

Safety Data Sheet

Aldehyde Fuchsin Solution

Section 1 - Chemical Product and Company Identification

SDS Name: Aldehyde Fuchsin Solution

Catalog Numbers: SO-282, A-120-3, F-378-1, G-470-1, G-454-3

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

65.5% of the mixture consists of ingredients of unknown acute dermal toxicity.

1.5% of the mixture consists of ingredients of unknown acute inhalation toxicity.

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, 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.
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.
P301+P310-If swallowed: Immediately call a Poison Center/doctor.
P302+P352-If on skin: Wash with plenty of soap and water.
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.
P308+P311-If exposed or concerned: Call a Poison Center/doctor.
P308+P313-If exposed or concerned: Get medical advice/attention.
P310-Immediately call a Poison Center/doctor.
P314-Get medical advice/attention if you feel unwell.
P330-Rinse mouth.
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 dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam to extinguish.
P390-Absorb spillage to prevent material damage.
P403+P235-Store in a well-ventilated place. Keep cool.
P405-Store locked up.
P406-Store in a corrosion 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
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
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. Get medical attention.

Oral Exposure: If swallowed, get 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. Get 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, hydrogen gas, chlorine fumes, formaldehyde, 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. Keep in a tightly closed and non-metal container. Store in a cool, dry, well-ventilated area. Do not use with metal tools or equipment. 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 - TLV	NIOSH - IDLH	OSHA - Final PELs
Ethyl Alcohol CAS#64-17-5	1000 ppm STEL	1000 ppm TWA 1900 mg/m ³ TWA 3300 ppm IDLH	1000 ppm TWA 1900 mg/m ³ TWA
Methyl Alcohol CAS#67-56-1	200 ppm TWA 250 ppm Skin STEL	200 ppm TWA 260 mg/m ³ TWA 250 ppm STEL 325 mg/m ³ STEL 6000 ppm IDLH	200 ppm TWA 260 mg/m ³ TWA
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/m ³ Ceiling 50 ppm IDLH	5 ppm Ceiling 7 mg/m ³ Ceiling

OSHA Vacated PELs: Ethyl Alcohol: 1000 ppm TWA; 1900 mg/m³ TWA
Methyl Alcohol: 200 ppm TWA; 260 mg/m³ TWA; 250 ppm STEL;
325 mg/m³ Skin STEL
Hydrochloric Acid: 5 ppm Ceiling; 7 mg/m³ Ceiling

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: Approx. 1.1 – 1.4

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

Autoignition 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, and rubber.

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

Section 11 - Toxicological Information

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

LD50 Oral: 10470 mg/kg (rat)

LD50 Dermal: Not available

LC50 Inhalation: 124.7 mg/L 4h (rat)

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

Skin: Repeated exposure may cause skin dryness or cracking.

Ethyl Alcohol overexposure may lead to headache, dizziness, tiredness, nausea, and vomiting.

Carcinogenicity: Ethyl Alcohol CAS#64-17-5 is not listed by OSHA. Ethyl Alcohol is listed by IARC (Group 1, Carcinogenic to Humans), NTP (Known Carcinogen), and ACGIH (A3, Animal Carcinogen). Ethyl Alcohol is listed by California Prop. 65 as a developmental carcinogen (alcoholic beverages only).

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

LD50 Oral: 100.1 mg/kg (expert judgement)

LD50 Dermal: 300.1 mg/kg (expert judgement)

LC50 Inhalation: 3.1 mg/L 4h vapor (expert judgement)

Investigated as a mutagen, reproductive effector.

Draize test, rabbit, eye: 100 mg/24h Moderate Irritant.

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

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 1h (rat)

Carcinogenicity: Hydrochloric Acid CAS#123-63-7 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: 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.

Symptoms associated with exposure: Prolonged or repeated exposure can defat the skin and lead to irritation, cracking, and/or dermatitis. Eye contact may result in corneal damage, blindness, pain, irritation, watering, redness, blurred or double vision. Causes damage to organs if in contact with skin, if inhaled or if swallowed. 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, and damage to the respiratory

tract. Corrosive. Skin contact may cause severe burns, redness, pain, deep ulcers, and skin discoloration. Causes burns by all exposure routes.

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:

LC50, freshwater fish: 14200 mg/L 96h (pimephales promelas)(fathead minnow)
EC50, freshwater algae: 275 mg/L 72h (chlorella vulgaris)
EC50, water flea: 9268 mg/L 48h
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: 15400 mg/L 96h flow-through (lepomis macrochirus)(bluegill)
LC50, freshwater fish: 19000 mg/L 96h (oncorhynchus mykiss)(rainbow trout)
EC50, water flea: 18260 mg/L 96h semi-static
ErC50, algae: 22000 mg/L 96h static (pseudokirchneriella subcapitata)(green algae)
IC50, bacteria: >1000 mg/L 3h static (activated sludge)

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)(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 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: 10/21/12

Revision #1: 12/10/14 RC

Revision #2: 9-12-19

Revision #3: 6-29-22

Revision #4: 1-27-25

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