

Ident-No: XD 4501 ADHESIVE

Version 5
Revision Date 22.03.2009

Print Date 10.04.2009

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

Product information

Trade name : XD 4501 ADHESIVE

Use : 1-Component adhesive system

Company : Huntsman Advanced Materials (Europe)BVBA
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number

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2. 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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Bisphenol A epoxy resin containing reactive diluent preparation

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	50.00 - 80.00
chlorotoluron EC-No.: 239-592-2	15545-48-9	N, Xn	R50/53 R63 R40	3.00 - 9.00
butanedioldiglycidyl ether EC-No.: 219-371-7	2425-79-8	Xn	R20/21 R36/38 R43 R52/53	1.00 - 5.00

4. FIRST AID MEASURES

Inhalation : Move to fresh air.
Call a physician immediately.

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

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- Skin contact : Wash off with soap and plenty of water.
If skin irritation persists, call a physician.
- Ingestion : Do not induce vomiting.
Immediately give plenty of water (if possible charcoal slurry).
Obtain medical attention.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Water spray.
Dry powder.
Carbon dioxide (CO₂).
Foam.
- Extinguishing media which must not be used for safety reasons : High volume water jet.
- Specific hazards during fire fighting : Burning produces obnoxious and toxic fumes.
Carbon oxides.
- Special protective equipment for fire-fighters : Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Do not breathe vapours/dust.
Avoid contact with skin, eyes and clothing.
Ensure adequate ventilation.
- Environmental precautions : Do not allow material to contaminate ground water system.
- Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

7. HANDLING AND STORAGE

Handling

- Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
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 8 °C.

- Storage hazard class : Storage class 10, Environmentally hazardous liquids
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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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Engineering measures

Avoid formation of aerosol.
Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.

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
- Skin and body protection : Protective suit.
Safety shoes.
- Protective measures : Do not breathe vapours/dust.
Keep away from sources of ignition - No smoking.
Avoid contact with skin, eyes and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : paste
- Colour : white
- Odour : slight
- Thermal decomposition : > 200 °C

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

Water solubility : at 20 °C
Note: soluble

Miscibility with water : miscible
at 20 °C

Viscosity, dynamic : 60 - 140 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.

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

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.

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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

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

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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)	450.00 L
Packing instruction (passenger aircraft):	914
Max. Qty/Pack.: (999.00 = No limit)	450.00 L
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-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) butanedioldiglycidyl ether EC-No.: 219-371-7 chlorotoluron EC-No.: 239-592-2	

National legislation

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Notification status

: EINECS yes

: TSCA yes

16. OTHER INFORMATION

List of R-phrases (Section 3)

R20/21	Harmful by inhalation and in contact with skin.
R36/38	Irritating to eyes and skin.
R40	Limited evidence of a carcinogenic effect.
R43	May cause sensitization by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term effects in the aquatic environment.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R63	Possible risk of harm to the unborn child.

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).

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.