



Infosafe No™	1CHI0	Issue Date : June 2014	RE-ISSUED by CHEMSUPP
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Product Name : **NINHYDRIN**

Classified as hazardous

1. Identification

GHS Product Identifier NINHYDRIN

Company Name CHEM-SUPPLY PTY LTD (ABN 19 008 264 211)

Address 38 - 50 Bedford Street GILLMAN
SA 5013 Australia

Telephone/Fax Number Tel: (08) 8440-2000
Fax: (08) 8440-2001

Recommended use of the chemical and restrictions on use Chemical intermediate; reagent for determination of amines, peptines, amino acids, amino sugars and ascorbic acid and laboratory reagent.

Other Names	Name	Product Code
	NINHYDRIN LR	NL021
	NINHYDRIN AR	NA021

Other Information 2,2-Dihydroxy-1,3-indanedione, 1,2,3-Indanetrione hydrate, 1,2,3-Triketohydrindene monohydrate, 2,2-Dihydroxyhydrindene-1,3-dione
EMERGENCY CONTACT NUMBER: +61 08 8440 2000
Business hours: 8:30am to 5:00pm, Monday to Friday.

Chem-Supply 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 Chem-Supply 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 Chem-Supply 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.

2. Hazard Identification

GHS classification of the substance/mixture Eye Damage/Irritation: Category 2A
Acute Toxicity - Oral: Category 4
Skin Corrosion/Irritation: Category 2
Specific Target Organ Toxicity - Single Exposure Category 3

Signal Word (s) WARNING

Hazard Statement (s) H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Pictogram (s) Exclamation mark



Precautionary statement – Prevention P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P337+P313 If eye irritation persists: Get medical advice/attention.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.



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Precautionary statement – Storage

P332+P313 If skin irritation occurs: Get medical advice/attention.
 P362 Take off contaminated clothing and wash before reuse.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.

3. Composition/information on ingredients

Chemical Characterization	Solid				
Ingredients	Name	CAS	Proportion	Hazard Symbol	Risk Phrase
	Ninhydrin	485-47-2	100 %	Xn, Xi	R22, R36/37/38

4. First-aid measures

Inhalation	Remove victim to fresh air. If breathing has stopped, apply artificial respiration. If symptoms persist, obtain medical attention.
Ingestion	Wash out mouth with water and obtain medical attention. Never give anything by mouth to an unconscious person. Seek medical advice.
Skin	Remove contaminated clothing and wash affected skin with soap and water. Seek medical advice if effects persist.
Eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Seek medical attention.
First Aid Facilities	Maintain eyewash fountain and safety shower in work area.
Advice to Doctor	Treat symptomatically.
Other Information	For advice, contact a Poisons Information Centre (Phone eg Australia 13 1126; New Zealand 0800 764 766) or a doctor at once.

5. Fire-fighting measures

Hazards from Combustion Products	Oxides of carbon.
Specific Methods	Small fire: Use dry chemical, CO2, water spray or foam. Large fire: Use water spray, fog or foam. 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.
Specific hazards arising from the chemical	May burn but do not ignite readily. Containers may explode when heated. Runoff may pollute waterways. Fire or heat may produce irritating, poisonous and/or corrosive gases.
Precautions in connection with Fire	Wear SCBA and structural firefighter's uniform.

6. Accidental release measures

Personal Precautions	Avoid inhalation and ingestion. Avoid contact with skin, eyes and clothing.
Personal Protection	Wear protective clothing specified for normal operations (see Section 8)
Clean-up Methods - Small Spillages	Sweep up (avoid generating dust) and remove to a suitable, clearly labelled container for disposal in accordance with local regulations.
Clean-up Methods - Large Spillages	Seek expert advice on handling and disposal.
Environmental Precautions	Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for Safe Handling	Avoid generation or accumulation of dusts. Avoid prolonged or repeated contact with skin and eyes. Use in well ventilated areas away from all ignition sources. In case of insufficient ventilation, wear suitable respiratory equipment. Wash hands and face thoroughly after working with material.
Conditions for safe storage, including any incompatibilities	Store away from sources of heat or ignition. Store away from oxidizing agents. Store in a cool, dry place. Keep containers securely sealed and protected against physical damage.

8. Exposure controls/personal protection



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Other Exposure Information	A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been established by Safe Work Australia for this product. There is a blanket limit of 10 mg/m ³ for dusts or mists when limits have not otherwise been established.
Appropriate engineering controls	In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.
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.
Eye 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.
Hand Protection	Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance. Recommendation: rubber or plastic gloves.
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.
Hygiene Measures	Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. Physical and chemical properties

Form	Solid
Appearance	White to brownish-white or faintly yellow crystals or powder. May discolour on exposure to light.
Odour	Characteristic.
Melting Point	250 - 258 °C (decomposes)
Solubility in Water	Slightly soluble (20 g/L @ 20 °C)
Solubility in Organic Solvents	Soluble in alcohol. Slightly soluble in ether and chloroform.
pH	4.6 -5.0 (10 g/l, H ₂ O, 20 °C)
Vapour Density (Air=1)	6.16 (air=1)
Volatile Component	0% (21 °C)
Flammability	Combustible.
Molecular Weight	178.14
Other Information	When heated above 150 °C becomes purple and melts with decomposition at approximately 250 °C.

10. Stability and reactivity

Chemical Stability	Stable under normal use conditons.
Conditions to Avoid	Dust generation. High temperatures. Light. Incompatibles.
Incompatible Materials	Strong oxidizing agents, strong acids.
Hazardous Decomposition Products	Oxides of carbon.
Hazardous Polymerization	Will not occur.

11. Toxicological Information

Ingestion	Harmful if swallowed. Causes irritation to the gastrointestinal tract. Symptoms may be nausea, vomiting and diarrhea.
Inhalation	May be harmful if inhaled. Irritating to respiratory system. May cause coughing, shortness of breath.



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Skin	Irritating to skin. May be harmful if absorbed through skin. Discolours the skin (rubefacient). May cause skin rash.
Eye	Causes irritation to eyes, redness and pain. May cause burns.
Carcinogenicity	No evidence of carcinogenic properties.
Chronic Effects	Repeated skin or eye contact with solid or solution may cause burns.
Mutagenicity	No evidence of mutagenic properties.

12. Ecological information**Ecotoxicity** No ecological data available for this product.**13. Disposal considerations****Disposal Considerations** Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local, state and federal government regulations.**14. Transport information****Transport Information** Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.**15. Regulatory information****Regulatory Information** Listed in the Australian Inventory of Chemical Substances (AICS).**Poisons Schedule** Not Scheduled**Hazard Category** Harmful,Irritant**16. Other Information**

Literature References

'Standard for the Uniform Scheduling of Medicines and Poisons No. 4', Commonwealth of Australia, June 2013.

Lewis, Richard J. Sr. 'Hawley's Condensed Chemical Dictionary 13th. Ed.', Rev., John Wiley and Sons, Inc., NY, 1997.

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.', 2007.

'Labelling of Hazardous Workplace Chemicals, Code of Practice' Safe Work Australia.

Standards Australia 'AS 1940-2004 The Storage and Handling of Flammable and Combustible Liquids.

Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand, 2010.

Worksafe Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004)]'.

Worksafe Australia, 'Hazardous Substances Information System, 2005'.

Worksafe Australia, 'National Code of Practice for the Labelling of Workplace Hazardous Substances (2011)'.

Worksafe Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]'.

Contact**Person/Point**Paul McCarthy Ph. (08) 8440 2000 **DISCLAIMER STATEMENT:**

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Empirical Formula & Structural Formula C9 H6 O4

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