

## Safety Data Sheet DITHIZONE

SDS no. 2UD3CLBF • Version 1.0 • Date of issue: 2026-01-07

### SECTION 1: Identification

#### GHS Product identifier

Product name DITHIZONE

Product number DA041

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

Sensitive reagent for several heavy metals, Co, Cu, Pb and Hg, especially for the estimation of minute amounts of Pb.

#### 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)

#### 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

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

#### GHS label elements, including precautionary statements

#### Pictograms



Signal word

Warning

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### Hazard statement(s)

H315 Causes skin irritation  
H319 Causes serious eye irritation  
H335 May cause respiratory irritation

### Precautionary statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264 Wash hands thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
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.  
P332+P313 If skin irritation 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.  
P405 Store locked up.  
P501 Dispose of contents/container to an approved waste disposal facility

## SECTION 3: Composition/information on ingredients

### Mixtures

<b>Molecular weight</b>	256.33	
<b>Component</b>	<b>Identification</b>	<b>Weight %</b>
Diphenylthiocarbazone	CAS no.: 60-10-6 EC no.: 200-454-1	100 %

## 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 If contact with the eye(s) occurs, wash with copious amounts of water for approximately 15 minutes holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. If persistent irritation occurs, obtain medical attention.

If swallowed 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.

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### 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>, water spray or foam.

Large fire: Use water spray, fog or foam.

### Specific hazards arising from the chemical

Hazards from Combustion Products: May liberate toxic fumes in fire oxides of carbon, nitrogen and sulfur.

May burn but do not ignite readily. Runoff may pollute waterways. Fire may produce irritating, poisonous and/or corrosive fumes. In sufficient quantities and reduced particle size, this material is capable of creating a dust explosion.

### Special protective actions for fire-fighters

Wear SCBA and structural firefighter's uniform.

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## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Avoid substance contact. Avoid generation of dusts: do not inhale dusts.

Ensure supply of fresh air in enclosed rooms.

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

### Methods and materials for containment and cleaning up

Sweep up (avoid generating dust) and using clean non-sparking tools transfer to a clean, suitable, clearly labelled container for disposal in accordance with local regulations.

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## SECTION 7: Handling and storage

### Precautions for safe handling

Avoid substance contact and generation and inhalation of dust.

### Conditions for safe storage, including any incompatibilities

Store away from oxidizing agents. Keep container tightly closed and dry, away from direct sunlight and other sources of heat or ignition. Store at room temperature (15 - 25 °C).

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## 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

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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 and 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.

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## SECTION 9: Physical and chemical properties

### Basic physical and chemical properties

Physical state	Solid
Appearance	Bluish-black crystalline powder.
Color	No data available.
Odor	Odourless.
Odor threshold	No data available.
Melting point/freezing point	168 °C (decomposes)
Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
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	168 °C
Oxidizing properties	No data available.
pH	No data available.
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Negligible. Insoluble in cold water. Solubility in Organic Solvents: Sparingly soluble in alcohol. Freely soluble in carbon tetrachloride and chloroform.
Partition coefficient n-octanol/ water (log value)	No data available.
Vapor pressure	No data available.

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Evaporation rate	0
Density and/or relative density	No data available.
Relative vapor density	8.8 (air = 1)
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 at room temperature. Solutions are not stable.

### Possibility of hazardous reactions

Hazardous Polymerization: Will not occur.

### Conditions to avoid

Heat, dusting and incompatibles.

### Incompatible materials

Strong oxidisers.

### Hazardous decomposition products

Oxides of carbon, nitrogen and sulfur.

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## SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity

Inhalation: May cause slight irritation to respiratory system.

#### Skin corrosion/irritation

Irritating to skin.

#### Serious eye damage/irritation

Causes serious eye 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

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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

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Diphenylthiocarbazone: mouse LD50 intraperitoneal 200mg/kg (200mg/kg) National Technical Information Service. Vol. AD277-689, mouse LD50 intravenous 56mg/kg (56mg/kg) U.S. Army Armament Research & Development Command, Chemical Systems Laboratory, NIOSH Exchange Chemicals. Vol. NX#07955, rat LD oral > 500mg/kg (500mg/kg) National Academy of Sciences, National Research Council, Chemical-Biological Coordination Center, Review. Vol. 5, Pg. 44, 1953.

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## SECTION 12: Ecological information

#### Toxicity

No data available.

#### Persistence and degradability

No data available.

#### Bioaccumulative potential

No data available.

#### Mobility in soil

No data available.

#### Results of PBT and vPvB assessment

No data available.

#### Endocrine disrupting properties

No data available.

#### Other adverse effects

No data available.

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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)

Not dangerous goods

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### IMDG

Not dangerous goods

### IATA

Not dangerous goods

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## SECTION 15: Regulatory information

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

#### Australia SUSMP

Poison Schedule: NS

#### Canadian Domestic Substances List (DSL)

Chemical name: Diazenecarbothioic acid, phenyl-, 2-phenylhydrazide

CAS: 60-10-6

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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

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

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)