

Ident-No: ARADUR 249 LC**Hazardous according to the criteria of NOHSC.**

Version 1

Print Date 04.08.2003

Revision Date 04.07.2003

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING**Product information**

Trade name : ARADUR 249 LC
 Use : Curing agent for epoxy resins

Company : Vantico Pty Ltd
 235 Settlement Road
 Thomastown 3074

Telephone : +61392802300
 Telefax : +61392802329
 Emergency telephone : Australia: 1800 033 111 New Zealand: 0800 734 607 Asia-
 number Pacific: +61 3 9663 2130

2. COMPOSITION/INFORMATION ON INGREDIENTS**Chemical nature**

Formulated polyamine

Hazardous components

Chemical Name	CAS-No.	Symbol(s):	R-phrases)	Concentration [%]
isophorone diamine	2855-13-2	C	R21/22 R34 R43 R52/53	> 60.00
polyoxypropylene diamine	9046-10-0	C	R34	>= 10.00 - < 30.00
phenol	108-95-2	T	R24/25 R34	< 10.00
trimethylhexamethylenediamine	25620-58-0	C	R22 R34 R43 R52/53	< 10.00

Also contains other ingredients not hazardous to the criteria of NOHSC.

3. HAZARDS IDENTIFICATION

Harmful by inhalation, in contact with skin and if swallowed.

Causes burns.

Risk of serious damage to eyes.

May cause sensitization by skin contact.

Poison schedule: 5

4. FIRST AID MEASURES

Inhalation : Move to fresh air.
 Call a physician immediately.

Eye contact : Rinse immediately with plenty of water, also under the eyelids,
 for at least 15 minutes.
 Call a physician immediately.

Skin contact : Wash off with soap and plenty of water.
 Do NOT use solvents or thinners.
 If skin irritation persists, call a physician.

Ident-No: ARADUR 249 LC**Hazardous according to the criteria of NOHSC.**

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Ingestion : Do not induce vomiting.
Immediately give plenty of water (if possible charcoal slurry).
Obtain medical attention.

Notes to physician

Treatment : No specific antidote. Treat symptomatically.
First aid facility: Eye wash station . Showering facility.
Poisons Information Centres in each State capital city can
provide advice for scheduled poisons.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water spray.
Dry powder.
Carbon dioxide (CO₂).
Foam.

Extinguishing media which must not be used for safety reasons : High volume water jet.

Specific hazards during fire fighting : Burning produces obnoxious and toxic fumes.
Carbon oxides.

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Do not breathe vapours/dust.
Avoid contact with skin, eyes and clothing.
Ensure adequate ventilation.

Environmental precautions : Do not allow material to contaminate ground water system.

If in doubt contact Vantico Pty. Limited using contact details provided on this SDS.

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

7. HANDLING AND STORAGE**Handling**

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
Handle and open container with care.

Storage

Further information on : Keep away from food, drink and animal feeding stuffs.

Ident-No: ARADUR 249 LC**Hazardous according to the criteria of NOHSC.**

Version 1

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Revision Date 04.07.2003

storage conditions

Keep container tightly closed.
Keep at temperatures between 10 and 30°C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Control parameters	Update	Basis
phenol	108-95-2	1 ppm 4 mg/m ³		TLV (AUS)

Engineering measures

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Wherever possible, the workplace must be ventilated sufficiently to ensure that exposure standards are met. Ensure airflow, where this product is being used, is directed away from the operators.

If cured material made from this product is to be cut or sanded, ensure that dust is kept below the Worksafe Exposure Standard for inspirable dusts (10mg/m³) or the ACGIH Exposure Standard for respirable dusts (3mg/m³).

Personal protective equipment

Respiratory protection : In the case of hazardous fumes, wear self contained breathing apparatus.

Eye protection : goggles

Hand protection : rubber or plastic gloves

Skin and body protection : long sleeved clothing

Hygiene measures : Keep away from food, drink and animal feeding stuffs.
Wash hands before breaks and immediately after handling the product.

Protective measures : Avoid contact with skin, eyes and clothing.

Avoid exceeding the Exposure Standards by use of adequate ventilation / extraction. If this is not possible, use appropriate personal protective equipment meeting AS/NZS 1715 and AS/NZS 1716.

Avoid contact with skin and eyes by wearing long impervious gloves, (Rubber, Neoprene, PVC complying to AS 2161) and industrial safety glasses. Respiratory protection complying with AS 1715, 1716 should be worn if ventilation at the workplace is inadequate. Apply barrier creams to exposed skin areas.

Use with adequate ventilation. If risk of inhalations exists, wear an organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: liquid
Colour	: light yellow
Odour	: amine-like
pH	: approx.11 at (20 °C) 1:1 in water
Boiling point	: > 200 °C
Thermal decomposition	: > 200 °C
Flash point	: 115 °C Method: DIN 51758 (Pensky-Martens Closed Cup)
Vapour pressure	: 4 Pa at 20 °C
Density	: 0.95 - 1.00 g/cm ³ at 25 °C
Water solubility	: at 20 °C Note: practically insoluble
Miscibility with water	: immiscible at 20 °C
Viscosity, dynamic	: 50 - 80 mPa.s at 25 °C

10. STABILITY AND REACTIVITY

Conditions to avoid	: Note: Take necessary action to avoid static electricity discharge.
Materials to avoid	: Strong acids and strong bases. Strong oxidizing agents.
Hazardous decomposition products	: Carbon oxides. Nitrogen oxides. Burning produces obnoxious and toxic fumes. Product will not decompose explosively.
Hazardous reactions	: Product as received will not present a dust explosion hazard. If cured material made using this product is to be machined, or sanded, a dust explosion hazard may be created. All dust generated should be removed as quickly as possible, preferably by the use of a vacuum cleaner.

Ident-No: ARADUR 249 LC**Hazardous according to the criteria of NOHSC.**

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11. TOXICOLOGICAL INFORMATION

- Acute oral toxicity : LD50 rat
Dose: approx. > 1,000 mg/kg
- Remarks: Swallowing can cause irritation of the gastro-intestinal tract, nausea, vomiting, diarrhoea and abdominal pain.
- Acute inhalation toxicity : Remarks: Where product is used in poorly ventilated areas, and/or in confined spaces and/or at elevated temperatures, vapours may be irritating to the respiratory system.
- Eye irritation : Corrosive rabbit
- Skin irritation : Corrosive rabbit dermal
- Sensitization : Causes sensitization.
guinea pig dermal
- Further information : Chronic exposure: Product is a skin sensitiser. Repeated or prolonged skin contact may result in allergic contact dermatitis.

12. ECOLOGICAL INFORMATION**Ecotoxicity effects****Further information on ecology**

- Additional ecological information : Avoid subsoil penetration.
Prevent product from entering drains.
Do not contaminate surface water.

13. DISPOSAL CONSIDERATIONS

- Product : Spilt / waste material should be disposed of by incineration by an approved agent according to local regulations.
- Container : Empty containers should either be sent to an approved agent for cleaning and recycling or incineration according to local regulations.

14. TRANSPORT INFORMATION**Land transport**

Ident-No: ARADUR 249 LC**Hazardous according to the criteria of NOHSC.**

Version 1

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Road/ADR:

UN-No: 2289
Class: 8
Item: C7
Risk No.: 80
ADR/RID-Labels: 8
Proper shipping name: ISOPHORONEDIAMINE SOLUTION

HAZCHEM-CODE: 2X**Rail/RID:**

UN-No: 2289
Class: 8
Item: C7
Risk No.: 80
ADR/RID-Labels: 8
Proper shipping name: ISOPHORONEDIAMINE SOLUTION

Sea transport**IMDG:**

UN-No: 2289
Class: 8
Packaging group: III
ADR/RID-Labels: 8
MFAG:
EmS: F-A S-B
Proper shipping name: ISOPHORONEDIAMINE SOLUTION

Air transport**IATA-DGR:**

UN/ID No.: UN 2289
Class: 8
Packaging group: III
Packing instruction (cargo aircraft): 820
ADR/RID-Labels: 8
Proper shipping name: ISOPHORONEDIAMINE SOLUTION

15. REGULATORY INFORMATION**Labelling according to EEC Directive**

Labelling required

Symbol(s): : Xn Harmful
C Corrosive

R-phrase(s) : R20/21/22 Harmful by inhalation, in contact with skin

Ident-No: ARADUR 249 LC**Hazardous according to the criteria of NOHSC.**

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	R34	and if swallowed.
	R41	Causes burns.
	R43	Risk of serious damage to eyes.
		May cause sensitization by skin contact.
S-phrases(s)	: S23	Do not breathe vapour, spray.
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
	S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
Hazardous components which must be listed on the label	: isophorone diamine	
	polyoxypropylene diamine	
	phenol	
	trimethylhexamethylenediamine	

National legislation**Notification status**

: AICS yes

16. OTHER INFORMATION

All information is based on results gained from experience and tests and is believed to be accurate but is given without acceptance of liability for loss or damage attributable to reliance thereon as conditions of use lie outside our control. Users should always carry out sufficient tests to establish the suitability of any products for their intended applications. No statements shall be incorporated in any contract unless expressly agreed in writing nor construed as recommending the use of any product in conflict of any patent. All goods are supplied subject to Vantico's General Conditions of Sale.

CONTACT POINT:

EH&S MANAGER

TELEPHONE: (03) 9280 2325 or (03) 9280 2300 (switch)

FACSIMILE: (03) 9280 2329