technical systems:</b>	Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.
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**Control parameters****Components with critical values that require monitoring at the workplace:****107-19-7 Propargyl alcohol (100.0%)**

WEL ()	Short-term value: 7 mg/m <sup>3</sup> , 3 ppm
Sk	Long-term value: 2.3 mg/m <sup>3</sup> , 1 ppm

<b>Additional information:</b>	No data
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<b>Exposure controls</b>	
<b>Personal protective equipment</b>	
<b>General protective and hygienic measures</b>	The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work. Store protective clothing separately. Avoid contact with the eyes and skin.
<b>Breathing equipment:</b>	Use breathing protection with high concentrations.
<b>Protection of hands:</b>	Check protective gloves prior to each use for their proper condition.
<b>Material of gloves</b>	The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. Impervious gloves
<b>Penetration time of glove material</b>	Not determined
<b>Eye protection:</b>	Safety glasses Tightly sealed safety glasses. Face protection Full face protection
<b>Body protection:</b>	Protective work clothing.

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**9 Physical and chemical properties****Information on basic physical and chemical properties****General Information****Appearance:**

<b>Form:</b>	Liquid
<b>Colour:</b>	Colourless
	Yellow
<b>Smell:</b>	Not determined
<b>Odour threshold:</b>	Not determined.

**pH-value:** Not determined.**Change in condition**

<b>Melting point/Melting range:</b>	-53°C
<b>Boiling point/Boiling range:</b>	115°C
<b>Sublimation temperature / start:</b>	Not determined

**Flash point:** 33°C**Inflammability (solid, gaseous)** Not applicable.**Ignition temperature:** 365°C**Decomposition temperature:** Not determined**Self-inflammability:** Not determined.**Critical values for explosion:**

<b>Lower:</b>	1.9 Vol %
<b>Upper:</b>	86.2 Vol %

**Steam pressure at 20°C:** 15.4 hPa**Density at 20°C** 0.949 g/cm<sup>3</sup>**Relative density** Not determined.**Vapour density** Not determined.**Evaporation rate** Not determined.**Solubility in / Miscibility with****Water:** Fully miscible**Segregation coefficient (n-octanol/water):** Not determined.**Viscosity:****dynamic:** Not determined.**kinematic:** Not determined.**Other information** No further relevant information available.**10 Stability and reactivity****Reactivity****Chemical stability****Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

**Possibility of hazardous reactions** No dangerous reactions known**Incompatible materials:** Heat

Oxidizing agents

**Hazardous decomposition products:** Carbon monoxide and carbon dioxide**11 Toxicological information****Information on toxicological effects****Acute toxicity:****LD/LC50 values that are relevant for classification:**

Oral	LD50	20 mg/kg (rat)
Dermal	LD50	88 mg/kg (rabbit)
Inhalative	LC50	1800 mg/m3 (rat)

**Primary irritant effect:****on the skin:****on the eye:****Sensitization:****Additional toxicological information:**

Corrosive effect on skin and mucous membranes.

Strong corrosive effect.

No sensitizing effect known.

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Danger by skin resorption.

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute and/or other multiple dose toxicity data for components in this product.

The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive and/or mutation data for components in this product.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

**12 Ecological information****Toxicity****Aquatic toxicity:****Persistence and degradability****Behaviour in environmental systems:****Bioaccumulative potential****Mobility in soil****Ecotoxicological effects:****Remark:****Additional ecological information:****General notes:**

No further relevant information available.

No further relevant information available.

No further relevant information available.

No further relevant information available.

Toxic for fish

Do not allow product to reach ground water, water bodies or sewage system.

Water hazard class 2 (Assessment by list): hazardous for water.

Danger to drinking water if even small quantities leak into soil.

Also poisonous for fish and plankton in water bodies.

Do not allow material to be released to the environment without proper governmental permits.

Toxic for aquatic organisms

**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.

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Other adverse effects

No further relevant information available.

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**13 Disposal considerations**Waste treatment methods  
Recommendation

Hand over to disposers of hazardous waste.  
Must be specially treated under adherence to official regulations.  
Consult state, local or national regulations for proper disposal.

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.

Recommended cleaning agent:

Water, if necessary with cleaning agent.

**14 Transport information**

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)



ADR/RID-GGVS/E Class:

6.1 (TF1) Toxic substances.

Kemler Number:

63

UN-Number:

2929

Packaging group:

II

Label

6.1+3

Special marking:

Symbol (fish and tree)

UN proper shipping name:

2929 TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S. (Propargyl alcohol)

Limited quantities (LQ)

LQ17

Transport category

2

Tunnel restriction code

D/E

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class:

6.1

UN Number:

2929

Label

6.1+3

Packaging group:

II

Marine pollutant:

No

Correct technical name:

TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S. (Propargyl alcohol)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class:

6.1

UN/ID Number:

2929

Label

6.1+3

Packaging group:

II

Correct technical name:

TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S. (Propargyl alcohol)

UN "Model Regulation":

UN2929, TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S., 6.1 (3), II  
Environmentally hazardous substance, liquid; Marine Pollutant  
Warning: Toxic substances.

Environmental hazards:

Special precautions for user

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

**15 Regulatory information**

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

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

The substance is classified and labelled according to the CLP regulation.



GHS02 GHS05 GHS06 GHS09

Signal word

Danger

Hazard statements

H226 Flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H314 Causes severe skin burns and eye damage.

H411 Toxic to aquatic life with long lasting effects.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P361 Remove/Take off immediately all contaminated clothing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations

Information about limitation of use:

Employment restrictions concerning young persons must be observed.  
For use only by technically qualified individuals.

Technical instructions (air):

Class	Share in %
I	100.0

Water hazard class:

Water hazard class 2 (Assessment by list): hazardous for water.

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

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**16 Other information**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**Department issuing data specification sheet:** Health, Safety and Environmental Department.

**Contact:** Zachariah C. Holt

**Global EHS Manager**

**Abbreviations and acronyms:** ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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