

**Ident-No: ARALDITE F CI****HAZARDOUS SUBSTANCE. DANGEROUS GOODS**

Version 1

Print Date 13.07.2006

Revision Date 28.12.2005

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

Trade name : ARALDITE F CI  
 Use : Component used for the manufacture of electrical insulation parts

Company : Huntsman Advanced Materials (Australia)  
 PTY Ltd  
 Gate 3, Ballarat Road  
 3023 Deer Park

Telephone : +61393616060  
 Telefax : +61393616066  
 Emergency telephone number : Australia: 1800 786 152/New Zealand : 0800 767 437/Asia Pacific: + 65 6336 6011

**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.

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Oxygen or artificial respiration if needed.  
Do not induce vomiting.

**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 (CO<sub>2</sub>).  
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 Huntsman Advanced Materials. 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.

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Keep at temperatures between 2 and 40°C.

**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/m<sup>3</sup>) or the ACGIH Exposure Standard for respirable dusts (3mg/m<sup>3</sup>).

**Personal protective equipment**

- Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment.  
Filter type AX-P2 (organic vapours, particles)
- Eye protection : Tightly fitting safety goggles.  
Face-shield.
- Hand protection : Material of gloves for long term application (BTT>480 min):  
Butyl rubber  
Ethyl Vinyl Alcohol Laminate (EVAL)  
Material of gloves for short term/splash application (10 min<BTT<480 min):  
Nitrile rubber  
Neoprene rubber  
Use gloves approved to relevant standards e.g. EN 374 (Europe), F739 (US).  
Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material and dexterity. Always seek advice from glove suppliers.  
Additional information can be found for instance at [www.gisbau.de](http://www.gisbau.de)
- 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

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|                        |   |
|------------------------|---|
| Colour                 | : yellow  |
| Odour                  | : slight  |
| pH                     | : approx.8<br>at (20 °C)<br>1:1 in water                    |
| Boiling point          | : > 200 °C  |
| Thermal decomposition  | : > 200 °C  |
| Flash point            | : > 200 °C<br>Method: DIN 51758 (Pensky-Martens Closed Cup) |
| Vapour pressure        | : < 0.01 Pa<br>at 20 °C                                     |
| Density                | : 1.17 g/cm <sup>3</sup><br>at 25 °C                        |
| Water solubility       | : at 20 °C<br>Note: practically insoluble                   |
| Miscibility with water | : immiscible  |
| Viscosity, dynamic     | : 9 - 13 Pa.s<br>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.<br>Strong oxidizing agents.  |
| Hazardous decomposition products | : Carbon oxides. Burning produces obnoxious and toxic fumes.<br><br>Product will not decompose explosively.   |
| Hazardous reactions              | : Product as received will not present a dust explosion hazard.<br>If cured material made using this product is to be machined, or sanded, a dust explosion hazard may be created.<br>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<br>Dose: > 5,000 mg/kg   |
|                     | Remarks: No adverse health effects expected, however large amounts may cause nausea and vomiting. |

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- 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 : 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.

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

- Biodegradability : Result: Not readily biodegradable.

**Ecotoxicity effects**

- Toxicity to fish : LC50  
Species:  
Dose: 2.4 mg/l  
Exposure time: 96 h
- Toxicity 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.

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**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

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

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

**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.

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contains: (BISPHENOL A EPOXY RESIN)

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

Labelling required

|  |   |  |
|--|---|--|
| Symbol(s):   | : Xi<br>N   | Irritant<br>Dangerous for the environment  |
| R-phrase(s)  | : R36/38<br>R43<br>R51/53   | Irritating to eyes and skin.<br>May cause sensitization by skin contact.<br>Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  |
| S-phrase(s)  | : S28<br><br>S37/39<br><br>S61  | After contact with skin, wash immediately with plenty of soap and water.<br>Wear suitable gloves and eye/face protection.<br>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

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**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 Huntsman Advanced Materials General Conditions of Sale.

**CONTACT POINT:**

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