

Safety Data Sheet

Acid Alcohol, 1% HCl in 70% Isopropyl Alcohol

Section 1 - Chemical Product and Company Identification

SDS Name: Acid Alcohol, 1% HCl in 70% Isopropyl Alcohol

Catalog Numbers: SO-1310

Company Identification: Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.
10 ELECTRONICS AVENUE
DANVERS, MA 01923

For information, call: 978-739-4883

Emergency Number: 800-424-9300

For CHEMTREC assistance, call: 800-424-9300

Section 2 - Hazards Identification

GHS Classifications

H225-Flammable Liquids: 2

H290-Corrosive to metals: 1

H303-Acute toxicity, oral: 5

H314-Skin corrosion/irritation: 1B

H318-Serious eye damage/eye irritation: 1

H335-Specific target organ toxicity, single exposure; Respiratory tract irritation: 3

H336-Specific target organ toxicity, single exposure; Narcotic effects: 3

H373-Specific target organ toxicity, repeated exposure: 2

Pictograms or Hazard symbols and Hazard Statement(s):



Signal Word: Danger

Hazard Statements:

H225-Highly flammable liquid and vapour

H290-May be corrosive to metals

H303-May be harmful if swallowed

H314-Causes severe skin burns and eye damage
 H318-Causes serious eye damage
 H335-May cause respiratory irritation
 H336-May cause drowsiness or dizziness
 H373-May cause damage to organs through prolonged or repeated exposure (target organs: kidney and liver)

Precautionary Statements:

P210-Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
 P233-Keep container tightly closed.
 P234-Keep only in original packaging.
 P240-Ground and bond container and receiving equipment.
 P241-Use explosion-proof electrical/ventilating/lighting/equipment.
 P242-Use non-sparking tools.
 P243-Take action to prevent static discharges.
 P260-Do not breathe dust/fume/gas/mist/vapours/spray.
 P261-Avoid breathing dust/fume/gas/mist/vapours/spray.
 P264-Wash thoroughly after handling.
 P271-Use only outdoors or in a well-ventilated area.
 P280-Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P312-If swallowed: Call a Poison Center or doctor/physician if you feel unwell.
 P301+P330+P331-If swallowed: Rinse mouth. Do NOT induce vomiting.
 P303+P361+P353-If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304+P340-If inhaled: Remove person to fresh air and keep comfortable for breathing.
 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 or doctor/physician.
 P312-Call a Poison Center or doctor/physician if you feel unwell.
 P314-Get medical advice/attention if you feel unwell.
 P363-Wash contaminated clothing before reuse.
 P370+P378-In case of fire: Use dry chemical, carbon dioxide, dry sand, water spray or alcohol-resistant foam to extinguish.
 P390-Absorb spillage to prevent material damage.
 P403+P233-Store in a well-ventilated place. Keep container tightly closed.
 P403+P235-Store in a well-ventilated place. Keep cool.
 P405-Store locked up.
 P406-Store in corrosive resistant/container with a resistant inner liner.
 P501-Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
67-63-0	Isopropyl Alcohol	70 v/v
7647-01-1	Hydrochloric Acid (36-38%)	1 v/v
7732-18-5	Water	Balance

Section 4 - First Aid Measures

Eye Exposure: Corrosive to naked eye. In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Remove contact lenses, if present and easy to do. Continue rinsing. May cause permanent eye damage or blindness. Seek immediate medical attention.

Dermal Exposure: Obtain immediate medical attention; corrosive to exposed skin. Causes severe skin burns. In case of skin contact, flush with copious amounts of water for at least 15 minutes. Take off immediately all contaminated clothing and shoes. Wash clothing and shoes before reuse.

Oral Exposure: If swallowed, seek immediate medical advice. Will cause severe burns to the mouth and severe and permanent damage to the digestive tract. Do not induce vomiting. Rinse mouth with water and, after rinsing, drink water.

Inhalation Exposure: If inhaled, remove to fresh air. Seek immediate medical attention. If not breathing, give artificial respiration. Inhalation of vapors may cause coughing, choking, inflammation of the nose, throat, and upper respiratory tract.

Section 5 - Fire Fighting Measures

General Information: Containers can build up pressure if exposed to heat and/or fire. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Highly flammable liquid and vapor. Corrosive liquid. Keep away from metals and other incompatible materials. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

Hazardous Combustion Products: Carbon oxides, peroxides, hydrogen chloride gas, hydrogen gas, chlorine fumes, irritating and toxic fumes and gases.

Flash Point: Not available

Auto ignition Temperature: Not available

Explosion Limits, Lower: Not available

Upper: Not available

NFPA Rating: (estimated) Health: 2; Flammability: 3; Instability: 0

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep away from heat. Eliminate all sources of ignition. Take precautionary measures against static discharge.

Methods for Cleaning up: Spilled material may be neutralized with alkaline material (soda ash, lime). Absorb with inert material such as sand, earth, or vermiculite. Do NOT absorb with combustible material such as saw dust or cellulosic material. Carefully sweep up and containerize for proper disposal. Use only non-sparking tools. Use explosion-proof equipment and take precautionary measures against static discharge. Do not release to the environment. Do not release to drains.

Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Store in a cool, dry, and well-ventilated area. Keep in a tightly closed, non-metal container. Use only non-sparking tools. Use explosion-proof electrical/ventilating/lighting/equipment. Use proper grounding procedures to avoid static electricity. Keep away from incompatible materials, including metals. Protect from heat. Vapors heavier than air may travel considerable distance and ignite or explode.

NOTE: Static discharge could act as an ignition source. This is a corrosive and flammable material.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Exposure Limits:

Chemical Name	ACGIH - TLV	NIOSH - IDLH	OSHA - Final PELs
Isopropyl Alcohol CAS#67-63-0	200 ppm TWA 400 ppm STEL	400 ppm TWA 980 mg/m ³ TWA 500 ppm STEL 1225 mg/m ³ STEL 2000 ppm IDLH	400 ppm TWA 980 mg/m ³ TWA
Hydrochloric Acid CAS#7647-01-0	2 ppm Ceiling	5 ppm Ceiling 7 mg/m ³ Ceiling 50 ppm IDLH	5 ppm Ceiling 7 mg/m ³ Ceiling

OSHA Vacated PELs: Isopropyl Alcohol: 400 ppm TWA; 980 mg/m³ TWA; 500 ppm STEL; 1225 mg/m³ STEL
Hydrochloric Acid: 5 ppm Ceiling; 7 mg/m³ Ceiling

Section 9 - Physical and Chemical Properties
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Physical State: Liquid

Appearance: Clear, colorless

Odor: Alcohol-like

Vapor Pressure: Not available

Odor Threshold: Not available

Vapor Density: Not available

pH: Approx. 1.2

Relative Density: Not available

Melting point/freezing point: Not available

Solubility: Miscible with water

Boiling Point: Not available

Flash Point: Not available

Evaporation Rate: Not available

Flammability (solid, gas): Not available

Partition coefficient: n-octanol/water: Not available

Auto-ignition Temperature: Not available

Decomposition Temperature: Not available

Viscosity: Not available

Specific Gravity/Density: Not available

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, ignition sources, excess heat, hot surfaces, open flames, and oxidizers. Direct sunlight.

Incompatibilities with Other Materials: Oxidizing agents, reducing agents, acids, halogens, halogenated compounds, acid anhydrides, aluminum, metals, bases, sodium hypochlorite, amines, fluorine, cyanides, alkalis, metal oxides, hydroxides, carbonates, sulfides, sulfites, permanganates, metal acetylides, and formaldehyde.

Hazardous Decomposition Products: Carbon oxides, peroxides, hydrogen chloride gas, hydrogen gas, chlorine fumes, irritating and toxic fumes and gases.

Section 11 - Toxicological Information

CAS#67-63-0 Isopropyl Alcohol: RTECS#: NT8050000

LD50 Oral: 5045 mg/kg (rat)
LD50 Oral: 3600 mg/kg (mouse)
LD50 Dermal: 12800 mg/kg (rat)
LD50 Inhalation: 72.6 mg/L 4h (rat)

Carcinogenicity: Isopropyl Alcohol CAS#67-63-0 is not listed by NTP, ACGIH, OSHA, or California Prop 65. Isopropyl Alcohol is listed by IARC (Group 3, Not classifiable as to its carcinogenicity to humans).

CAS#7647-01-0 Hydrochloric Acid: RTECS#: MW4025000

LD50 Oral: 238-277 mg/kg (rat)
LD50 Dermal: >5010 mg/kg (rabbit)
LC50 Inhalation: 1.68 mg/L 1h (rat)
Investigated as a tumorigen, mutagen, reproductive effector.

Carcinogenicity: Hydrochloric Acid CAS#7647-01-0 is not listed by NTP, ACGIH, OSHA, or California Prop 65. Hydrochloric Acid is listed by IARC (Group 3, Not classifiable as to its carcinogenicity to humans).

Information on the likely routes of exposure: Routes of entry anticipated: oral, dermal, inhalation, and eye.

Epidemiology: Not available.

Teratogenicity: Not available.

Reproductive Effects: Not available.

Developmental Effects: Not available.

Neurotoxicity: Not available.

Mutagenicity: Not available.

Specific Target Organ Toxicity, Single Exposure: Respiratory system and central nervous system.

Specific Target Organ Toxicity, Repeated Exposure: Kidney and liver.

Symptoms associated with exposure: May cause CNS depression. Prolonged or repeated exposure can cause headache, dizziness, tiredness, drowsiness, nausea, and vomiting. Narcotic effect. If ingested, causes severe burns of the mouth and throat, danger of perforation of the esophagus and stomach. If inhaled, mucosal irritations, cough, shortness of breath, damage to the respiratory tract. Causes serious eye damage, pain, watering, redness, risk of blindness. Corrosive. Skin contact may cause severe burns, redness, pain, deep ulcers, skin discoloration. Causes burns by all exposure routes. Repeated exposure may cause kidney and liver damage.

The toxicological properties of this material have not been thoroughly investigated.

Section 12 - Ecological Information

Ecotoxicity: Do not release to the environment. Do not release to drains.

CAS#67-63-0 Isopropyl Alcohol:

EC50, freshwater algae: >1000 mg/L 72h (desmodesmus subspicatus)(green algae)

EC50, freshwater algae: >1000 mg/L 96h (desmodesmus subspicatus)(green algae)

LC50, freshwater fish: 11130 mg/L 96h static (pimephales promelas)

LC50, freshwater fish: >1400000 µg/L 96h (lepomis macrochirus)

LC50, freshwater fish: 9640 mg/L 96h flow-through (pimephales promelas)

EC50, water flea: 13299 mg/L 48h (daphnia magna)

EC50, water flea: 9714 mg/L 24h

EC50, microtox: 35390 mg/L 5min (photobacterium phosphoreum)

CAS#7647-01-0 Hydrochloric Acid:

LC50, freshwater fish: 282 mg/L 96h (gambusia affinis)(mosquito fish)

LC50, freshwater fish: 862 mg/L (leuciscus idus)(golden orfe)

EC50, water flea: 56 mg/L 72h (daphnia magna)

Persistence and degradability: Not available.

Bio-accumulative potential: Not available.

Mobility: Will likely be mobile in the environment due to its volatility.

Section 13 - Disposal Considerations

DISPOSAL: Dispose of in accordance with all federal, state, and local regulations.

Section 14 - Transport Information

DOT

Proper shipping name: Flammable liquids, corrosive, N.O.S. (Isopropyl Alcohol & Hydrochloric Acid)

UN2924

PG II

Hazard class 3 (8)

Section 15 - Regulatory Information

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information

SDS Creation Date: 11-29-22

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Rowley Biochemical, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages, howsoever arising, even if Rowley Biochemical, Inc. has been advised of the possibility of such damages.