

**Ident-No: ARALDITE 2011 RESIN(E)/HARZ**Version 6  
Revision Date 21.02.2003

Print Date 13.03.2003

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

Trade name : ARALDITE 2011 RESIN(E)/HARZ

Company : Vantico Ltd.  
Ickleton Road  
CB2 4QA Duxford

Telephone : +441223832121  
Telefax : +441223493322  
Emergency telephone : +41 61 966 40 00  
number

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

Formulated 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	70.00 - 82.00
bisphenol F-epoxy resin	9003-36-5	Xi, N	R36/38 R43 R51/53	4.00 - 10.00

**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.

**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).  
Do not induce vomiting.  
Obtain medical attention.

**Ident-No: ARALDITE 2011 RESIN(E)/HARZ**Version 6  
Revision Date 21.02.2003

Print Date 13.03.2003

**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**

- Environmental precautions : Do not allow material to contaminate ground water system.  
Prevent product from entering drains.
- 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.  
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  
Vantico Ltd.

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

Components	CAS-No.	Control parameters	Update	Basis

**Personal protective equipment**

- Eye protection : Tightly fitting safety goggles.

**Ident-No: ARALDITE 2011 RESIN(E)/HARZ**Version 6  
Revision Date 21.02.2003

Print Date 13.03.2003

	Face-shield.
Hand protection	: rubber or plastic gloves
Skin and body protection	: Protective suit. Safety shoes.
Protective measures	: Keep away from sources of ignition - No smoking. Avoid contact with skin, eyes and clothing.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Form	: paste
Colour	: natural colour
Odour	: slight
pH	: approx.6 at (20 °C) 1:1 in water
Boiling point	: > 200 °C
Thermal decomposition	: > 200 °C
Flash point	: 210 °C Method: DIN 51758 (Pensky-Martens Closed Cup)
Vapour pressure	: < 0.1 Pa at 20 °C
Density	: 1.15 - 1.25 g/cm <sup>3</sup> at 25 °C
Water solubility	: at 20 °C Note: practically insoluble
Miscibility with water	: immiscible at 20 °C
Viscosity, dynamic	: 30 - 50 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.

**Ident-No: ARALDITE 2011 RESIN(E)/HARZ**Version 6  
Revision Date 21.02.2003

Print Date 13.03.2003

**11. TOXICOLOGICAL INFORMATION**

Acute oral toxicity	:	LD50 rat Dose: > 5,000 mg/kg
Eye irritation	:	irritating rabbit
Skin irritation	:	irritating rabbit dermal
Sensitization	:	sensitizing guinea pig dermal

**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	:	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

**Ident-No: ARALDITE 2011 RESIN(E)/HARZ**Version 6  
Revision Date 21.02.2003

Print Date 13.03.2003

*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

**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  
 Max. Qty/Pack.: 999.00 L  
 ( 999.00 = No limit )  
 Packing instruction (passenger aircraft): 914  
 Max. Qty/Pack.: 999.00 L  
 ( 999.00 = No limit )  
 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 Irritant  
 N Dangerous for the environment

R-phrase(s) : R36/38 Irritating to eyes and skin.

**Ident-No: ARALDITE 2011 RESIN(E)/HARZ**Version 6  
Revision Date 21.02.2003

Print Date 13.03.2003

	R43 R51/53	May cause sensitization by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	: S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S28	After contact with skin, wash immediately with plenty of soap and water.
	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**

- : EINECS yes
- : TSCA yes
- : DSL yes
- : AICS yes
- : KECI (KR) yes
- : JEX (JP) yes

**16. OTHER INFORMATION****List of R-phrases (Section 2)**



**Ident-No: ARALDITE 2011 RESIN(E)/HARZ**

Version 6  
Revision Date 21.02.2003

Print Date 13.03.2003

R36/38	Irritating to eyes and skin.
R43	May cause sensitization by skin contact.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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 Vantico Ltd should take appropriate measures to ensure working practices are in accordance with the Control of Substances Hazardous to Health Regulations (COSHH).

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.