

## Safety Data Sheet **DECALCIFIER (10% Formic acid)**

SDS no. 5YSXWHZW • Version 1.0 • Date of issue: 2025-03-02

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### SECTION 1: Identification

#### GHS Product identifier

Product name DECALCIFIER (10% Formic acid)

Product number DECALFA

#### Recommended use of the chemical and restrictions on use

Laboratory 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](http://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)

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### 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

- Serious eye damage/eye irritation, Cat. 1
- Skin corrosion/irritation, Cat. 1A

**GHS label elements, including precautionary statements**

**Pictograms**



**Signal word**

**Danger**

**Hazard statement(s)**

H314

Causes severe skin burns and eye damage

**Precautionary statement(s)**

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.

P405

Store locked up.

P501

Dispose of contents/container to an approved waste disposal facility

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**SECTION 3: Composition/information on ingredients**

**Mixtures**

**Components**

Component	CAS no.	Concentration
<b>Formic acid (EC no.: 200-579-1; Index no.: 607-001-00-0)</b>	<b>64-18-6</b>	<b>&lt;= 10 % (weight)</b>
CLASSIFICATIONS: Flammable liquids, Cat. 3; Acute toxicity, oral, Cat. 4; Acute toxicity, inhalation, Cat. 3; Serious eye damage/eye irritation, Cat. 1; Hazardous to the aquatic environment, short-term (acute), Cat. 3; Skin corrosion/irritation, Cat. 1A; Specific target organ toxicity following single exposure, Cat. 3. HAZARDS: H226 - Flammable liquid and vapor; H302 - Harmful if swallowed; H314 - Causes severe skin burns and eye damage; H318 - Causes serious eye damage; H331 - Toxic if inhaled; H335 - May cause respiratory irritation; H336 - May cause drowsiness or dizziness; H402 - Harmful to aquatic life. [SCLs/M-factors/ATEs]: Skin Corr. 1A; H314: C ≥ 90 %; Skin Corr. 1B; H314: 10 % ≤ C < 90 %; Skin Irrit. 2; H315: 2 % ≤ C < 10 %; Eye Irrit. 2; H319: 2 % ≤ C < 10 %		
<b>Water (EC no.: 231-791-2)</b>	<b>7732-18-5</b>	<b>&gt;= 90 % (weight)</b>
CLASSIFICATIONS: No data available. HAZARDS: No data available.		

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**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, avoid becoming a casualty. Make patient comfortable, keep warm and at rest until fully recovered. If breathing is difficult (or develops a bluish skin discolouration), supply oxygen by a qualified person. Apply artificial respiration with a respiratory medical device if not breathing. Do not use

mouth to mouth resuscitation. Immediately medical attention is required.

In case of skin contact

Remove contaminated clothing and wash affected skin with soap and water. If rapid recovery does not occur, obtain medical attention

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 immediate 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.

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## **SECTION 5: Fire-fighting measures**

#### **Suitable extinguishing media**

Small fire: Use dry chemical, CO<sub>2</sub> or water spray.

Large fire: Use water spray, fog or foam - Do NOT use water jets.

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. Avoid getting water inside the containers.

#### **Specific hazards arising from the chemical**

Hazards from Combustion Products: The product will support combustion of oxidisable materials. Vapour may travel to source of ignition and flash back.

On burning, will emit toxic fumes, including oxides of carbon. The packaging material may burn to emit noxious fumes

May burn but do not ignite readily. Containers may explode when heated. Runoff may pollute waterways. Fire will produce irritating, poisonous and/or corrosive gases.

#### **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.

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## **SECTION 6: Accidental release measures**

#### **Personal precautions, protective equipment and emergency procedures**

Evacuate the area of all non-essential personnel. Avoid inhalation, contact with skin, eyes and clothing.

Wear protective clothing specified for normal operations (see Section 8)

#### **Methods and materials for containment and cleaning up**

Eliminate all ignition sources. Do NOT touch or walk through spilled product.

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, confined areas.

Absorb with dry earth, sand or other non-combustible material. Neutralise with lime or soda ash. Use clean nonsparking tools to collect and seal in properly labelled drums for disposal in an area approved by local authority bylaws.

Wash area down with excess water to remove residual material.

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## SECTION 7: Handling and storage

### Precautions for safe handling

Handle and open containers with care. When opening containers, avoid inhalation of headspace gases.

Use in a well-ventilated area. Prevent formation of aerosols.

### Conditions for safe storage, including any incompatibilities

Corrosiveness: Metal containers.

Store away from sources of heat or ignition. Store away from oxidizing agents. Store away from combustible materials. Keep containers securely sealed and protected against physical damage.

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## SECTION 8: Exposure controls/personal protection

### Control parameters

#### CAS: 64-18-6

Formic acid

AU/SWA (Australia): 10 ppm; 19 mg/m<sup>3</sup> STEL inhalation; 5 ppm; 9.4 mg/m<sup>3</sup> 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

Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

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## SECTION 9: Physical and chemical properties

### Basic physical and chemical properties

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Physical state	Liquid
Appearance	Colourless liquid.
Color	Colourless
Odor	Strong acrid.
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	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.
pH	~2.2
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Miscible in all proportions.
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	Approx 1
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.

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## 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

Reacts with alkalis and amines. Exothermic reaction.

Hazardous Polymerization: Will not occur.

#### Conditions to avoid

Avoid exposure to heat, direct sunlight, open flames or other sources of ignition.

#### Incompatible materials

Oxidisers, metals.

#### Hazardous decomposition products

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

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## SECTION 11: Toxicological information

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### Information on toxicological effects

#### Acute toxicity

Acute Toxicity - Oral: Formic acid: LD50 730 mg/kg body weight.

Acute Toxicity - Inhalation: Formic acid: LC50 7.4 mg/L body weight.

Ingestion: Cause severe burns to the mouth, throat and stomach.

Inhalation of vapours can cause severe irritation of nose, throat, and upper respiratory tract. Inhalation of higher concentrations may cause central nervous system effects and respiratory/lung damage.

#### Skin corrosion/irritation

Causes severe burns. Symptoms may include redness, burning, and swelling of skin, burns, and other skin damage.

#### Serious eye damage/irritation

Causes severe burns and eye damage. Risk of blindness.

#### 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: Prolonged or repeated exposure to low concentrations may cause skin irritation and burns. Prolonged or repeated exposure may cause liver and kidney damage.

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## SECTION 12: Ecological information

#### Toxicity

Do not discharge to the environment.

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## 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.

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## SECTION 14: Transport information

### ADG (Road and Rail)

UN Number: 3412

Class: 8

Packing Group: II

Proper Shipping Name: FORMIC ACID

### Hazchem emergency action code (EAC)

•2X

### IMDG

UN Number: 3412

Class: 8

Packing Group: II

EMS Number:

Proper Shipping Name: FORMIC ACID

### IATA

UN Number: 3412

Class: 8

Packing Group: II

Proper Shipping Name: FORMIC ACID

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## SECTION 15: Regulatory information

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

#### Australia SUSMP

Poison Schedule: NS

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## 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

All information provided in this data sheet or by our technical representatives is compiled from the best knowledge available to us. However, since data, safety standards and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, we make no warranty either expressed or implied, with respect to the completeness or accuracy to the information contained herein. ChemSupply Australia Pty Ltd accepts no responsibility whatsoever for its accuracy or for any results that may be obtained by customers from using the data and disclaims all liability for reliance on information provided in this data sheet or by our technical representatives.

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.

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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](https://hcis.safeworkaustralia.gov.au)

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)