

CSAScientific CSAIngredients CSAPatholog

Safety Data Sheet IMIDAZOLE BUFFER CONCENTRATE

SDS no. 50YMU5MH • Date of issue: 2024-10-30

SECTION 1: Identification

GHS Product identifier

Product name IMIDAZOLE BUFFER CONCENTRATE

Product number AIB

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

Not 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

- Toxic to reproduction, Cat. 1

GHS label elements, including precautionary statements

Pictograms



Signal word Danger

Hazard statement(s)

H360 May damage fertility or the unborn child

Precautionary statement(s)

P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

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
Imidazole (EC no.: 206-019-2; Index no.: 613-319-00-0)	288-32-4	7 % (weight)
CLASSIFICATIONS: Toxic to reproduction, Cat. 1B; Acute toxicity, oral, Cat. 4; Skin corrosion/irritation, Cat. 1C. HAZARDS: H302 - Harmful if swallowed; H314 -		
Causes severe skin burns and eye damage; H360D - May damage the unborn child.		
HYDROCHLORIC ACID (<37%) (EC no.: 231-595-7; Index no.: 017-002-01-X)	7647-01-0	< 5 % (weight)
CLASSIFICATIONS: Specific target organ toxicity following single exposure, Cat. 3; Skin corrosion/irritation, Cat. 1B. HAZARDS: H314 - Causes severe skin burns and		
1005 Marriage 1005 Marriage 1005 Marriage 1005 Marriage 1005 Marriage 1005 October 1005 Marriage 100		

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).

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 Immediately remove contaminated clothing and wash affected area with water for at

least 15 minutes. Ensure contaminated clothing is washed before re-use. Seek medical

advice if concerned.

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.

Safety Data Sheet IMIDAZOLE BUFFER CONCENTRATE

If swallowed

SDS no. 50YMU5MH • Date of issue: 2024-10-30

Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek medical advice if effects persist.

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

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

Specific hazards arising from the chemical

Temperature and combustion of materials in the vicinity may cause formation of toxic fumes.

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

Ensure adequate ventilation. Use personal protective equipment. For personal protection see section 8.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel). Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

Precautions for safe handling

Wash hands and face thoroughly after working with material. Avoid generation or accumulation of dusts. Avoid prolonged or repeated contact with skin, eyes and clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Use local exhaust extraction.

Conditions for safe storage, including any incompatibilities

Store away from oxidizing agents. Keep container tightly closed and in a cool, dry, well-ventilated place, away from direct sunlight and other sources of heat or ignition.

SECTION 8: Exposure controls/personal protection

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

Solid Physical state

Clear colourless liquid. **Appearance** Color No data available. Characteristic. Odor Odor threshold No data available.

No data available. Melting point/freezing point ~100°C

Boiling point or initial boiling point and boiling range No data available. **Flammability**

Lower and upper explosion limit/flammability limit No data available. Flash point No data available. No data available. **Explosive properties** Auto-ignition temperature No data available. No data available. Decomposition temperature

Oxidizing properties No data available. 7.2 - 7.4

Kinematic viscosity No data available.

Solubility in Water: Soluble. Solubility

Partition coefficient n-octanol/water (log value) No data available. Vapor pressure No data available. No data available. **Evaporation rate**

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.

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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

Hazardous Polymerization: Will not occur.

Conditions to avoid

Avoid temperature extremes.

Incompatible materials

Strong oxidising agents, alkali metals, various metals and alloys.

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

Acute Toxicity - Oral: LD50 (rat): 970 mg/kg - Imidazole

Ingestion: May be harmful by ingestion. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: May be harmful by inhalation. May be irritating to mucous membranes and upper respiratory tract.

Skin corrosion/irritation

May cause skin irritation.

Serious eye damage/irritation

May cause eye irritation.

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

H360D May damage the unborn child.

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

Safety Data Sheet

IMIDAZOLE BUFFER CONCENTRATE

Imidazole: cat LDLo subcutaneous 125mg/kg (125mg/kg) BEHAVIORAL: FOOD INTAKE (ANIMAL)

BEHAVIORAL: REGIDITY Archiv fuer Experimentelle Pathologie und Pharmakologie, Vol. 84, Pg. 155, 1918.

dog LD50 subcutaneous 28mg/kg (28mg/kg) Przeglad Epidemiologiczny. Vol. 67, Pg. 295, 1993.

guinea pig LD50 oral 760mg/kg (760mg/kg) Przeglad Epidemiologiczny. Vol. 67, Pg. 295, 1993.

mammal (species unspecified) LD50 oral 1gm/kg (1000mg/kg) Pesticide Chemicals Official Compendium, Association of the American Pesticide Control Officials, Inc., 1966. Vol. -, Pg. 608, 1966.

SDS no. 50YMU5MH • Date of issue: 2024-10-30

mouse LD50 intraperitoneal 300mg/kg (300mg/kg) National Technical Information Service. Vol. AD277-689,

mouse LD50 intravenous 475mg/kg (475mg/kg) BEHAVIORAL: CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD Arzneimittel-

Forschung. Drug Research. Vol. 33, Pg. 716, 1983.

Link to PubMed

mouse LD50 oral 880mg/kg (880mg/kg) German Offenlegungsschrift Patent Document. Vol. #3046325,

mouse LD50 subcutaneous 817mg/kg (817mg/kg) Journal of Pharmacology and Experimental Therapeutics. Vol. 119, Pg. 444, 1957.

Link to PubMed

rat LD50 oral 220mg/kg (220mg/kg) Przeglad Epidemiologiczny. Vol. 67, Pg. 295, 1993.

rat LD50 subcutaneous 626mg/kg (626mg/kg) Journal of Pharmacology and Experimental Therapeutics. Vol. 119, Pg. 444, 1957.

Link to PubMed

SECTION 12: Ecological information

Toxicity

Acute Toxicity - Fish: Daphnia 341 mg/48hr.

Mobility in soil

Product is readily diluted with water and may find its way into waterways and soils.

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)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

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

Australia SUSMP

Poison Schedule: NS

SECTION 16: Other information

Further information/disclaimer

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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)