

Ident-No: ARALDITE AY 103

Version 4
Revision Date 28.01.2004

Print Date 30.04.2004

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product information

Trade name : ARALDITE AY 103

Use : Resin for adhesive systems

Company : Huntsman Advanced Materials
(UK) Ltd
Ickleton Road
CB2 4QA Duxford

Telephone : +441223832121
Telefax : +441223493322
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number

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Modified bisphenol A epoxy resin
preparation

Hazardous components

Chemical Name	CAS-No.	Symbol(s):	R-phrase(s)	Concentration [%]
reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight < 700)	25068-38-6	Xi, N	R36/38 R43 R51/53	75.00 - 85.00
dibutyl phthalate EC-No.: 201-557-4	84-74-2	T, N	R61 R50 R62	15.00 - 21.00

3. HAZARDS IDENTIFICATION

Irritating to eyes and skin.
May cause sensitization by skin contact.
Possible risk of impaired fertility.
May cause harm to unborn child.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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).

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Obtain medical attention.
Do not induce vomiting.

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 : Keep away from sources of ignition - No smoking.
Avoid contact with skin, eyes and clothing.
Do not breathe vapours/dust.
- Environmental precautions : Prevent product from entering drains.
Do not contaminate surface water.
Avoid subsoil penetration.
- 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 : irritating
Provide sufficient air exchange and/or exhaust in work rooms.
Avoid formation of aerosol.
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.
- Storage hazard class : Storage class 10, Environmentally hazardous liquids
Huntsman Advanced Materials

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Control parameters	Update	Basis
dibutyl phthalate	84-74-2	5 mg/m ³ 10 mg/m ³		EH40 OES EH40 OES

Engineering measures

No special precautions required.

Personal protective equipment

- Respiratory protection : In case of insufficient ventilation wear suitable respiratory 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, eyes and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : liquid
- Colour : clear
yellow
- Odour : slight
- pH : 6 - 7
at (20 °C)
1:1 in water
- Boiling point : > 200 °C
- Thermal decomposition : > 200 °C
- Flash point : > 180 °C
Method: DIN 51758 (Pensky-Martens Closed Cup)
- Vapour pressure : approx.0.01 Pa
at 20 °C
- Density : 1.1 g/cm³
at 25 °C

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Water solubility : at 20 °C
Note: practically insoluble

Miscibility with water : immiscible
at 20 °C

Viscosity, dynamic : 1,400 - 1,800 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. Burning produces obnoxious and toxic fumes.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 rat
Dose: > 5,000 mg/kg

Eye irritation : irritating
rabbit

Skin irritation : irritating
rabbit
dermal

Sensitization : Causes sensitization.
guinea pig
dermal

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Biodegradability : Result: Not readily biodegradable.

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

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Product : Waste Key Number: 070208
Must be incinerated, when in compliance with local regulations.

Container : Empty containers can be landfilled after cleaning, when in compliance with the Environmental Protection (Duty of Care) Regulations 1991.

14. TRANSPORT INFORMATION

Land transport

ADR:

UN-No: 3082
Class: 9
Classification code: M6
Packaging group: III
Risk No.: 90
ADR/RID-Labels: 9
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

contains: BISPHENOL A EPOXY RESIN
contains: DIBUTYL PHTHALATE

RID:

UN-No: 3082
Class: 9
Packaging group: III
Risk No.: 90
ADR/RID-Labels: 9
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

contains: BISPHENOL A EPOXY RESIN
contains: DIBUTYL PHTHALATE

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)
contains: (DIBUTYL PHTHALATE)
MARINE POLLUTANT

Air transport

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IATA-DGR:

UN/ID No.:	UN 3082
Class:	9
Packaging group:	III
Packing instruction (cargo aircraft):	914
Max. Qty/Pack.: (999.00 = No limit)	999.00 L
Packing instruction (passenger aircraft):	914
Max. Qty/Pack.: (999.00 = No limit)	999.00 L
ADR/RID-Labels:	9
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
contains:	(BISPHENOL A EPOXY RESIN)
contains:	(DIBUTYL PHTHALATE)

15. REGULATORY INFORMATION

Labelling according to EEC Directive

Labelling required

Symbol(s):	: T N	Toxic Dangerous for the environment
R-phrase(s)	: R36/38 R43 R62 R61 R51/53	Irritating to eyes and skin. May cause sensitization by skin contact. Possible risk of impaired fertility. May cause harm to unborn child. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	: S28 S37/39 S45 S53 S61	After contact with skin, wash immediately with plenty of soap and water. Wear suitable gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible). Avoid exposure - obtain special instructions before use. 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. Restricted to professional users.	
Hazardous components which must be listed on the label	: reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight < 700) dibutyl phthalate	

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EC-No.: 201-557-4

National legislation

Notification status

: EINECS yes

: TSCA yes

: DSL yes

: AICS yes

: KECI (KR) yes

: JEX (JP) yes

16. OTHER INFORMATION

List of R-phrases (Section 2)

R36/38	Irritating to eyes and skin.
R43	May cause sensitization by skin contact.
R50	Very toxic to aquatic organisms.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R61	May cause harm to unborn child.
R62	Possible risk of impaired fertility.

The provision of Safety Data Sheets comes under Regulation 6 of CHIP (CHIP is the recognised abbreviation for the Chemicals Hazard Information and Packaging Regulations). This is an addition to the Health and Safety at Work Act 1974. Users of products supplied by Huntsman Advanced Materials should take appropriate measures to ensure working practices are in accordance with the Control of Substances Hazardous to Health Regulations (COSHH).

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