

**Ident-No: ARALDIT CY 221**

Version 1  
Revision Date 27.01.2004

Print Date 01.07.2005

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

### Product information

Trade name : ARALDIT CY 221

Company : Huntsman Advanced Materials (Europe)BVBA  
Everslaan 45  
3078 Everberg / Belgium

Telephone : +41619661599  
Telefax : +41619661589  
Emergency telephone : +41 61 966 40 00 (in France ORFILA : +33(0)145425959)  
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	50.00 - 62.00
diglycidylether of polypropyleneglycol	9072-62-2	Xi	R36/38 R43	38.00 - 50.00

## 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).  
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.

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## 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 : 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 : Provide sufficient air exchange and/or exhaust in work rooms.  
Ensure adequate ventilation.  
Keep away from sources of ignition - No smoking.  
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.  
Store at room temperature in the original container.
- 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
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### Personal protective equipment

- Respiratory protection : No special protective equipment required.
- Eye protection : Tightly fitting safety goggles.  
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 : liquid
- Colour : light yellow  
clear
- Odour : slight
- Boiling point : > 200 °C
- Thermal decomposition : > 165 °C
- Flash point : 188 °C  
Method: DIN 51758 (Pensky-Martens Closed Cup)
- Vapour pressure : 0.01 Pa  
at 20 °C
- Density : 1.125 g/cm<sup>3</sup>  
at 20 °C
- Water solubility : at 20 °C  
Note: practically insoluble
- Miscibility with water : immiscible
- Viscosity, dynamic : 300 - 500 mPa.s  
at 25 °C

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## 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

### 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

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**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

**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)

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## 15. REGULATORY INFORMATION

### Labelling according to EEC Directive

Labelling required

Symbol(s):	: Xi N	Irritant Dangerous for the environment
R-phrase(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-phrase(s)	: S28  S37/39  S61	After contact with skin, wash immediately with plenty of soap and water. Wear suitable gloves and eye/face protection. 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

## 16. OTHER INFORMATION

### List of R-phrases (Section 2)

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 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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