

Safety Data Sheet **ACETO-ORCEIN STAIN**

SDS no. C10Z1SYA • Version 1.0 • Date of issue: 2025-12-06

SECTION 1: Identification

GHS Product identifier

Product name ACETO-ORCEIN STAIN

Product number AL025

Recommended use of the chemical and restrictions on use

Microscopy dye solution and laboratory reagent.

This product supplied by Chem-Supply is for education/research use only.

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

Dangerous goods of Class 8 (Corrosive) are incompatible in a placard load with any of the following:

Class 1, Class 4.3, Class 5, Class 6, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids, Class 7; and are incompatible with food and food packaging in any quantity.

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

- Serious eye damage/eye irritation, Cat. 1
- Skin corrosion/irritation, Cat. 1
- Flammable liquids, Cat. 3

GHS label elements, including precautionary statements

Pictograms

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Signal word

Danger

Hazard statement(s)

H226
H314

Flammable liquid and vapor
Causes severe skin burns and eye damage

Precautionary statement(s)

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.

P260

Do not breathe dust/fume/gas/mist/vapors/spray.

P264

Wash hands thoroughly after handling.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

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 [or 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/doctor/physician

P363

Wash contaminated clothing before reuse.

P370+P378

In case of fire: Use agents recommended in Section 5 of SDS for extinction

P403+P235

Store in a well-ventilated place. Keep cool.

P405

Store locked up.

P501

Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

Mixtures

Component	Identification	Weight %
Water	CAS no.: 7732-18-5 EC no.: 231-791-2	40 - <= 70 %
Acetic acid	CAS no.: 64-19-7 EC no.: 200-580-7 Index no.: 607-002-00-6	30 - <= 60 %
Orcein	CAS no.: 1400-62-0 EC no.: 215-750-6	<= 1 %

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice

First Aid Facilities: Maintain eyewash fountain in work area.

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If inhaled	If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Immediately medical attention is required.
In case of skin contact	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician
In case of eye contact	Immediately irrigate with copious quantity of water continuously. Eyelids to be held open. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek immediate medical assistance.
If swallowed	Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

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

Small fire: Use dry chemical, CO₂ or water spray.

Large fire: Use dry chemical, CO₂, foam or water spray - Do not use water jets.

If safe to do so, move undamaged containers from fire area. Cool containers with flooding quantities of water until well after the fire is out. Avoid getting water inside containers.

Specific hazards arising from the chemical

May liberate toxic fumes in fire such as oxides of carbon.

Special protective actions for fire-fighters

Wear SCBA and chemical splash suit. Fully-encapsulating, gas-tight suits should be worn for maximum protection. Structural firefighter's uniform is NOT effective for these materials.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid substance contact. Avoid inhaling vapour. Ensure supply of fresh air in enclosed rooms.

Methods and materials for containment and cleaning up

Spills & Disposal: ELIMINATE all ignition sources (no smoking, flares, sparks or flames) within at least 15m. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Cover with plastic sheet to prevent spreading. Absorb with earth, sand or other non-combustible material and transfer to container.

Other Information: Elimination of harmful effect: Neutralize with diluted sodium hydroxide solution.

SECTION 7: Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Corrosiveness: Attacks most common metals, including some stainless steels.

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Unsuitable Materials: Metals.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 64-19-7

Acetic acid

AU/SWA (Australia): 15 ppm; 37 mg/m³ STEL inhalation; 10 ppm; 25 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.

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 an 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	Dark red liquid.
Color	No data available.
Odor	Pungent odour of acetic acid.
Odor threshold	0.2 - 1 ppm
Melting point/freezing point	No data available.
Boiling point or initial boiling point and boiling range	105 °C
Flammability	No data available.

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Lower and upper explosion limit/ flammability limit	No data available.
Flash point	55C (PMCC)
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	2
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Miscible.
Partition coefficient n-octanol/ water (log value)	No data available.
Vapor pressure	18 mm Hg @ 25 °C
Evaporation rate	No data available.
Density and/or relative density	Specific Gravity: 1.03
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.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

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

Hazardous Polymerization: Will not occur.

Conditions to avoid

Strong heating.

Incompatible materials

Oxidising agents, strong bases, chromic acid, sodium peroxide, nitric acid, amines, potassium permanganate, alcohols, aldehydes, anhydrides/water, ethanolamine, halogen-halogen compounds, non-metallic halides, alkali hydroxides and metals. Soluble carbonates.

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Hazardous decomposition products

Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Ingestion: Burns to the mucous membranes of the oesophagus and stomach; spasms, vomiting, dyspnoea. Risk of perforation in the oesophagus and stomach. Risk of aspiration upon vomiting. Systemic effect: cardiovascular failure, acidosis, drop in blood pressure, cardiac dysrhythmia, circulatory collapse and renal failure, bloody diarrhoea and death. Causes damage to the kidneys.

Inhalation: The vapour is an irritant to the mucous membranes and respiratory tract. May cause bronchitis, pneumonia and respiratory oedema.

Skin corrosion/irritation

Causes burns. Contact with skin will result in severe irritation.

[80] Skin corrosion/irritation: Skin Corrosion/Irritation: Category 1A
H314 Causes severe skin burns and eye damage.

Serious eye damage/irritation

Liquid will cause burns. May cause permanent injury. High concentrations of vapours will cause irritation.

Respiratory or skin sensitization

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

Specific target organ toxicity (STOT) - single exposure

Not classified based on available information.

Specific target organ toxicity (STOT) - repeated exposure

Not classified based on available information.

Aspiration hazard

Not classified based on available information.

Additional information

Chronic Effects: Long term exposure may lead to dental erosion, skin thickening and discolouration, chronic irritation of nose and throat and conjunctivitis.

SECTION 12: Ecological information

Toxicity

Ecotoxicity: The following applies to acetic acid in general: Toxic for aquatic organisms. Harmful effect due to pH shift. Easily eliminable.

Environmental Protection: Avoid contaminating waterways. Harmful to aquatic life.

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Persistence and degradability

Distribution: log P(o/w): -0.17.

Bioaccumulative potential

Low probability of bioaccumulation (log P(o/w) < 1).

Mobility in soil

Product miscible in water.

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.

Sewage disposal

Low probability of bioaccumulation (log P(o/w) < 1).

Other disposal recommendations

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

SECTION 14: Transport information

ADG (Road and Rail)

UN Number: 2790

Class: 8

Packing Group: II

Proper Shipping Name: ACETIC ACID SOLUTION, not less than 50% but not more than 80% acid, by mass

Hazchem emergency action code (EAC)

2X

IMDG

UN Number: 2790

Class: 8

Packing Group: II

Proper Shipping Name: ACETIC ACID SOLUTION, not less than 50% but not more than 80% acid, by mass

IATA

UN Number: 2790

Class: 8

Packing Group: II

Proper Shipping Name: ACETIC ACID SOLUTION, not less than 50% but not more than 80% acid, by mass

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP

Poison Schedule: S5

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

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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 for 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 Airborne 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)