Safety Data Sheet

Acid Alcohol 1%

Revision Date: 08/22/19

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Trade name: Acid Alcohol 1%
Product code(s): 400681

1.2 Relevant identified uses

Laboratory Reagent

Supplier:

EDM 3, LLC
3611 St Johns Bluff Road, Suite 1
Jacksonville, FL 32224
800-638-2625
Monday-Friday: 8:30 -5:00 PM

Synonym: None.
Material uses: Laboratory Reagent.
Validation date: 08/10/2022
In case of emergency: INFOTRAC 800-535-5053 (Domestic within the USA and Canada)
Or 1-352-323-3599 (International callers may call collect),
24 Hours/Day: 7 Days/Week

2. HAZARDS IDENTIFICATION

Emergency Overview:

GHS Label Elements: Pictogram

Signal Word: **Danger!**

Hazard statement(s):

H225: Highly flammable liquid vapour
H302: Harmful if swallowed
H315: Causes skin irritation
H319: Causes serious eye irritation
H335: May cause respiratory irritation
H370: Causes damage to organs

Precautionary statement(s):

P210: Keep away from heat/sparks/open flames. No smoking
P233: Keep container tightly closed
P242: Use only non-spark tools
P264: Wash skin thoroughly after handling

NFPA Rating	HMIS Classification
Health hazard: 2	Health hazard: 2
Fire: 3	Flammability: 3
Reactivity Hazard: 0	Physical hazards: 0

Potential Health Effects : Inhalation – May cause respiratory tract irritation.
Skin - May cause skin irritation.
Eyes – May cause eye irritation.
Ingestion – Potentially toxic if swallowed in large quantities.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS number	% by volume
Ethanol	64-17-5	~63
Methanol	67-56-1	<3
Isopropanol	67-63-0	~4
Hydrochloric Acid	7647-01-0	~1
Water	7732-18-5	balance

4. FIRST AID MEASURES

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: *Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.*

First-aid measures after skin contact: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media: Do not use a heavy water stream

5.2 Special hazards arising from the substance or mixture

No additional information available

5.3 Advice for firefighters

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water form entering environment. Do not enter fire area without proper protective equipment, including respiratory protection.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment: Gloves. Safety glasses. Combined gas/dust mask with filter type B/P3.
Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mist, vapors, spray. Obtain special instructions before use. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood.
Hygiene measures: Wash exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Comply with applicable regulations.
Storage conditions: Keep container closed when not in use. Protect from sunlight. Store in a well-ventilated place.
Incompatible products: Strong oxidizers. Strong reducing agents. Strong bases.
Incompatible materials: Sources of ignition. Direct sunlight

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Consult local authorities for acceptable exposure limits.

Component	Source	Type	Value	Note
Methanol	ACGIH	TWA	200 ppm	
	ACGIH	STEL	250 ppm	
	NIOSH	TWA	260 mg/m3, 200 ppm	
	OSHA	TWA	260 mg/m3, 200 ppm	
Ethanol	OSHA	TWA	1900 mg/m3	
	OSHA	ppm	1000 ppm	
Isopropanol	ACGIH	TWA	200 ppm	
	ACGIH	STEL	400 ppm	
	NIOSH	TWA	980 mg/m3, 400 ppm	
	OSHA	TWA	980 mg/m3, 400 ppm	
Hydrochloric Acid	ACGIH	Ceiling	2.98 mg/3, 2 ppm	
	OSHA	PEL	7 mg/m3, 5 ppm	
	IDLH	US	50 ppm	

Personal protective equipment: Safety glasses. Gloves. Protective clothing. High gas/vapor concentration: gas mask with filter type B.
Hand protection: Wear protective gloves.

Eye protection: Chemical goggles or face shield.
Skin and body protection: Wear suitable protective clothing.
Respiratory protection: Wear appropriate mask. Gas mask with filter type B.
Other information: Do not eat, drink or smoke during use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid.
Flash Point: Closed cup: 13°C
pH:NA
Melting/freezing point: -115°C
Vapor pressure: 59 hPa
Odor threshold: NA
VOC: 100%

Color: Clear, colorless
Odor: Pungent
Boiling/condensation point: 78°C
Relative density: 0.79 g/ml at 25°C
Vapor density: NA
Evaporation rate: NA
Solubility: Soluble in the following materials: water

Explosive limits: 3.3-19.0 vol %

10. STABILITY AND REACTIVITY

10.1. Reactivity
Reacts violently with many compounds
10.2. Chemical stability
Hygroscopic
10.3. Possibility of hazardous reactions
Not established
10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperature. Open flame
10.5. Incompatible materials
Strong acids. Strong bases. Strong oxidizers
10.6. Hazardous decomposition products
Carbon monoxide. Carbon dioxide. May release flammable gases.

11. TOXICOLOGICAL INFORMATION

Methanol

LD50 oral rat	1187-2,769 mg/kg
LC50 inhalation rat (mg/l)	128.2 mg/l (4hr)
LC50 inhalation rat (mg/l)	87.6 mg/l (6hr)
LD50 Dermal rabbit	17100 mg/kg

Ethanol

LD50 oral rat	10740 mg/kg bodyweight
LD50 dermal rabbit	>16000 mg/kg

Isopropanol

LD50 dermal rabbit	12870 mg/kg
LC50 inhalation rat	73 mg/l/4hr
ATE oral	5045 mg/kg body weight

Hydrochloric Acid (7647-01-0)
LD50 oral rat 700 mg/kg
LD50 dermal rabbit 5010 mg/kg
ATE US oral 700 mg/kg body weight
ATE US dermal 5010 mg/kg body weight

Skin corrosion/irritation: Not classified

Serious eye damage/irritation: No irritating effect
Respiratory or skin sensitization: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not Classified

12. ECOLOGICAL INFORMATION

Toxicity

Methanol		
	LC50 fish1	15400 mg/l
	EC50 Daphnia1	>10000 mg/l
	LC502	10800 mg/l
Ethanol		
	LC50 fish1	14200 mg/l
	EC50 Daphnia1	9300 mg/l
	LC50 fish2	13000 mg/l/96h
Isopropanol		
	LC50 fish2	9640 mg/l
	EC50 Daphnia2	13299 mg/l
Hydrochloric Acid		
	LC50 fish 1	282 mg/l/96h
	EC50 Daphnia 1	<56 mg/l/72h

Persistence and degradability

Methanol		
	BOD	0.6-1.12 gO2/g
	COD	1.42 gO2/g
	ThOD	1.5 gO2/g
Ethanol		
	BOD	0.8-0.967 gO2/g
	COD	1.70 gO2/g
	ThOD	2.10 gO2/g
Isopropanol		
	BOD	1.19 gO2/g
	COD	2.23 gO2/g
	ThOD	2.4 gO2/g

Bioaccumulative Potential

Methanol		
	Log Pow	-0.77
	BCF fish	<10
Ethanol		
	Log Pow	-0.31

Mobility in soil

Methanol	Surface tension	0.023 N/m
Ethanol	Surface tension	0.022 N/m
Isopropanol	Surface tension	0.021 N/m

13. DISPOSAL CONSIDERATIONS

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with

applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT (US)
UN number: 1170
Class: 3
Packing Group: II
Proper Shipping name: Ethanol Solution
Reportable Quantity: 5000lb

IMDG/IATA
UN number: 1170
Class: 3 (6.1)
Packing Group: II
Proper Shipping name: Ethanol

15. REGULATORY INFORMATION

15.1 US Federal regulations

Methanol
RQ 5000 lb
SARA Section 311/312 Hazardous Classes: Immediate health hazard, fire hazard

Ethanol
SARA Section 311/312 Hazardous Classes: Fire hazard, Acute health hazard, chronic health hazard

Hydrochloric Acid (7647-01-0)
Listed on the US TSCA inventory. Not subject to reporting requirements of the United States SARA Section 311/312.
Immediate (acute) health hazard
RQ 5000lb

15.2 International regulations

Methanol
WHMIS Classification: Class B Division 2-Flammable Liquid, Class D Division 2 Subdivision A- Very toxic material causing other toxic effects, Class D Division 2 subdivision B- Toxic material causing other toxic effects

Ethanol
WHMIS Classification: Class B Division 2-Flammable Liquid, Class D Division 2 Subdivision A- Very toxic material causing other toxic effects, Class D Division 2 subdivision B- Toxic material causing other toxic effects

Isopropanol
WHMIS Classification: Class B Division 2-Flammable Liquid, Class D Division 2 Subdivision A- Very toxic material causing other toxic effects

15.3 California Proposition 65

 **WARNING:** This product can expose you to chemicals including Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

16. OTHER INFORMATION

National Fire Protection Association (U.S.A.)

Notice to reader

EDM3 believes this information was obtained from reliable sources, however, the information is provided without any warranty expressed or implied regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and knowledge and for this reason EDM3 does not assume responsibility and expressly disclaims liability for any damages. If the product is used as a component in another product, the MSDS information may not be applicable. The information provided is correct to the best of our knowledge at the date of the MSDS publication.