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**1. PRODUCT AND COMPANY IDENTIFICATION**

Product name	Propan-1-ol
Synonyms	1-Propanol, Propyl Alcohol
Grade	ACS, HPLC, HPLC-prep, LCMS, Pesticide, Dehydrous, Anapremium, UPLC
Company	Anaqua Chemicals Supply
	1510 Eldridge Parkway, Suite 110-268 Houston, TX 77077, USA
Telephone	(281) 668-0032
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**2. COMPOSITION/ INFORMATION ON INGREDIENTS**

Formula	C <sub>3</sub> H <sub>8</sub> O
CAS-No.	71-23-8
Index-No.	603-003-00-0
Ec-No.	200-746-9
Concentration	> 94.5 %

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**3. HAZARDS IDENTIFICATION****GHS Classification**

Flammable liquid	Category 2
Serious eye damage	Category 1
Specific target organ toxicity- single exposure	Category 3

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

Highly flammable. Vapours may cause drowsiness and dizziness. Risk of serious damage to eyes.

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**4. FIRST AID MEASURES**

Inhalation	If breathed in, move to fresh air. If not breathing, give artificial respiration. Consult a physician.
Ingestion	Rinse mouth with water. Consult a physician immediately.
Skin Contact	Immediately wash off with plenty of water for at least 15 minutes. Consult a physician.
Eye Contact	Rinse through with plenty of water for at least 15 minutes. Consult a physician.
Note to Physician	Treat symptomatically

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**5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Specific hazards arising from the mixture	Carbon oxides
Special protective equipment for fire-fighters	Wear self contained breathing apparatus for fighting if necessary. In case

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## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions	Do not release into drains.
Methods for cleaning up	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

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## 7. HANDLING AND STORAGE

Handling	Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
Storage	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

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## 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

### Occupational exposure controls

Engineering Measures	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
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### Personal protective Equipment

Respiratory protection	Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)
Hand protection	Wear appropriate protective gloves.
Eye protection	Tightly fitting safety glasses.
Skin and body protection	Protective clothes should be selected specifically for the work place according to concentration and quantity of the chemical handled.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice. Wash hands and face before breaks and at the end of working day.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Liquid
Color	Colorless
pH	No data available
Oxidizing properties	8.5 at 200 g/l at 20 °C
Melting point	-127 °C
Boiling point	97 °C
Flash point	22 °C - closed cup
Ignition temperature	No data available

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Lower explosion limit	2.1 % (V)
Upper explosion limit	13.7 % (V)
Vapor pressure	19.3 hPa at 20.0 °C (68.0 °F)
Vapor density	2.07 - (Air = 1.0)
Density	0.804 gcm <sup>3</sup> at 25 °C (77 °F)
Water solubility	Completely soluble
Partition coefficient: n-octanol/ water	log Pow: 0.25 – 0.34
Molecular weight	60.1

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## 10. STABILITY AND REACTIVITY

Storage stability	No data available
Conditions to avoid	Heat, flames and sparks. Extremes of temperature and direct sunlight
Materials to avoid	Strong oxidizing agents
Hazardous decomposition products	No data available

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## 11. TOXICOLOGICAL INFORMATION

Acute toxicity	LD50 Oral 8,038 mg/kg (Rat)
	LC50 Inhalation 20,000 ppm (Rat) 1 h
	LD50 Dermal 4,000 mg/kg (Rabbit)
Skin irritation	Mild skin irritation (Rabbit)
Eye irritation	Severe eye irritation (Rabbit)
Carcinogenicity	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Specific target organ toxicity - single exposure	May cause drowsiness or dizziness.
Potential health effects	<b>Inhalation</b> May be harmful if inhaled. May causes respiratory tract irritation. Vapours may cause drowsiness and dizziness.
	<b>Ingestion</b> May be harmful if swallowed.
	<b>Skin</b> May be harmful if absorbed through skin. Causes skin irritation.
	<b>Eyes</b> Causes eye burns.
Symptoms of Exposure	Central nervous system depression, prolonged or repeated exposure can cause:, narcosis, Skin irritation
Additional Information	RTECS: UH8225000

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## 12. ECOLOGICAL INFORMATION

Persistence and degradability	Biodegradability
Ecotoxicity	
Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) – 1,000 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) – 3,642 mg/l – 48h
Toxicity to algae	IC5 8.000 mg/l (Green algae) 8 d
Bioaccumulation Potential - Bioaccumulation	No available information

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### 13. DISPOSAL CONSIDERATIONS

Product	Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.
Packaging	Dispose of as unused product.

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### 14. TRANSPORT INFORMATION

#### IATA

UN-Number: 1274 Class: 3 Packing group: II  
Proper shipping name: n-Propanol

#### IMDG

UN-Number: 1274 Class: 3 Packing group: II  
Proper shipping name: n-Propanol

#### DOT (US)

UN-Number: 1274 Class: 3 Packing group: II  
Proper shipping name: n-Propanol  
Marine pollution: No  
Poison Inhalation Hazard: No

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### 15. REGULATORY INFORMATION

#### Hazard statements

H225: Highly flammable liquid and vapour.

H318: Causes serious eye damage.

H336: May cause drowsiness or dizziness.

#### Precautionary statements

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P280: Wear protective gloves/ 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.

#### GHS-Labeling

Pictogram



Signal word *Danger*

Labeling according to EC Directive

Symbol(s): T- Toxic F- Highly flammable

R-phrase(s): 11-41-67

Highly flammable. Risk of serious damage to eyes. Vapours may cause drowsiness and dizziness.

S-phrase(s): 7-16-24-26-39

Keep container tightly closed. Keep away from sources of ignition - No smoking. Avoid contact with skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection.

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## 16. OTHER INFORMATION

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