

Safety Data Sheet **BOUIN'S FLUID**

SDS no. EMR287C0 • Version 1.0 • Date of issue: 2026-01-17

SECTION 1: Identification

GHS Product identifier

Product name BOUIN'S FLUID

Product number ABF

Recommended use of the chemical and restrictions on use

In vitro diagnostic reagent, intended for the preservation of samples for later analysis.

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

National contact

Name Australian Biostain Pty Ltd
Address 16 Shipwright Road
5016 Largs North SA
Australia

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

- Skin corrosion/irritation, Cat. 2
- Carcinogenicity, Cat. 1
- Skin sensitizer, Cat. 1
- Specific target organ toxicity following single exposure, Cat. 2
- Serious eye damage/eye irritation, Cat. 2
- Specific target organ toxicity following single exposure, Cat. 3

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- Acute toxicity, inhalation, Cat. 3
- Acute toxicity, oral, Cat. 4

GHS label elements, including precautionary statements

Pictograms



Signal word

Danger

Hazard statement(s)

H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H350	May cause cancer
H371	May cause damage to organs [Eyes]

Precautionary statement(s)

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell,
P302+P352	IF ON SKIN: Wash with plenty of water/soap
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.
P312	Call a POISON CENTER/doctor/physician if you feel unwell.
P333+P313	If skin irritation or rash 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.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

Mixtures

Component	Identification	Weight %	Classifications
Water	CAS no.: 7732-18-5 EC no.: 231-791-2	> 78 %	CLASSIFICATIONS: No data available. HAZARDS: No data available.
Acetic acid	CAS no.: 64-19-7 EC no.: 200-580-7 Index no.: 607-002-00-6	< 10 %	CLASSIFICATIONS: Flammable liquids, Cat. 3; Skin corrosion/irritation, Cat. 1A. HAZARDS: H226 - Flammable liquid and vapor; H314 - Causes severe skin burns and eye damage. [SCLs/M-factors/ATEs]: Skin Corr. 1A; H314: C ≥ 90 %; Skin Corr. 1B; H314: 25 % ≤ C < 90 %; Skin Irrit. 2; H315: 10 % ≤ C < 25 %; Eye Irrit. 2; H319: 10 % ≤ C < 25 %
Formaldehyde, 37% solution	CAS no.: 50-00-0 EC no.: 200-001-8	< 10 %	CLASSIFICATIONS: Carcinogenicity, Cat. 1B; Germ cell mutagenicity, Cat. 2; Acute toxicity,

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Component	Identification	Weight %	Classifications
	Index no.: 605-001-00-5		inhalation, Cat. 3; Acute toxicity, dermal, Cat. 3; Acute toxicity, oral, Cat. 3; Skin corrosion/irritation, Cat. 1B; Sensitization - skin, Cat. 1. HAZARDS: H301 - Toxic if swallowed; H311 - Toxic in contact with skin; H314 - Causes severe skin burns and eye damage; H317 - May cause an allergic skin reaction; H331 - Toxic if inhaled; H341 - Suspected of causing genetic defects [route]; H350 - May cause cancer [route]. [SCLs/M-factors/ATEs]: STOT SE 3; H335: C ≥ 5 %; Skin Corr. 1B; H314: C ≥ 25 %; Skin Irrit. 2; H315: 5 % ≤ C < 25 %; Eye Irrit. 2; H319: 5 % ≤ C < 25 %; Skin Sens. 1; H317: C ≥ 0,2 %
Picric acid	CAS no.: 88-89-1 EC no.: 201-865-9 Index no.: 609-009-00-X	< 1 %	CLASSIFICATIONS: Explosives, Division 1.1; Acute toxicity, inhalation, Cat. 3; Acute toxicity, dermal, Cat. 3; Acute toxicity, oral, Cat. 3. HAZARDS: H201 - Explosive; mass explosion hazard; H301 - Toxic if swallowed; H311 - Toxic in contact with skin; H331 - Toxic if inhaled.
Methanol	CAS no.: 67-56-1 EC no.: 200-659-6 Index no.: 603-001-00-X	≤ 1 %	CLASSIFICATIONS: Flammable liquids, Cat. 2; Acute toxicity, inhalation, Cat. 3; Acute toxicity, dermal, Cat. 3; Acute toxicity, oral, Cat. 3; Specific target organ toxicity, single exposure, Cat. 1. HAZARDS: H225 - Highly flammable liquid and vapor; H301 - Toxic if swallowed; H311 - Toxic in contact with skin; H331 - Toxic if inhaled; H370 - Causes damage to organs [organs, route]. [SCLs/M-factors/ATEs]: *; STOT SE 1; H370: C ≥ 10 %; STOT SE 2; H371: 3 % ≤ C < 10 %

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

Rinse with plenty of water. Get medical attention if irritation develops and persists.

In case of eye contact

Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. In all cases of eye contamination it is a sensible precaution to seek medical advice.

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

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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 foam, dry chemical, CO2 or water spray.

Large fire: Use foam, fog 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 fire is out.

Specific hazards arising from the chemical

Hazards from Combustion Products: Oxides of carbon.

Special protective actions for fire-fighters

SCBA and structural firefighter's uniform may provide limited protection. Fully-encapsulating, gas-tight suits should be worn for maximum protection.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas. For personal protection see section 8.

Methods and materials for containment and cleaning up

Contain the spill. Place inert absorbent material onto spillage. Collect the material and place into a suitable labelled container. Do not dilute material but contain. Dispose of waste according to the applicable local and national regulations.

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

Keep container tightly closed in a dry and well-ventilated place.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 50-00-0

Formaldehyde, 37% solution

AU/SWA (Australia): 2 ppm; 2.5 mg/m³ STEL inhalation [Formaldehyde]; 1 ppm; 1.2 mg/m³ TWA inhalation [Formaldehyde]

CAS: 64-19-7

Acetic acid

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

CAS: 67-56-1

Methanol

AU/SWA (Australia): 250 ppm; 328 mg/m³ STEL inhalation [Methyl alcohol]; 200 ppm; 262 mg/m³ TWA inhalation [Methyl alcohol]

CAS: 88-89-1

Picric acid

AU/SWA (Australia): 0.1 mg/m³ TWA inhalation

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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	Thin, clear, volatile liquid.
Color	Clear, yellow.
Odor	Pungent
Odor threshold	No data available.
Melting point/freezing point	<2°C
Boiling point or initial boiling point and boiling range	No data available.
Flammability	Not Flammable
Lower and upper explosion limit/ flammability limit	No data available.
Flash point	No data available.
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.

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pH	No data available.
Kinematic viscosity	No data available.
Solubility	Solubility in Water: 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	Specific Gravity: 1.017 @ 20°C
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

None under normal use conditions.

Hazardous Polymerization: Will not occur.

Conditions to avoid

Avoid storing in direct sunlight and avoid extremes of temperature.

Incompatible materials

Oxidising agents, alkali metals, metals and alloys.

Hazardous decomposition products

May liberate toxic fumes in fire producing carbon monoxide and or carbon dioxide.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Acute Toxicity - Oral: LD50 (rat): >200 mg/kg - Formaldehyde

LD50 (rat): 5628 mg/kg - Methanol

LD50 (rat): 3310 mg/kg - Acetic acid

Ingestion: May cause nausea, vomiting, headache, dizziness, gastric irritation.

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Inhalation: Irritating to the mucous membranes and respiratory tract. May cause headaches, dizziness, nausea and possible chest pains.

Skin corrosion/irritation

May cause irritation, itchiness and redness.

Serious eye damage/irritation

May cause irritation and watering. High concentrations of vapours may cause irritation.

Respiratory or skin sensitization

Sensitization - Skin: Category 1 H317 May cause an allergic skin reaction.

Germ cell mutagenicity

Based on available data, classification data are not met

Carcinogenicity

Formaldehyde:

Safe Work Australia: Carcinogenicity: Category 1B

IARC: Group 1: Carcinogenic to humans. May cause cancer by inhalation.

Reproductive toxicity

Based on available data, classification data are not met

Specific target organ toxicity (STOT) - single exposure

Specific Target Organ Toxicity - Single Exposure Category 2. H371 May cause damage to organs (eyes).

Specific target organ toxicity (STOT) - repeated exposure

Based on available data, classification data are not met

Aspiration hazard

Based on available data, classification data are not met

SECTION 12: Ecological information

Toxicity

Short Summary of Assessment of Environmental Impact: No ecological problems are to be expected when the product is handled and used with due care and attention.

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: 2922

Class: 8, 6.1

Packing Group: III

Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. (Contains Acetic acid 10%, Formaldehyde 10%)

Hazchem emergency action code (EAC)

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2X

IMDG

UN Number: 2922

Class: 8, 6.1

Packing Group: III

Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. (Contains Acetic acid 10%, Formaldehyde 10%)

IATA

UN Number: 2922

Class: 8, 6.1

Packing Group: III

Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. (Contains Acetic acid 10%, Formaldehyde 10%)

SECTION 15: Regulatory information

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

Australia SUSMP

Poison Schedule: S6

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.

Preparation information

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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)