

Ident-No: ARALDITE F**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 : ARALDITE F
 Use : General purpose filled epoxy resin

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**

Bisphenol A epoxy resin
 substance

Hazardous components

Chemical Name	CAS-No.	Symbol(s):	R-phrases)	Concentration [%]
reaction product: bisphenol A- (epichlorhydrin); epoxy resin (number average molecular weight < 700)	25068-38- 6	Xi, N	R36/38 R43 R51/53	100.00

3. HAZARDS IDENTIFICATION

Irritating to eyes and skin.
 May cause sensitization by skin contact.
 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Poison schedule: 5

4. FIRST AID MEASURES

Inhalation : Move to fresh air.
 If symptoms persist, call a physician.

Eye contact : Rinse immediately with plenty of water for at least 15 minutes.
 If eye irritation persists, consult a specialist.

Skin contact : Wash off with soap and plenty of water.
 If skin irritation persists, call a physician.

Ingestion : Immediately give plenty of water (if possible charcoal slurry).
 If a person vomits when lying on his back, place him in the
 recovery position.
 Oxygen or artificial respiration if needed.
 Do not induce vomiting.

Ident-No: ARALDITE F**Hazardous according to the criteria of NOHSC.**

Version 1

Print Date 04.08.2003

Revision Date 04.07.2003

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.
Carbon dioxide (CO₂).
Foam.
Dry powder.

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

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

Further information : Burning produces obnoxious and toxic fumes.
Carbon oxides.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Avoid contact with skin, eyes and clothing.

Environmental precautions : Prevent product from entering drains.
Do not contaminate surface water.
Avoid subsoil penetration.

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

Methods for cleaning up : Soak up with inert absorbent material and dispose of as hazardous waste.

7. HANDLING AND STORAGE**Handling**

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

Storage

Further information on storage conditions : Keep away from food, drink and animal feeding stuffs.
Keep container tightly closed.
Keep at temperatures between 2 and 40°C.

Ident-No: ARALDITE F**Hazardous according to the criteria of NOHSC.**

Version 1

Print Date 04.08.2003

Revision Date 04.07.2003

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

Components	CAS-No.	Control parameters	Update	Basis
------------	---------	--------------------	--------	-------

Engineering measures

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

Eye protection : Tightly fitting safety goggles.
Face-shield.

Hand protection : rubber or plastic gloves

Skin and body protection : Protective suit.
Safety shoes.

Protective measures : 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid

Colour : yellow

Odour : slight

pH : approx.8
at (20 °C)
1:1 in water

Boiling point : > 200 °C

Thermal decomposition : > 200 °C

Flash point : > 200 °C
Method: DIN 51758 (Pensky-Martens Closed Cup)

Vapour pressure : < 0.01 Pa
at 20 °C

Density : 1.17 g/cm³
at 25 °C

Ident-No: ARALDITE F**Hazardous according to the criteria of NOHSC.**

Version 1

Print Date 04.08.2003

Revision Date 04.07.2003

Water solubility	:	at 20 °C Note: practically insoluble
Miscibility with water	:	immiscible
Viscosity, dynamic	:	9 - 13 Pa.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. 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.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	:	LD50 rat Dose: > 5,000 mg/kg Remarks: No adverse health effects expected, however large amounts may cause nausea and vomiting.
Eye irritation	:	irritating rabbit
Skin irritation	:	irritating rabbit dermal
Sensitization	:	Causes sensitization. guinea pig dermal
Further information	:	Chronic exposure: Repeated or prolonged contact with low molecular weight (liquid) epoxy resins may result in skin sensitisation.

Ident-No: ARALDITE F**Hazardous according to the criteria of NOHSC.**

Version 1

Print Date 04.08.2003

Revision Date 04.07.2003

12. ECOLOGICAL INFORMATION**Elimination information (persistence and degradability)**

Biodegradability : Result: Not readily biodegradable.

Ecotoxicity effectsToxicity to fish : LC50
Species:
Dose: 2.4 mg/l
Exposure time: 96 hToxicity to daphnia : EC50
Species: Daphnia magna Straus 1820
Dose: 3.6 mg/l
Exposure time: 24 h**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**

Road/ADR:

UN-No: 3082
Class: 9
Item: M6
Risk No.: 90
ADR/RID-Labels: 9
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
contains: BISPHENOL A EPOXY RESIN

Rail/RID:

UN-No: 3082

Ident-No: ARALDITE F**Hazardous according to the criteria of NOHSC.**

Version 1

Print Date 04.08.2003

Revision Date 04.07.2003

Class: 9
 Item: M6
 Risk No.: 90
 ADR/RID-Labels: 9
 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
 N.O.S.
 contains: BISPHENOL A EPOXY RESIN

Sea transport*IMDG:*

UN-No: 3082
 Class: 9
 Packaging group: III
 ADR/RID-Labels: 9
 MFAG:
 EmS: F-A S-F
 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
 N.O.S.
 contains: (BISPHENOL A EPOXY RESIN)

Air transport*IATA-DGR:*

UN/ID No.: UN 3082
 Class: 9
 Packaging group: III
 Packing instruction (cargo aircraft): 914
 ADR/RID-Labels: 9
 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
 N.O.S.
 contains: (BISPHENOL A EPOXY RESIN)

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

Labelling required

Symbol(s):	: Xi N	Irritant Dangerous for the environment
R-phrases(s)	: R36/38 R43 R51/53	Irritating to eyes and skin. May cause sensitization by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrases(s)	: S28	After contact with skin, wash immediately with plenty of soap and water.

Ident-No: ARALDITE F**Hazardous according to the criteria of NOHSC.**

Version 1

Print Date 04.08.2003

Revision Date 04.07.2003

S37/39

Wear suitable gloves and eye/face protection.

S61

Avoid release to the environment. Refer to special instructions/Safety data sheets.

Exceptional labelling of special preparations : Contains epoxy constituents. See information supplied by the manufacturer.

Hazardous components which must be listed on the label : reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight < 700)

National legislation**Notification status**

: AICS yes

: EINECS yes

: TSCA 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