

Safety Data Sheet

ALDEHYDE FUCHSIN SOLUTION, pH 1.7

Section 1 - Chemical Product and Company Identification

SDS Name: Aldehyde Fuchsin Solution, pH 1.7

Catalog Numbers: E-326-1, E-327-2

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

H301-Acute toxicity, oral: 3

H315-Skin corrosion/irritation: 2

H318-Serious eye damage/eye irritation: 1

H350-Carcinogenicity: 1B

H370-Specific target organ toxicity, single exposure: 1

H372-Specific target organ toxicity, repeated exposure: 1

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
H301-Toxic if swallowed
H315-Causes skin irritation
H318-Causes serious eye damage
H350-May cause cancer
H370-Causes damage to organs (target organs: respiratory system, central nervous system, and optic nerve).
H372-Causes damage to organs through prolonged or repeated exposure (target organs: kidney, liver, and blood).

Precautionary Statements:

P201-Obtain special instructions before use.
P202-Do not handle until all safety precautions have been read and understood.
P210-Keep away from heat/sparks/open flames/hot surfaces.-No smoking.
P233-Keep container tightly closed.
P234-Keep only in original container.
P240-Ground/Bond container and receiving equipment.
P241-Use explosion-proof electrical/ventilating/lighting/equipment.
P242-Use only non-sparking tools.
P243-Take precautionary measures against static discharge.
P260-Do not breathe dust/fume/gas/mist/vapours/spray.
P264-Wash thoroughly after handling.
P270-Do not eat, drink, or smoke when using this product.
P280-Wear protective gloves/protective clothing/eye protection/face protection.
P281-Use personal protective equipment as required.
P301+P310-If swallowed: Immediately call a Poison Center or doctor/physician.
P302+P352-If on skin: Wash with plenty of soap and water.
P303+P361+P353-If on skin (or hair): Remove/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.
P307+P311-If exposed: Call a Poison Center or doctor/physician.
P308+P313-If exposed or concerned: Get medical advice/attention.
P310-Immediately call a Poison Center or doctor/physician.
P314-Get medical advice/attention if you feel unwell.
P330-Rinse mouth.
P332+P313-If skin irritation occurs: Get medical advice/attention.
P362-Take off contaminated clothing and wash before reuse.
P370+P378-In case of fire: Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam for extinction.
P390-Absorb spillage to prevent material damage.
P403+P235-Store in a well-ventilated place. Keep cool.
P405-Store locked up.
P406-Store in corrosive resistant container/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
64-17-5	Ethyl alcohol	65 v/v
67-56-1	Methyl alcohol	3 v/v
569-61-9	Pararosaniline HCl	0.5 w/v
123-63-7	Paraldehyde	1 v/v
7647-01-0	Hydrochloric Acid	1 v/v
1336-21-6	Ammonium Hydroxide, 28-30%	<0.5 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 eyelids with fingers. May cause permanent eye damage or blindness. Call a physician.

Dermal Exposure: Obtain medical attention: Corrosive to exposed skin. In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical attention.

Oral Exposure: If swallowed, seek immediate medical attention. Will cause severe burns to the mouth and severe and permanent damage to the digestive tract. Causes gastrointestinal burns and perforation of the digestive tract. Do NOT induce vomiting.

Inhalation Exposure: If inhaled, remove to fresh air. If not breathing, give artificial respiration. Inhalation of vapors may cause coughing choking, inflammation of the nose, throat, and upper respiratory tract. In severe cases, may cause pulmonary edema, circulatory failure, and death. Seek medical attention.

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. Flammable Liquid. 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, dry sand, 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, nitrogen oxides, hydrogen chloride gas, irritating and toxic fumes and gases.

Flash Point: Not available

Autoignition Temperature: Not available

Explosion Limits, Lower: Not available

Upper: Not available

NFPA Rating: (estimated) Health: 2; Flammability: 4; Instability: 0

NOTE: Static discharge could act as an ignition source.

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. Use only non-sparking tools. Keep away from heat. Eliminate all sources of ignition.

Methods for Cleaning up: Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. 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. Do not use with metal tools or equipment. Store in a cool, dry, well-ventilated area. Keep in a tightly closed and non-metal container. Keep away from incompatible materials. Protect from heat. Protect from light. Vapors heavier than air may travel considerable distance and ignite or explode.

NOTE: Static discharge could act as an ignition source.

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	NIOSH	OSHA - Final PELs
Ethanol CAS#64-17-5	1000 ppm STEL	1000 ppm TWA 1900 mg/m3 TWA 3300 ppm IDLH	1000 ppm TWA 1900 mg/m3 TWA
Methanol CAS#67-56-1	200 ppm TWA 250 ppm STEL	200 ppm TWA 260 mg/m3 TWA 250 ppm STEL 325 mg/m3 STEL 6000 ppm IDLH	200 ppm TWA 260 mg/m3 TWA 250 ppm STEL 325 mg/m3 STEL
Pararosaniline HCl CAS#569-61-9	Not listed	Not listed	Not listed
Paraldehyde CAS#123-63-7	Not listed	Not listed	Not listed
Hydrochloric Acid CAS#7647-01-0	2 ppm Ceiling	5 ppm Ceiling 7 mg/m3 Ceiling 50 ppm IDLH	5 ppm Ceiling 7 mg/m3 Ceiling
Ammonia	25 ppm TWA 35 ppm STEL	25 ppm TWA 18 mg/m3 TWA 35 ppm STEL 27 mg/m3 STEL 300 ppm IDLH	50 ppm TWA 35 mg/m3 TWA

OSHA Vacated PELs: Ethanol: 1000 ppm TWA; 1900 mg/m3 TWA
Methanol: 200 ppm TWA; 260 mg/m3 TWA; 250 ppm STEL; 325 mg/m3 STEL
Hydrochloric Acid: 5 ppm Ceiling; 7 mg/m3 Ceiling
Ammonia: 35 ppm STEL; 27 mg/m3 STEL

Section 9 - Physical and Chemical Properties
--

Physical State: Liquid

Appearance: Violet

Odor: Alcohol-like

Vapor Pressure: Not available

Odor Threshold: Not available

Vapor Density: Not available

pH: 1.65-1.75

Relative density: Not available

Melting point/freezing point: Not available

Solubility: Not available

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. Reacts violently with oxidizers: Risk of fire/explosion. **Note: Shelf life is 6 months.**

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Open flame. Incompatible materials, ignition sources, excess heat, and oxidizers.

Incompatibilities with Other Materials: Strong oxidizing agents, reducing agents, acids, most common metals, strong bases, alkali metals, aldehydes, metal oxides, amines, hydroxides, cyanides, sulfides, sulfites, formaldehyde, carbonates, ammonia, hydrazine, peroxides, sodium, acid anhydrides, calcium hypochlorite, chromyl chloride, nitrosyl perchlorate, bromine pentafluoride, perchloric acid, silver nitrate, mercuric nitrate, potassium-tert-butoxide, magnesium perchlorate, acid chlorides, platinum, uranium hexafluoride, silver oxide, iodine heptafluoride, acetyl bromide, disulfuryl difluoride, tetrachlorosilane + water, acetyl chloride, permanganic acid, ruthenium (VIII) oxide, uranyl perchlorate, potassium dioxide, permanganates, fluorine, metal acetylides, iodides, aluminum, lead, nickel, silver, zinc, copper, metal alloys, rubber and halogens.

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

Section 11 - Toxicological Information

CAS#64-17-5 Ethyl Alcohol: RTECS#: KQ6300000

LD50 Oral: 7060 mg/kg (rat)

LD50 Dermal: Not available

LC50 Inhalation: 20000 ppm (rat) 10h

Draize test, rabbit, eye: 500 mg Severe.

Draize test, rabbit, eye: 500 mg/24H Mild.

Draize test, rabbit, skin: 20 mg/24H Moderate.

Carcinogenicity: Ethyl Alcohol CAS#64-17-5 is listed by IARC (Group 1, Carcinogenic to Humans), NTP, and ACGIH (A3, Animal Carcinogen). Ethyl Alcohol is listed by California Prop. 65 as a developmental carcinogen (alcoholic beverages).

CAS#67-56-1 Methyl Alcohol: RTECS#: PC1400000

LD50 Oral: 6200 mg/kg (rat)

LD50 Dermal: 15800 mg/kg (rabbit)

LC50 Inhalation: 64000 ppm (rat) 4h

Carcinogenicity: Methyl Alcohol CAS#67-56-1 is not listed by IARC, NTP, ACGIH, or OSHA. Methyl Alcohol is listed by California Prop. 65 as a developmental carcinogen.

CAS#569-61-9 Pararosaniline HCl: RTECS#: CX9850000

LD50 Oral: 5000 mg/kg (rat)
LD50 Dermal: Not available
LC50 Inhalation: Not available

Carcinogenicity: Pararosaniline HCl CAS#569-61-9 is not listed by ACGIH or OSHA. Pararosaniline HCl is listed by IARC (Group 2B, Possibly Carcinogenic to Humans), NTP (Reasonably anticipated to be a human carcinogen), and California Prop 65. as a carcinogen.

CAS#123-63-7 Paraldehyde: RTECS#: YK0525000

LD50 Oral: 1530 mg/kg (rat)
LD50 Dermal: 14000 mg/kg (rabbit)
LC50 Inhalation: Not available

Carcinogenicity: Paraldehyde CAS#123-63-7 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop 65.

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 (rat) 1h

Carcinogenicity: Hydrochloric Acid CAS#123-63-7 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop 65.

CAS#1336-21-6 Ammonium Hydroxide:

LD50 Oral: 43 mg/kg 29% solution (human)
LD50 Dermal: Not available
LC50 Inhalation: Not available

Carcinogenicity: Ammonium Hydroxide CAS#1336-21-6 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop 65.

Epidemiology: Not available.

Teratogenicity: Not available.

Reproductive Effects: Not available.

Developmental Effects: Not available

Neurotoxicity: Not available.

Mutagenicity: Mutagenic effects have occurred in experimental animals and humans.

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

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

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. Toxic to aquatic life with long lasting effects.

CAS#64-17-5 Ethyl Alcohol:

EC50, freshwater algae: 275 mg/L (*chlorella vulgaris*) 72h
LC50, freshwater fish: 14200 mg/L (*pimephales promelas*)(fathead minnow) 96h
EC50, water flea: 9268 mg/L 48h, 10800 mg/L 24h
EC50, water flea: 10800 mg/L 24h
IC50, bacteria: >1000 mg/L 3h (activated sludge)
EC50, microtox: 34634 mg/L 30min (*photobacterium phosphoreum*)
EC50, microtox: 35470 mg/L 5min (*photobacterium phosphoreum*)

CAS#67-56-1 Methyl Alcohol:

LC50, freshwater fish: >10000 mg/L (*pimephales promelas*)(fathead minnow) 96h
EC50, water flea: >10000mg/L 24 h
ErC50, algae: 22000 mg/L 96h (*pseudokirchneriella subcapitata*)(green algae)
IC50, bacteria: >1000 mg/L 3h (activated sludge)
EC50, microtox: 39000 mg/L 25min
EC50, microtox: 40000 mg/L 15min
EC50, microtox: 43000 mg/L 5min

CAS#123-63-7 Paraldehyde:

LC50, freshwater fish: 1340 mg/L 96h flow-through (*oncorhynchus mykiss*)(rainbow trout)
EC50, water flea: 356 mg/L 48h static (*daphnia magna*)

CAS#7647-01-0 Hydrochloric Acid:

LC50, freshwater fish: 282 mg/L 96h (*gambusia affinis*)
EC50, water flea: 56 mg/L 72h (*daphnia magna*)

CAS#1336-21-6 Ammonium Hydroxide:

LC50, freshwater fish: 0.53 mg/L 96h
LC50, freshwater fish: 0.75-3.4 mg/L 96h
LC50, freshwater fish: 8.2 mg/L 96h
EC50, water flea: 0.66 mg/L 48h

Persistence and degradability: Not available.

Bio-accumulative potential: Not available.

Mobility: Will likely be mobile in the environment due to its water solubility and 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. (SD 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: 7-1-22

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.