Safety Data Sheet acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: August 29, 2018

1 Identification

Revision: August 29, 2018

· Product id	entifier
	e: Acid Alcohol
· Product cod	de: AA5580SS
	ded use and restriction on use
	ded use: Laboratory chemicals s on use: No relevant information available.
· Details of 1 · Manufactur	the supplier of the Safety Data Sheet
	x Scientific, Inc.
860 Gitts Ru	in Road
Hanover, PA	
Phone: (717 Toll-Free: (8	<i>)</i> 632-1291 66)632-1291
	hoenixsci.com
Emergency	telephone number:
ChemTel Inc	C.
	24 (North America)
+1 (013)240	-0585 (International)
2 Hazard(s)	identification
· Classificat	tion of the substance or mixture
Flam. Liq. 2	H225 Highly flammable liquid and vapor.
Met. Corr.1	H290 May be corrosive to metals.
Skin Irrit. 2	H315 Causes skin irritation.
Eye Dam. 1	H318 Causes serious eye damage.
Label elem	nents
· GHS label e	
	is classified and labeled according to the Globally Harmonized System (GHS).
· Hazard pict	ograms:
	The second se
GHS02 GHS	305
· Signal word	d' Denger
· Hazard stat	
H225 Highly	flammable liquid and vapor.
	e corrosive to metals.
	es skin irritation.
	es serious eye damage. ary statements:
P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.
P233	Keep container tightly closed.

- Keep container tightly closed. Keep only in original container. P233
- P234
- Ground/bond container and receiving equipment. P240
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.

(Cont'd. on page 2)

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: August 29, 2018

Revision: August 29, 2018

Trade name: Acid Alcohol

	(Cont'd. of page 1)
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection.
P303+P361+P353	If on skin (or hair): 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.
P310	Immediately call a poison center/doctor.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use for extinction: CO2, powder or water spray.
P390	Absorb spillage to prevent material damage.
P403+P235	Store in a well-ventilated place. Keep cool.
P406	Store in corrosive resistant container with a resistant inner liner.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
Other hazards	here are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Components:

64-17-5 Ethanol		>90%
-	 Flam. Liq. 2, H225 Eye Irrit. 2A, H319 	
	hydrochloric acid	<10%
-	Met. Corr.1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318 Acute Tox. 4, H302; STOT SE 3, H335	

· Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

[•] Description of first aid measures

· After inhalation:

Supply fresh air; consult doctor in case of complaints.

Provide oxygen treatment if affected person has difficulty breathing.

After skin contact:

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation continues, consult a doctor.

Seek immediate medical help for blistering or open wounds.

· After eye contact:

Protect unharmed eye.

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. Then consult a doctor.

(Cont'd. on page 3)

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: August 29, 2018

Trade name: Acid Alcohol

Revision: August 29, 2018

(Cont'd. of page 2)

• After swallowing: Rinse out mouth and then drink plenty of water. Do not induce vomiting; immediately call for medical help. Most important symptoms and effects, both acute and delayed: Irritant to skin and mucous membranes. Danger of severe eye injury. Breathing difficulty Couahina Gastric or intestinal disorders when ingested. Nausea in case of ingestion. Dizziness Acidosis Disorientation · Danger: Causes serious eye damage. Indication of any immediate medical attention and special treatment needed: No relevant information available.

5 Fire-fighting measures

- [·] Extinguishing media
- Suitable extinguishing agents: Foam
 Alcohol resistant foam
 Water fog / haze
 Carbon dioxide
 Gaseous extinguishing agents
 Fire-extinguishing powder
 For safety reasons unsuitable extinguishing agents: Water stream.
- · Special hazards arising from the substance or mixture

Highly flammable liquid and vapor.

During heating or in case of fire poisonous gases are produced.

- [•] Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

- Wear fully protective suit.
- [•] Additional information:

Eliminate all ignition sources if safe to do so.

Use large quantities of foam as it is partially destroyed by the product.

Cool endangered receptacles with water in flooding quantities.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Keep away from ignition sources.

Protect from heat.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

(Cont'd. on page 4)

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: August 29, 2018

Trade name: Acid Alcohol

Revision: August 29, 2018

(Cont'd. of page 3)

Environmental precautions

Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

Methods and material for containment and cleaning up

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders). Send for recovery or disposal in suitable receptacles.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling

· Precautions for safe handling: Prevent formation of aerosols. Avoid splashes or spray in enclosed areas. Use only in well ventilated areas. Information about protection against explosions and fires: Highly flammable liquid and vapor. Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Flammable gas-air mixtures may be formed in empty containers/receptacles.

Conditions for safe storage, including any incompatibilities

· Requirements to be met by storerooms and receptacles:

Store in cool, dry conditions in well sealed receptacles.

Store only in the original receptacle.

Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from metals.

Do not store together with alkalis (caustic solutions).

Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

· Control parameters

Components with limit values that require monitoring at the workplace: 64-17-5 Ethanol	
REL (USA)	Long-term value: 1900 mg/m³, 1000 ppm
TLV (USA)	Short-term value: 1880 mg/m³, 1000 ppm
EL (Canada)	Short-term value: 1000 ppm
EV (Canada)	Long-term value: 1,900 mg/m³, 1,000 ppm
LMPE (Mexico)	Long-term value: 1000 ppm
	A3
	(Cont'd. on page 5)

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: August 29, 2018

Revision: August 29, 2018

Trade name: Acid Alcohol

(Cont'd. of page 4)

7647-01-0 hydrochloric acid		
PEL (USA)	Ceiling limit value: 7 mg/m³, 5 ppm	
REL (USA)	Ceiling limit value: 7 mg/m ³ , 5 ppm	
TLV (USA)	Ceiling limit value: 2.98 mg/m ³ , 2 ppm	
EL (Canada)	Coiling limit value: 2 ppm	

EL (Canada)	Celling limit value. 2 ppm

- EV (Canada) Ceiling limit value: 2 ppm
- LMPE (Mexico) Ceiling limit value: 2 ppm A4

• Exposure controls

· General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

- · Engineering controls: Provide adequate ventilation.
- · Breathing equipment: Suitable respiratory protective device recommended.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- · Body protection: Protective work clothing
- · Limitation and supervision of exposure into the environment No relevant information available.
- Risk management measures No relevant information available.

9 Physical and chemical properties		
Information on basic phy	vsical and chemical properties	
· Appearance:		
Form:	Liquid	
Color:	Clear	
· Odor:	Characteristic	
· Odor threshold:	Not determined.	
· pH-value:	Not determined.	
		(Cont'd. on page 6)

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: August 29, 2018

Revision: August 29, 2018

Trade name: Acid Alcohol

	(Cont'd. of page
 Melting point/Melting range: Boiling point/Boiling range: 	Not determined. 78 °C (172.4 °F)
· Flash point:	13 °C (55.4 °F)
· Flammability (solid, gaseous):	Not applicable.
· Auto-ignition temperature:	425 °C (797 °F)
· Decomposition temperature:	Not determined.
· Danger of explosion:	Product is not explosive. However, formation of explosive ai vapor mixtures are possible.
 Explosion limits Lower: Upper: Oxidizing properties: 	Not determined. Not determined. Not determined.
· Vapor pressure:	Not determined.
[·] Density: Relative density: Vapor density: Evaporation rate:	0.81 Not determined. Not determined.
 Solubility in / Miscibility with Water: 	Fully miscible.
· Partition coefficient (n-octanol/wat	er): Not determined.
 Viscosity Dynamic: Kinematic: Other information 	Not determined. Not determined. No relevant information available.

10 Stability and reactivity

· Reactivity: No relevant information available. · Chemical stability: Stable under normal temperatures and pressures. Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications. Possibility of hazardous reactions Reacts violently with oxidizing agents. Highly flammable liquid and vapor. Used empty containers may contain product gases which form explosive mixtures with air. Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized. Corrosive action on metals. Toxic fumes may be released if heated above the decomposition point. Conditions to avoid Keep ignition sources away - Do not smoke. Excessive heat. [·] Incompatible materials (Cont'd. on page 7)

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: August 29, 2018

Revision: August 29, 2018

Trade name: Acid Alcohol

(Cont'd. of page 6)

1

Metals. Oxidizers Alkalis **Hazardous decomposition products** Under fire conditions only: Chlorine compounds Carbon monoxide and carbon dioxide

11 Toxicological information

Information on toxicological effects

• Acute toxicity: Based on available data, the classification criteria are not met.

· LD/LC50 values that are relevant for classification:

64-17-5 Ethanol

Oral LD50 7,060 mg/kg (rat)

Inhalative LC50/4h 20,000 mg/l (rat)

Primary irritant effect:

· On the skin: Irritant to skin and mucous membranes.

· On the eye: Strong irritant with the danger of severe eye injury.

• Sensitization: Based on available data, the classification criteria are not met.

· IARC (International Agency for Research on Cancer):

64-17-5 Ethanol

• NTP (National Toxicology Program):

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

Probable route(s) of exposure:

Ingestion.

Inhalation.

Eye contact.

Skin contact.

• Germ cell mutagenicity: Based on available data, the classification criteria are not met.

· Carcinogenicity: Based on available data, the classification criteria are not met.

· Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

• STOT-repeated exposure: Based on available data, the classification criteria are not met.

• Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

[·] Toxicity

· Aquatic toxicity No relevant information available.

· Persistence and degradability No relevant information available.

• **Bioaccumulative potential:** No relevant information available.

· Mobility in soil: No relevant information available.

(Cont'd. on page 8)

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: August 29, 2018

Revision: August 29, 2018

Trade name: Acid Alcohol

(Cont'd. of page 7)

[•] Additional ecological information

· General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

- [•] Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

• Other adverse effects No relevant information available.

13 Disposal considerations

[•] Waste treatment methods

• Recommendation:

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

[·] Uncleaned packagings

· Recommendation: Disposal must be made according to official regulations.

· UN-Number	
· DOT, ADR, IMDG, IATA	UN2924
· UN proper shipping name	
DOT	Flammable liquid, corrosive, n.o.s. (Ethand Hydrochloric acid)
· ADR, IMDG	FLAMMABLE LIQUID, CORROSIVE, N.O. (ETHANOL, HYDROCHLORIC ACID)
·IATA	Flammable liquids, corrosive, n.o.s. (Ethand Hydrochloric acid)
[·] Transport hazard class(es)	
· DOT	
· Class	3
[.] Label	3, 8
· ADR	
	(Cont'd. on page

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: August 29, 2018

Revision: August 29, 2018

Trade name: Acid Alcohol

	(Cont'd. of page
Class	3 (FC)
Label	3+8
IMDG	
Class	3
Label	3/8
ΙΑΤΑ	
Class	3
Label	3 (8)
Packing group	
DOT, ADR, IMDG, IATA	ll
Environmental hazards	
Marine pollutant:	No
Special precautions for user	Warning: Flammable liquids
Danger code (Kemler):	338
EMS Number:	F-E,S-C
Segregation groups	Acids
Transport in bulk according to Annex	ll of
MARPOL73/78 and the IBC Code	Not applicable.

15 Regulatory information

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

· United States (USA)

· SARA

• Section 302 (extremely hazardous substances):

None of the ingredients are listed.

• Section 355 (extremely hazardous substances):

7647-01-0 hydrochloric acid

• Section 313 (Specific toxic chemical listings):

7647-01-0 hydrochloric acid

· TSCA (Toxic Substances Control Act)

All ingredients are listed.

· Proposition 65 (California)

(Cont'd. on page 10)

(Cont'd. of page 9)

1

Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: August 29, 2018

Trade name: Acid Alcohol

Revision: August 29, 2018

rade name: Acid Alcohol

· Chemicals known to cause cancer:

Ethanol - listing refers specifically to alcoholic beverage consumption and is not applicable for product. 64-17-5 Ethanol

· Chemicals known to cause developmental toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

Ethanol - listing refers specifically to alcoholic beverage consumption and is not applicable for product.

64-17-5 Ethanol

· EPA (Environmental Protection Agency):

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer):

64-17-5 Ethanol

Canadian Domestic Substances List (DSL) (Substances not listed.):

All ingredients are listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistant, Bio-accumulable, Toxic vPvB: very Persistent and very Bioaccumulative OSHA: Occupational Safety & Health Administration Flam. Liq. 2: Flammable liquids - Category 2 Met. Corr.1: Corrosive to metals - Category 1 Acute Tox. 4: Acute toxicity - Category 4 Skin Corr. 1B: Skin corrosion/irritation - Category 1B Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Dam. 1: Serious eye damage/eye irritation - Category 1 Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A STOT SE 3: Specific target organ toxicity (single exposure) - Category 3 Sources Website, European Chemicals Agency (echa.europa.eu) Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/ overview/home.do) Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org) Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6 Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5. Safety Data Sheets, Individual Manufacturers (Cont'd. on page 11)

Safety Data Sheet acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: August 29, 2018

Revision: August 29, 2018

Trade name: Acid Alcohol

(Cont'd. of page 10)

SDS Prepared by: ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtelinc.com