SAFETY DATA SHEET

According to Safe Work Australia

Printing date 02.11.2015 Revision: 16.04.2018

1 . IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Name: ACID ALCOHOL 0.25% - 3%

Other Means of Identification: Mixture

Product Code:
ACDL-500, ACDL-1L, ACDL-2.5L, ACDL-5L, ACDL.25-5L, ACDL3-500, ACDL3-1L, ACDL3-2.5L, ACDL3-5L

Recommended Use of the Chemical and Restriction on Use:
Used in hospital and pathology laboratories only

Details of Manufacturer or Importer:
Amber Scientific Pty Ltd
Unit 2, 9 Elmsfield Road
Midvale WA 6056

Phone Number: 61 8 9250 7782

Emergency telephone number: 61 8 9250 7782

2 . HAZARDS IDENTIFICATION

Hazardous Nature:
Not classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).


flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Signal Word Danger

Hazard Statements
H225 Highly flammable liquid and vapour.

Precautionary Statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P240	Ground/bond container and receiving equipment.
P233	Keep container tightly closed.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P370+P378	In case of fire: Use for extinction: CO2, powder or water spray.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national regulations.

3 . COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Characterization: Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:			
64-17-5	Ethanol	Flam. Liq. 2, H225	70%

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7647-01-0	Hydrochloric acid	Skin Corr. 1B, H314; STOT SE 3, H335	0.25 - 3%

4 . FIRST AID MEASURES

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:
In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms persist.

Eye Contact:
In case of eye contact, hold eyelids open and rinse with water for at least 15 minutes. Seek immediate medical attention.

Ingestion:
If swallowed, do not induce vomiting. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:
Inhalation: May cause respiratory irritation leading to headache, dizziness and confusion.
Skin Contact: May cause skin irritation, itchiness and redness.
Eye Contact: May cause eye irritation, stinging, tearing and blurred vision.
Ingestion: May cause irritation of mouth, throat and stomach, mucous build up and stomach pain.

5 . FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Foam, dry chemical or carbon dioxide.

Specific Hazards Arising from the Chemical:
Hazardous combustion products include oxides of carbon.
Product is highly flammable. Vapours may travel considerable distances to a source of ignition where they can ignite, flashback, or explode.
Closed containers may explode when exposed to extreme heat. Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

Special Protective Equipment and Precautions for Fire Fighters:
When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 . ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:
Wear appropriate respiratory protection and protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

Environmental Precautions:
In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:
Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Do not use sawdust. Collect the spilled material and place into a suitable container for disposal. Blanket the spill with foam or use water spray to disperse vapours. Use only non-sparking tools.

7 . HANDLING AND STORAGE

Precautions for Safe Handling:
Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

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Take precautionary measures against static discharge. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:
Store in a cool, dry and well ventilated area out of direct sunlight. Keep in original container tightly closed when not in use. Protect from heat, sparks, open flames and other sources of ignition. Keep away from strong oxidising agents, acids, alkalies, amines and alcohols.

8 . EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:	
64-17-5 Ethanol	
NES	TWA: 1880 mg/m³, 1000 ppm
7647-01-0 Hydrochloric acid	
NES	Peak limitation: 7.5 mg/m³, 5 ppm

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour below occupational exposure standards.

Respiratory Protection:
When vapours approach the exposure standards then the use of a half-face organic vapour respirator with dust/mist filter is recommended.
When vapours exceed the exposure standards, the use of an positive pressure demand self-contained or airline breathing apparatus is recommended. Filter capacity and respirator type depends on exposure levels.
If entering spaces where the airborne concentration of a contaminant is unknown then the use of a self-contained breathing apparatus (SCBA) with positive pressure air supply is recommended.
See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:
PVC or rubber gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information.
When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.
Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:
Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 . PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Form:	Liquid
Colour:	Straw/Yellow
Odour:	No information available
Odour Threshold:	No information available
pH-Value:	No information available
Melting point/Melting range:	-117 °C
Initial Boiling Point/Boiling Range:	78 °C
Flash Point:	12 °C
Flammability:	Highly flammable.

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Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	2.8 Vol %
Upper:	18.2 Vol %
Vapour Pressure at 20 °C:	59 hPa
Relative Density:	No information available
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Soluble in water

10 . STABILITY AND REACTIVITY

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.

Conditions to Avoid: Heat, sparks, open flames and other sources of ignition.

Incompatible Materials: Oxidising agents, acids, alkalies, amines and alcohols.

Hazardous Decomposition Products: Oxides of carbon.

11 . TOXICOLOGICAL INFORMATION

Toxicity:

LD_{50}/LC_{50} Values Relevant for Classification:		
64-17-5 Ethanol		
Oral	LD_{50}	7060 mg/kg (rat)
Inhalation	LC_{50}/4 h	20000 mg/l (rat)
7647-01-0 Hydrochloric acid		
Oral	LD_{50}	900 mg/kg (rabbit)

Acute Health Effects
Inhalation: May cause respiratory irritation leading to headache, dizziness and confusion.
Skin: May cause skin irritation, itchiness and redness.
Eye: May cause eye irritation, stinging, tearing and blurred vision.
Ingestion: May cause irritation of mouth, throat and stomach, mucous build up and stomach pain.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.

Serious Eye Damage / Irritation: Based on classification principles, the classification criteria are not met.

Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity:
Hydrochloric acid is classified by IARC as Group 3 - Not classifiable as to its carcinogenicity to humans.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Single Exposure:
Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:
Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

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Chronic Health Effects: No information available

Existing Conditions Aggravated by Exposure: No information available

12 . ECOLOGICAL INFORMATION

Ecotoxicity: May cause long term adverse effects in the aquatic environment.

Aquatic toxicity: No information available

Persistence and Degradability: No information available

Bioaccumulative Potential: No information available

Mobility in Soil: No information available

13 . DISPOSAL CONSIDERATIONS

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:
Please consult your state Land Waste Management Authority for more information.

14 . TRANSPORT INFORMATION

UN Number	
ADG, IMDG, IATA	1170
Proper Shipping Name	
ADG, IMDG	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
IATA	ETHANOL SOLUTION
Dangerous Goods Class	
ADG Class:	3 Flammable liquids.
Packing Group:	
ADG, IMDG, IATA	II
Marine pollutant:	No
EMS Number:	F-E,S-D
Hazchem Code:	.2YE
Special Provisions:	144
Limited Quantities:	1 L
Packagings & IBCs - Packing Instruction:	P001, IBC02
Packagings & IBCs - Special Packing Provisions:	No information available
Portable Tanks & Bulk Containers - Instructions:	T4
Portable Tanks & Bulk Containers - Special Provisions:	TP1

15 . REGULATORY INFORMATION

Australian Inventory of Chemical Substances:	
64-17-5	Ethanol
7647-01-0	Hydrochloric acid

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7732-18-5	Water

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:
Poisons Schedule: 5

16 . OTHER INFORMATION

Date of Preparation or Last Revision: 02.11.2015

Prepared by: MSDS.COM.AU Pty Ltd www.msds.com.au

Abbreviations and acronyms:
ADG: Australian Dangerous Goods
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC_{50}: Lethal concentration, 50 percent
LD_{50}: Lethal dose, 50 percent
IARC: International Agency for Research on Cancer
STEL: Short Term Exposure Limit
TWA: Time Weighted Average
NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Disclaimer
This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - December 2011”
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