

SDS no. F8Q57VY6 • Version 1.0 • Date of issue: 2024-09-19

#### **SECTION 1: Identification**

#### **GHS Product identifier**

Product name DECAL MAYNE HEALTH (HARD)

Product number ADMHH

#### 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

**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**

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.

## Classification of the substance or mixture

# GHS classification in accordance with: UN GHS revision 7

- Acute toxicity, inhalation, Cat. 4

- Serious eye damage/eye irritation, Cat. 1
- Skin corrosion/irritation, Cat. 1A
- Specific target organ toxicity following single exposure. Cat. 3
- Corrosive to metals, Cat. 1

#### GHS label elements, including precautionary statements

#### **Pictograms**



# Signal word Danger

Hazard statement(s)

H290 May be corrosive to metals

H314 Causes severe skin burns and eye damage

H332 Harmful if inhaled

H335 May cause respiratory irritation

**Precautionary statement(s)** 

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

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/physcian

P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material-damage.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
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.

#### **Components**

Component	CAS no.	Concentration
Formic acid (EC no.: 200-579-1; Index no.: 607-001-00-0)	64-18-6	<= 12 % (volume)

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:  $C \ge 90$  %; Skin Corr. 1B; H314:

# HYDROCHLORIC ACID (<37%) (EC no.: 231-595-7; Index no.: 017-002-01-X) 7647-01-0 <= 10 % (volume)

CLASSIFICATIONS: Specific target organ toxicity following single exposure, Cat. 3; Skin corrosion/irritation, Cat. 1B. HAZARDS: H314 - Causes severe skin burns and eye damage; H335 - May cause respiratory irritation. [SCLs/M-factors/ATEs]: Skin Corr. 1B; H314:  $C \ge 25$  %; Skin Irrit. 2; H315: 10 %  $\le C < 25$  %; Eye Irrit. 2; H319: 10 %  $\le C < 25$  %; STOT SE 3; H335:  $C \ge 10$  %

# **SECTION 4: First-aid measures**

#### **Description of necessary first-aid measures**

General advice For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New

Zealand 0800 764 766) or a doctor (at once).

First Aid Facilities: Maintain eyewash fountain in work area.

If inhaled f 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.

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

#### Suitable extinguishing media

Small fire: Use dry chemical, CO2 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

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.

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Formic acid: Carbon oxides

# Special protective actions for fire-fighters

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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

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

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.

# **SECTION 7: Handling and storage**

#### **Precautions for safe handling**

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

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

#### 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.

# **SECTION 8: Exposure controls/personal protection**

## **Control parameters**

CAS: 64-18-6

Formic acid

ACGIH: 10 ppm (STEL) TLV® inhalation; 5 ppm TLV® inhalation; AU/SWA (Australia): 10 ppm; 19 mg/m3 STEL inhalation; 5 ppm; 9.4 mg/m3 TWA inhalation

CAS: 7647-01-0

HYDROCHLORIC ACID (<37%)

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**

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.

# **SECTION 9: Physical and chemical properties**

### **Basic physical and chemical properties**

Physical state Liquid

Appearance Colourless liquid.
Color No data available.
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 n/a

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 in Water: Miscible in all proportions.

Partition coefficient n-octanol/water (log value)

Vapor pressure

Evaporation rate

No data available.

Relative vapor density

No data available.

Particle characteristics

No data available.

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.

Reacts with incompatible materials

#### **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.

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Formic acid: Strong oxidizing agents, Strong bases, Powdered metals

# **Hazardous decomposition products**

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Water: In the event of fire: see section 5

# **SECTION 11: Toxicological information**

#### 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/kg body weight.

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

Inhalation: Inhalation of vapours can cause severe irritation of nose, throat, and upper repiratory 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

No data available

# **Germ cell mutagenicity**

No data available.

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#### Carcinogenicity

No data available.

#### Reproductive toxicity

No data available.

## Summary of evaluation of the CMR properties

No data available.

# Specific target organ toxicity (STOT) - single exposure

May cause respiratory irritation.

#### Specific target organ toxicity (STOT) - repeated exposure

No data available.

# **Aspiration hazard**

No data available.

#### **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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Formic acid: \*TOXICITY:

typ. dose mode specie amount units other

LD50 orl rat 1100 mg/kg LC50 ihl rat 15 gm/m3/15M

LD50 orl mus 700 mg/kg

LC50 ihl mus 6200 mg/m3/15M

LD50 ipr mus 940 mg/kg

LD50 ivn mus 145 mg/kg

LD50 orl dog 4000 mg/kg

LDLo ivn dog 3000 mg/kg

LDLo ivn rbt 239 mg/kg

\*AQTX/TLM96: Not available

#### \*SAX TOXICITY EVALUATION:

THR = MODERATE via intraperitoneal, oral and intravenous routes. SEVERE eye irritation in rabbits. MILD skin toxicity in rabbits. A substance migrating to food from packaging materials.

# \*CARCINOGENICITY:

Status: NTP Carcinogensis Studies; selected, June 1986

# \*MUTATION DATA:

test lowest dose I test lowest dose

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mmo-esc 70 ppm/3H | pic-esc 100 mmol/L sln-dmg-ihl 1000 ppm/24H | sln-dmg-orl 1000 ppm oms-nml:oth 100 mmol/L | cyt-nml:oth 100 mmol/L

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\*TERATOGENICITY (Reproductive Effects Data): Not available

#### \*STANDARDS. REGULATIONS & RECOMMENDATIONS:

OSHA: Federal Register (1/19/89) and 29 CFR 1910.1000 Subpart Z

Transitional Limit: PEL-TWA 5 ppm [610] Final Limit: PEL-TWA 5 ppm [610]

ACGIH: TLV-TWA 5 ppm [015,413]

NIOSH Criteria Document: None

NFPA Hazard Rating: Health (H): 3

Flammability (F): 2 Reactivity (R): 0

H3: Materials extremely hazardous to health but areas may be entered with extreme care (see NFPA for details).

F2: Materials which must be moderately heated before ignition will occur (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:

skn-rbt 610 mg open MLD

eye-rbt 122 mg SEV

Review: Toxicology Review-2

Standards and Regulations: DOT-Hazard: Corrosive material; Label: Corrosive

DOT-Hazard: Corrosive material; Label: Corrosive,

solution

Status: "NIOSH Manual of Analytical Methods" Vol 1 232, Vol 5 S173# "NIOSH Manual of Analytical Methods" to be revised by June, 1985

Reported in EPA TSCA Inventory, 1983

Meets criteria for proposed OSHA Medical Records Rule

Estimated fatal dose: 30 mL

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HYDROCHLORIC ACID (<37%): \*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.

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\*CARCINOGENICITY: Not available

\*MUTATION DATA: See RTECS printout for most current data

test lowest dose I test lowest dose

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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]

# **SECTION 12: Ecological information**

#### **Toxicity**

Do not discharge to the environment.

# **SECTION 13: Disposal considerations**

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#### **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: 1760

Class: 8

Packing Group: III

Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (Contains FORMIC ACID, HYDROCHLORIC ACID)

# Hazchem emergency action code (EAC)

2X

### **IMDG**

UN Number: 1760

Class: 8

Packing Group: III

Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (Contains FORMIC ACID, HYDROCHLORIC ACID).

# IATA

UN Number: 1760

Class: 8

Packing Group: III

Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (Contains FORMIC ACID, HYDROCHLORIC ACID)

# **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 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

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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 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)