Safety Data Sheet Gomori Aldehyde Fuchsin

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SECTION 1: Identification

GHS Product identifier

Product name	Gomori Aldehyde Fuchsin
Product number	AGAF
Brand	Australian Biostain

Recommended use of the chemical and restrictions on use

Laboratory and Analytical Reagent

Supplier's details

Name	ChemSupply Australia Pty Ltd
Address	38-50 Bedford Street 5013 Gillman South Australia Australia
Telephone	08 8440 2000
email	www.chemsupply.com.au

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

General hazard statement

Classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

- Carcinogenicity, Cat. 1B
- Serious eye damage/eye irritation, Cat. 2A
- Skin corrosion/irritation, Cat. 2
- Flammable liquids, Cat. 2
- Corrosive to metals, Cat. 1

GHS label elements, including precautionary statements

Pictograms

Signal word	**Danger**

Hazard statement(s)

H225	Highly flammable liquid and vapor
H290	May be corrosive to metals
H315	Causes skin irritation
H319	Causes serious eye irritation
H350	May cause cancer

Precautionary statement(s)

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.
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.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water/soap
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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+P313	IF exposed or concerned: Get medical advice/attention.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use agents recommended in Section 5 of SDS for extinction
P390	Absorb spillage to prevent material-damage.
P403+P235	Store in a well-ventilated place. Keep cool.
P406	Store in a corrosive resistant/… container with a resistant inner liner.
P501	Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

Mixtures

Other components either not classified as Hazardous under the GHS, or below cut-off concentrations to be classified as Hazardous.

Hazardous components

Component	CAS no.	Concentration
Ethanol (EC no.: 200-578-6; Index no.: 603-002-00-5)	**64-17-5**	**<= 65 % (weight)**
CLASSIFICATIONS: Flammable liquids, Cat. 2; Serious eye damage/eye irritation, Cat. 2A. HAZARDS: H225 - Highly flammable liquid and vapor; H319 - Causes serious eye irritation.		
Hydrochloric acid (EC no.: 231-595-7; Index no.: 017-002-01-X)	**7647-01-0**	**<= 2 % (weight)**
CLASSIFICATIONS: Corrosive to metals, Cat. 1; Skin corrosion/irritation, Cat. 1B; Serious eye damage/eye irritation, Cat. 1; Specific target organ toxicity following single exposure, Cat. 3. HAZARDS: H290 - May be corrosive to metals; H314 - Causes severe skin burns and eye damage; H318 - Causes serious eye damage; H335 - May cause respiratory irritation; H336 - May cause drowsiness or dizziness. [SCLs/M-factors/ATEs]: Skin Corr. 1B; H314: C ≥ 25 %; Skin Irrit. 2; H315: 10 % ≤ C < 25 %; Eye Irrit. 2; H319: 10 % ≤ C < 25 %; STOT SE 3; H335: C ≥ 10 %		
PARALDEHYDE (EC no.: 204-639-8; Index no.: 605-004-00-1)	**123-63-7**	**<= 1 % (weight)**

CLASSIFICATIONS: Flammable liquids, Cat. 3. HAZARDS: H226 - Flammable liquid and vapor.		
PARAROSANILINE HYDROCHLORIDE (EC no.: 209-321-2; Index no.: 611-031-00-X)	**569-61-9**	**<= 1 % (weight)**
CLASSIFICATIONS: Carcinogenicity, Cat. 1B. HAZARDS: H350 - May cause cancer [route].		

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	First Aid Facilities: Maintain eyewash fountain in work area.
If inhaled	If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.
In case of skin contact	Wash with plenty of water for at least 15 minutes. Call a poison center or doctor if irritation develops or persists. Take off contaminated clothing and wash it before reuse. Acute and delayed symptoms and effects: Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching.
In case of eye contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention/advice. Acute and delayed symptoms and effects: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.
If swallowed	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek medical advice.

Most important symptoms/effects, acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary
For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

SECTION 5: Fire-fighting measures

Suitable extinguishing media
Specific Methods: Small fire: Use dry chemical, CO2, water spray or foam.
Large fire: Use water spray, fog or foam.
If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out.

Specific hazards arising from the chemical

Ethanol: Carbon oxides

Hydrochloric acid: Hydrogen chloride gas

Special protective actions for fire-fighters
Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

Methods and materials for containment and cleaning up
Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

ELIMINATE all ignition sources (no smoking, flares, sparks or flames) within at least 25m - All equipment used when handling the product must be earthed. Do not touch or walk through spilled material. Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Absorb with earth, sand or other non-combustible material. Use clean, non-sparking tools to collect absorbed material and place it into loosely-covered metal or plastic containers for later disposal.

SECTION 7: Handling and storage

Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities
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.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 64-17-5
Ethanol
ACGIH (USA): (ST) 1000 ppm TLV® inhalation; AU/SWA (Australia): 1000 ppm; 1880 mg/m3 TWA inhalation;

CAS: 7647-01-0
Hydrochloric acid
ACGIH: 2 ppm (C) TLV® inhalation; AU/SWA (Australia): 5 Peak limitation ppm; 7.5 Peak limitation mg/m3 TWA inhalation;

Appropriate engineering controls
Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection
The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin protection
Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Hand Protection: Ensure hand protection complies with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body protection

Footwear: Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.

Body Protection: Clean clothing or protective clothing should be worn, preferably with and apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Respiratory protection
If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/ NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Clear
Color	Purple
Odor	Ethanolic
Odor threshold	No data available.
Melting point/freezing point	No data available.
Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	22C
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	Acidic
Kinematic viscosity	No data available.
Solubility	Miscible
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	No data available.
Evaporation rate	No data available.
Density and/or relative density	No data available.
Relative vapor density	No data available.
Particle characteristics	No data available.

Supplemental information regarding physical hazard classes
No data available.

Further safety characteristics (supplemental)
No data available.

SECTION 10: Stability and reactivity

Reactivity
Stable under normal conditions of storage and handling.

Risk of ignition. Vapours may form explosive mixtures with air

Chemical stability
Stable under recommended storage conditions.

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

Will corrode metals. Will produce toxic gases on contact with cyanides, sulphides etc.

Hazardous Polymerization: Will not occur.

Conditions to avoid
Avoid storing in direct sunlight and avoid extremes of temperature.

Heat, flames and sparks.

Incompatible materials

Ethanol: Alkali metals, Oxidizing agents, Peroxides

Hydrochloric acid: Bases, Amines, Alkali metals, Metals, permanganates, for example potassium permanganate, Fluorine, metal acetylides, hexalithium disilicide

Hazardous decomposition products
No data available.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Harmful if swallowed. Ingestion of this product will cause nausea, vomiting, abdominal pain, and chemical burns to the mouth, throat and stomach.

Skin corrosion/irritation
Causes skin irritation. May cause an allergic skin reaction. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

Serious eye damage/irritation
Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

Respiratory or skin sensitization
No data available.

Germ cell mutagenicity
No data available.

Carcinogenicity
Suspected of causing cancer. Classified as a suspected human carcinogen.

Reproductive toxicity
No data available.

Summary of evaluation of the CMR properties
No data available.

Specific target organ toxicity (STOT) - single exposure
No data available.

Specific target organ toxicity (STOT) - repeated exposure
No data available.

Aspiration hazard
No data available.

Additional information

PARAROSANILINE HYDROCHLORIDE: *TOXICITY:
typ. dose mode specie amount units other
LD50 orl mus 5000 mg/kg

*AQTX/TLM96: Not available

*SAX TOXICITY EVALUATION:
THR: An experimental carcinogen and tumorigen. Mildly toxic by ingestion.
Mutagenic data.

*CARCINOGENICITY:
Tumorigenic Data:
TDLo: orl-mus 364 mg/kg/2Y-C
TDLo: orl-rat 728 mg/kg/2Y-C
TDLo: scu-rat 1714 mg/kg/43W-I
Status: NTP Carcinogenesis Studies (Feed); Clear Evidence: Male and Female
Rat, Male and Female Mouse [015,620]
NTP Fifth Annual Report on Carcinogens, 1989; anticipated to be
carcinogen [015,610]

*MUTATION DATA: See RTECS printout for most current data
test lowest dose | test lowest dose
---------- ---------- | ---------- ----------
dnd-mam:lym 10 pph | mma-sat 100 ug/plate
dnr-esc 20 mg/L | otr-mus:fbr 8 ug/L
dns-ham:lvr 10 umol/L | otr-rat:emb 1400 ug/L
dns-rat:lvr 2200 ug/L |

*TERATOGENICITY: Not available

*STANDARDS, REGULATIONS & RECOMMENDATIONS:
OSHA: None
ACGIH: None
NIOSH Criteria Document: None
NFPA Hazard Rating: Health (H): None
Flammability (F): None
Reactivity (R): None

*OTHER TOXICITY DATA:
Status: EPA Genetox Program 1988, Positive: Cell transform.-RLV F344 rat embryo
EPA Genetox Program 1988, Positive: E coli polA without S9
EPA Genetox Program 1988, Positive/dose response: Cell transform.-BALB/

c-3T3
EPA Genetox Program 1988, Negative: Host-mediated assay; Histidine reversion-Ames test
EPA Genetox Program 1988, Negative: S cerevisiae-homozygosis
EPA Genetox Program 1988, Inconclusive: SHE-clonal assay
EPA Genetox Program 1988, Positive/limited: Carcinogenicity-mouse/rat
EPA TSCA Chemical Inventory, 1989
EPA TSCA Test Submission (TSCATS) Data Base, April 1990

Ethanol: Stomach - Irregularities - Based on Human Evidence

Hydrochloric acid: *TOXICITY:
typ. dose mode specie amount units other
LCLo ihl hmn 1300 ppm/30M
LCLo ihl hmn 3000 ppm/5M
LDLo unr man 81 mg/kg
LC50 ihl rat 3124 ppm/1H
LC50 ihl mus 1108 ppm/1H
LD50 ipr mus 1449 mg/kg
LD50 orl rbt 900 mg/kg
LCLo ihl rbt 4416 ppm/30M
LCLo ihl gpg 4416 ppm/30M
LCLo ihl mam 1000 mg/m3/2H

*AQTX/TLM96: Not available

*SAX TOXICITY EVALUATION:
THR: A highly corrosive irritant to the eyes, skin and mucous membranes. Mildly toxic by inhalation.

*CARCINOGENICITY: Not available

*MUTATION DATA: See RTECS printout for most current data
test lowest dose | test lowest dose
---------- ---------- | ---------- ----------
dnr-esc 25 ug/well | sln-dmg-ihl 100 ppm/24H
sln-dmd-orl 100 ppm | cyt-grh-par 20 mg
cyt-ham:lng 30 mmol/L |

*TERATOGENICITY: See RTECS printout for most current data
Reproductive Effects Data:
TCLo: ihl-rat 450 mg/m3/1H (1D pre)

*STANDARDS, REGULATIONS & RECOMMENDATIONS:
OSHA: Federal Register (1/19/89) and 29 CFR 1910.1000 Subpart Z
Transitional and Final Limits: PEL-Ceiling Limit 5 ppm [015,327,545,610]
ACGIH: TLV-Ceiling Limit 5 ppm [015,415,421,610]
NIOSH Criteria Document: None
NFPA Hazard Rating: Health (H): 3
Flammability (F): 0
Reactivity (R): 0
H3: Materials extremely hazardous to health but areas may be entered

with extreme care (see NFPA for details).
F0: Materials that will not burn (see NFPA for details).
R0: Materials which are normally stable even under fire exposure conditions and which are not reactive with water (see NFPA for details).

*OTHER TOXICITY DATA:
Skin and Eye Irritation Data:
eye-rbt 5 mg/30S rinse MLD
Review: Toxicology Review-3
Standards and Regulations: DOT-Hazard: Nonflammable gas; Label: Nonflammable gas
DOT-Hazard: Corrosive material; Label: Corrosive
DOT-IMO: Flammable gas; Label: Nonflammable gas, Corrosive
EPA Fifra 1988 Pesticide Subject to Registration or Re-registration
Status: EPA Genetox Program 1988, Negative: Cell transform.-SA7/SHE
EPA TSCA Chemical Inventory, 1989
EPA TSCA Section 8(e) Status Report 8EHQ-0578-0146
EPA TSCA Test Submission (TSCATS) Data Base, April 1990
NIOSH Analytical Methods: see Acids, Inorganic, 7903
IDLH value: 100 ppm [346,371]

PARALDEHYDE: *TOXICITY:
typ. dose mode specie amount unit other
LDlo unk man 1462 mg/kg
LD50 orl rat 1530 mg/kg
LClo ihl rat 2000 ppm/4H
LDlo ipr rat 2100 mg/kg
LDlo scu rat 1650 mg/kg
LDlo orl cat 3300 mg/kg
LD50 orl rbt 3304 mg/kg
LD50 skn rbt 14 gm/kg

*AQTX/TLM96: Not available

*SAX TOXICITY EVALUATION:
THR:Moderate via oral and Low via dermal routes. Psychotropic effects on humans. An experimental neoplastigen via dermal route.

*CARCINOGENICITY: Not available

*MUTAGENICITY: Mutation data: cyt-smc 50 mmol/tube

*TERATOGENICITY: Not available

*STANDARDS, REGULATIONS & RECOMMENDATIONS:
OSHA: None
ACGIH: None
NIOSH Criteria Document: None
NFPA Hazard Rating: Health (H): 2
Flammability (F): 3

Reactivity (R): 1
H2: Materials hazardous to health, but areas may be entered freely with full-faced mask self-contained breathing apparatus which provides eye protection (see NFPA for details).
F3: Materials which can be ignited under almost all normal temperature conditions (see NFPA for details).
R1: Materials which are normally stable but which may become unstable at elevated temperatures and pressures or which may react with water with some release of energy but not violently (see NFPA for details).

*OTHER TOXICITY DATA:
Skin and Eye Irritation Data:
skn-rbt 500 mg open MLD
eye-rbt 5 mg SEV
Review: Toxicology Review
Standards and Regulations: DOT-Flammable liquid; Label: Flammable liquid
Status: Reported in EPA TSCA Inventory, 1980
Meets criteria for proposed OSHA Medical Records Rule

SECTION 12: Ecological information

Toxicity
No data available.

Persistence and degradability
No data available.

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Results of PBT and vPvB assessment
No data available.

Endocrine disrupting properties
No data available.

Other adverse effects
No data available.

SECTION 13: Disposal considerations

Disposal methods

Product disposal
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Other disposal recommendations
Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)
UN Number: 2924
Class: 3,8
Packing Group: II
Proper Shipping Name: FLAMMABLE LIQUID, CORROSIVE, N.O.S.(Contains Ethanol, Hydrochloric Acid)
Marine pollutant: No

Hazchem emergency action code (EAC)
• 3WE

IMDG
UN Number: 2924
Class: 3,8
Packing Group: II
Proper Shipping Name: FLAMMABLE LIQUID, CORROSIVE, N.O.S.(Contains Ethanol, Hydrochloric Acid)
Marine pollutant: No

IATA
UN Number: 2924
Class: 3,8
Packing Group: II
Proper Shipping Name: FLAMMABLE LIQUID, CORROSIVE, N.O.S.(Contains Ethanol, Hydrochloric Acid)
Marine pollutant: No

SECTION 15: Regulatory information

SECTION 16: Other information

Further information/disclaimer
ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia
National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'
Safe Work Australia, 'National Code of Practice fot the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.
Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.
Safe Work Australia, Workplace Exposure Standards for Airbourne Contaminants, December 2019
Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au
IATA, Dangerous Goods Regulations (DGR)
IMO, International Maritime Dangerous Goods Code (IMDG)