## SIGMA-ALDRICH

## **Material Safety Data Sheet**

Version 3.0 Revision Date 08/19/2009 Print Date 07/27/2010

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Amino-2-propanol

Product Number : 110248 Brand : Aldrich

Company : Sigma-Aldrich

3050 Spruce Street

SAINT LOUIS MO 63103

USA

Telephone : +18003255832 Fax : +18003255052 Emergency Phone # : (314) 776-6555

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms :  $(\pm)$ -1-Amino-2-propanol

(±)-Isopropanolamine

Formula : C<sub>3</sub>H<sub>9</sub>NO Molecular Weight : 75.11 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
1-Aminopropan-2-ol			
78-96-6	201-162-7	603-082-00-1	-

## 3. HAZARDS IDENTIFICATION

## **Emergency Overview**

#### **OSHA Hazards**

Combustible Liquid, Harmful by ingestion., Harmful by skin absorption., Corrosive

## **HMIS Classification**

Health Hazard: 3 Flammability: 2 Physical hazards: 0

**NFPA Rating** 

Health Hazard: 3 Fire: 2 Reactivity Hazard: 0

#### **Potential Health Effects**

**Inhalation** May be harmful if inhaled. Material is extremely destructive to the tissue of the

mucous membranes and upper respiratory tract.

**Skin** Harmful if absorbed through skin. Causes skin burns.

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**Eyes** Causes eye burns.

**Ingestion** Harmful if swallowed. Causes burns.

#### 4. FIRST AID MEASURES

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

#### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

## In case of eye contact

Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 5. FIRE-FIGHTING MEASURES

## Flammable properties

Flash point 71 °C (160 °F) - closed cup

Ignition temperature no data available

## Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### **6. ACCIDENTAL RELEASE MEASURES**

#### Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

#### **Environmental precautions**

Do not let product enter drains.

## Methods for cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

#### 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

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.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

## Personal protective equipment

## Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves.

## Eye protection

Tightly fitting safety goggles. Faceshield (8-inch minimum).

## Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

## Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### **Appearance**

Form clear, liquid Colour colourless

#### Safety data

pH no data available

Melting point -2 °C (28 °F) - lit.

Boiling point 160 °C (320 °F) - lit.

Flash point 71 °C (160 °F) - closed cup

Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available

Vapour pressure < 1 hPa (< 1 mmHg) at 20 °C (68 °F)

Density 0.973 g/mL at 25 °C (77 °F)

Water solubility no data available

Relative vapour 2.59

density - (Air = 1.0)

#### 10. STABILITY AND REACTIVITY

## Storage stability

Stable under recommended storage conditions.

#### Materials to avoid

Strong oxidizing agents

## **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

#### 11. TOXICOLOGICAL INFORMATION

## **Acute toxicity**

LD50 Oral - rat - 1,715 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity). Diarrhoea Nutritional and Gross Metabolic:Changes in:Body temperature decrease.

LD50 Dermal - rabbit - 1,573 mg/kg

#### Irritation and corrosion

Skin - rabbit - Mild skin irritation - 24 h

Eyes - rabbit - Severe eye irritation - 24 h

#### Sensitisation

no data available

#### Chronic exposure

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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as

a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as

a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as

a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity - rat - Unreported

Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea).

#### Signs and Symptoms of Exposure

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

## **Potential Health Effects**

**Inhalation** May be harmful if inhaled. Material is extremely destructive to the tissue of the

mucous membranes and upper respiratory tract.

**Skin** Harmful if absorbed through skin. Causes skin burns.

**Eyes** Causes eye burns.

**Ingestion** Harmful if swallowed. Causes burns.

# Additional Information RTECS: UA5775000

#### 12. ECOLOGICAL INFORMATION

#### Elimination information (persistence and degradability)

no data available

#### **Ecotoxicity effects**

Toxicity to fish LC50 - Carassius auratus (goldfish) - 210 mg/l - 96 h

## Further information on ecology

no data available

#### 13. DISPOSAL CONSIDERATIONS

#### Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

#### Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

DOT (US)

UN-Number: 2735 Class: 8 Packing group: II Proper shipping name: Amines, liquid, corrosive, n.o.s.

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG** 

UN-Number: 2735 Class: 8 Packing group: II EMS-No: F-A, S-B

Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S.

Marine pollutant: No

**IATA** 

UN-Number: 2735 Class: 8 Packing group: II

Proper shipping name: Amines, liquid, corrosive n.o.s.

## 15. REGULATORY INFORMATION

#### **OSHA Hazards**

Combustible Liquid, Harmful by ingestion., Harmful by skin absorption., Corrosive

#### **DSL Status**

All components of this product are on the Canadian DSL list.

#### **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

## **Massachusetts Right To Know Components**

1-Aminopropan-2-ol	CAS-No. 78-96-6	Revision Date 1991-07-01
Pennsylvania Right To Know Components		
·	CAS-No.	<b>Revision Date</b>
1-Aminopropan-2-ol	78-96-6	1991-07-01
New Jersey Right To Know Components		
, -	CAS-No.	Revision Date
1-Aminopropan-2-ol	78-96-6	1991-07-01

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## California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

## **16. OTHER INFORMATION**

## **Further information**

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