SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier
Trade name: Acetic Acid Glacial 99.8%

1.2 Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses: Industrial or Commercial Use only.
Uses advised against: All other uses.

1.3 Details of the supplier of the Safety Data Sheet
USA Lab Inc.
12400 Belden Ct., Livonia,
MI 48150,
USA

Hazard emergency contact: Chemtrec 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to OSHA Hazardous Communication Standard 29 CFR 1910.1200.
Flammable liquid, category 3
Skin corrosive, category 1A
Eye damage, category 1

2.2 Label elements
Labelling according to OSHA Hazardous Communication Standard 29 CFR 1910.1200:



Signal word: Danger

Hazard statements:
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

Precautionary statements:
P221 Take any precaution to avoid mixing with combustibles.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash hands thoroughly after handling.
P330 Rinse mouth.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

2.3 Other hazards
None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture meeting the criteria for classification in accordance with OSHA Hazardous Communication Standard 29 CFR 1910.1200.

Ingredients:

Name	CAS No.	GHS classification	% (w/v)
Acetic Acid	64-19-7	Flam. Liq. 3, H226 Skin Corr. 1B, H314	90 – 100

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Following inhalation: If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.

Following skin contact: After contact with skin, wash immediately with plenty of water. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

Following eye contact: In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye.

Following ingestion: Rinse mouth immediately and drink plenty of water. Call a physician immediately. If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

Protection of first aider: Not applicable.

4.2 Most important symptoms and effects

Symptoms: The known symptoms and effects are described in section 2.2 of this SDS.

Risks: Untreated symptoms may result in additional health risks.

4.3 Indication of any immediate medical and special treatment
The physician may contact the national poison center for advice.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, Carbon dioxide (CO2), Dry chemical.

Unsuitable extinguishing media: High volume water jet.

5.2 Specific hazards arising from mixture
No hazardous combustion products are known.

5.3 Advice for fire fighters

Special protective equipment for firefighters:
As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

5.4 Other information
No other information available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:
Use personal protective equipment. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

6.2 Environmental precautions:
Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up:
Neutralize with chalk, alkali solution or ammonia. Contain spillage, and then collect with non-combustible ab- sorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local
/ national regulations (see section 13).

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid formation of aerosol. Do not breathe vapours/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions: 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.

Incompatible materials: See section 10.

7.3 Specific end uses
See section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
64-19-7	Acetic acid	TWA	10 ppm	ACGIH
		STEL	15 ppm	ACGIH
		ST	15 ppm 37 mg/m3	NIOSH REL
		TWA	10 ppm 25 mg/m3	NIOSH REL
		TWA	10 ppm 25 mg/m3	OSHA Z-1
		TWA	10 ppm 25 mg/m3	OSHA P0

8.2 Exposure controls

Engineering controls:
None under normal use conditions. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective equipment:

Hand: Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

Body protection: Appropriate protective clothing should be worn to prevent skin contact.

Eye:	Eye wash bottle with pure water Tightly fitting safety goggles.
Respiratory:	No personal respiratory protective equipment normally required.
Other measures:	No statement available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid
Color:	Colorless
Odor:	Pungent
Odor threshold:	0,48 ppm
pH:	2.4
Melting point/range:	<-7 °C
Boiling point/range:	117 °C
Flash point:	39 °C
Evaporation rate:	0.97
Flammability:	No data available
Upper/lower flammability or explosive limits:	No data available
Vapor pressure:	No data available
Vapor density:	2.1 @ 20 - 25 °C
Relative Density:	1.0446 @ 25 °C
Solubility(ies):	602.9 g/l completely soluble @ 25 °C
Partition coefficient (n-octanol/water):	No data available
Auto-ignition temperature:	463 °C 1,013 hPa
Decomposition temperature:	No data available
Viscosity:	1.056 mPa.s @ 25 °C (77 °F)
Explosive properties:	No data available
Oxidizing properties:	No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
No dangerous reaction known under conditions of normal use.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Vapours may form explosive mixture with air.

10.4 Conditions to avoid
Keep away from heat, flame, sparks and other ignition sources. Exposure to sunlight. Freezing temperatures.

10.5 Incompatible materials
Alcohols; Amines; peroxides; halogens; Metals; Strong oxidizing agents; perchloric acid; chromium trioxide; sulphuric acid; Nitric acid; hydroxides; potassium permanganate; Chromic acid; Acetic anhydride; acetaldehyde.

10.6 Hazardous decomposition products
Hazardous combustion products: see section 5.

SECTION 11: TOXICOLOGICAL INFORMATION

General information:
This product does not contain known human carcinogens.

11.1 Information on toxicological effects

Acute Toxicity:
No statements available for any of the ingredients.

Skin corrosion/irritation:
Causes severe skin burns and eye damage.

Serious eye damage/irritation:
Causes serious eye damage.

Respiratory or skin sensitization:
No statements available for any of the ingredients.

Germ cell mutagenicity:
No statements available for any of the ingredients.

Carcinogenicity:
This product does not contain known human carcinogens.

Reproductive toxicity:
No statements available for any of the ingredients.

STOT – single exposure:
No statements available for any of the ingredients.

STOT – repeated exposure:
No statements available for any of the ingredients.

Aspiration hazard:
No statements available for any of the ingredients.

Likely route(s) of exposure:
Skin exposure and eye exposure are the most likely to occur. Accidental ingestion is also possible.

SECTION 12: ECOLOGICAL INFORMATION

General information:
No statements available for any of the ingredients

12.1 Toxicity
No statements available for any of the ingredients.

12.2 Persistence and degradability

Physical- and photochemical elimination:
No statements available for any of the ingredients.

Biodegradation:
No statements available for any of the ingredients.

12.3 Bioaccumulative potential
No statements available for any of the ingredients.

12.4 Mobility in soil

Known/Predicted environmental distribution:
No statements available for any of the ingredients.

Surface tension:
No statements available for any of the ingredients.

Adsorption/Desorption:
No statements available for any of the ingredients.

12.5 Results of PBT and vPvB assessment
This product does not contain components which are considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
No statements available for any of the ingredients.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product:
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Waste material:
Dispose according to Federal, State, Provincial and Local regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number
ADR/RID/IDMG/IATA: UN 2789

14.2 UN proper shipping name
ADR/RID/IDMG/IATA: Acetic acid, glacial

14.3 Transport hazard class(es)
ADR/RID/IDMG/IATA: 8

14.4 Packing group
ADR/RID/IDMG/IATA: II

14.5 Environmental hazards
ADR/RID/IDMG/IATA: Non-regulated

14.6 Special precautions for user
No statements available.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable, as product is not shipped in bulk.

SECTION 15: REGULATORY INFORMATION

International Inventories
TSCA: Complies
DSL: All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List.

US Federal Regulations
SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
Acute health hazard: Yes
Chronic Health Hazard: No
Fire hazard: Yes
Sudden release of pressure hazard: No
Reactive Hazard: No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Acetic acid	64-19-7	5000	5000

U.S. State Regulations
California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

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

Canada
WHMIS Hazard Class
Not determined.

SECTION 16: OTHER INFORMATION

Further information
The information presented in this Safety Data Sheet (SDS) is accurate to the best of our knowledge at the date of publication. The information given within the SDS is meant solely as a guide for safe handling, use, transportation, processing, storage, release and disposal. In no means can the information within the SDS be considered as a warranty or specification for quality.