SAFETY DATA SHEET

according to applicable EC directive

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Ident-No: ARALDITE 2011 HARDENER/HAERTER/DURCISSEUR

Version *9* Revision Date 20.03.2009 Print Date 09.05.2009

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

Product information

Trade name	: ARALDITE 2011 HARDENER/HAERTER/DURCISSEUR
Use	: Component for adhesive applications
Company	: Huntsman Advanced Materials (Europe)BVBA Everslaan 45 3078 Everberg / Belgium
Telephone	: +41619661599
Telefax	: +41619661589
Emergency telephone number	: +32 35 751 234 (in France ORFILA : +33(0)145425959)

For further Product EHS related questions concerning this document or its contents, please contact:

E-Mail: global_product_ehs_admat@huntsman.com

2. HAZARDS IDENTIFICATION

Irritating to eyes and skin. May cause sensitization by skin contact.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Formulated polyaminoamide preparation

Hazardous components

Chemical Name	CAS-No.	Symbol(s):	R-phrase(s)	Concentration [%]
N(3-dimethylaminopropyl)- 1,3-propylenediamine EC-No.: 234-148-4	10563-29- 8	С	R21/22 R34 R43	4.00 - 10.00

4. FIRST AID MEASURES

Inhalation	: Move to fresh air. Call a physician immediately.	
Eye contact	: Rinse immediately with plenty of water for at least 1 If eye irritation persists, consult a specialist.	5 minutes.
Skin contact	: Wash off immediately with soap and plenty of water If skin irritation persists, call a physician.	<i>.</i> .
Ingestion	 Immediately give plenty of water (if possible charco Do not induce vomiting. Obtain medical attention. 	al slurry).

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5. FIRE-FIGHTING MEASU	JRES
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. Nitrogen oxides.
6. ACCIDENTAL RELEASE	E MEASURES
Personal precautions	: Avoid contact with skin, eyes and clothing. Keep away from sources of ignition - No smoking. 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 STORA	AGE
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 40 ℃.
Storage hazard class Huntsman Advanced Materials	: Storage class 12, Liquids, not dangerous

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Components with workplace control parameters				
Components	CAS-No	o. Control parameters	Update	Basis
Engineering measures				
No special precautions r	equired.			
Personal protective equ	uipment			
Respiratory protection	ec	case of insufficient v quipment. Iter type AX-P2 (orga		
Eye protection	: Ti	ghtly fitting safety go	ggles.	
Hand protection	Bi Eti M N V U Si fre Si Si Ad	aterial of gloves for lo utyl rubber thyl Vinyl Alcohol Lan aterial of gloves for s in <btt<480 min):<br="">itrile rubber eoprene rubber se gloves approved to Europe), F739 (US). uitability and durabilit equency and duration aterial and dexterity. uppliers. dditonal information c ww.gisbau.de</btt<480>	ninate (EVAL) hort term/splash appl o relevant standards y of a glove is depend of contact, chemical Always seek advice f	ication (10 e.g. EN 374 dent on usage, e.g resistance of glov rom glove
Skin and body protection	: lo	ng sleeved clothing		
Hygiene measures	W	eep away from food, /ash hands before bre roduct.		
Protective measures		eep away from source void contact with skin		oking.
PHYSICAL AND CHE		PROPERTIES		
Form	: li	quid		
Colour	: li	ght yellow		
Odour	: s	light		
рН	: 1	0		

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	1:1 in water
Boiling point	: > 200 °C
Thermal decomposition	: > 200 ℃
Flash point	: 110 ℃ Method: DIN 51758 (Pensky-Martens Closed Cup)
Vapour pressure	: 4 Pa at 20 ℃
Density	: 0.95 g/cm3 at 25 ℃
Water solubility	: at 20 ℃ Note: practically insoluble
Viscosity, dynamic	: 20 - 35 Pa.s at 25 ℃
10. STABILITY AND REAC	тілітү
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.
producis	Nitrogen oxides. Burning produces obnoxious and toxic fumes.
11. TOXICOLOGICAL INFO	ORMATION
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

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	n (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.
DISPOSAL CONSID	DERATIONS
Product	: Waste Key Number: 070204 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.
ADR:	
<i>ADH</i> .	
Regulation:	Not dangerous goods
Regulation: <i>RID:</i>	Not dangerous goods
-	Not dangerous goods Not dangerous goods
RID:	
<i>RID:</i> Regulation:	
<i>RID:</i> Regulation: Sea transport	
RID: Regulation: Sea transport IMDG:	Not dangerous goods
RID: Regulation: Sea transport IMDG: Regulation:	Not dangerous goods
RID: Regulation: Sea transport IMDG: Regulation: Air transport	Not dangerous goods Not dangerous goods

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Print Date 09.05.2009 Version 9 Revision Date 20.03.2009 Labelling required Symbol(s): : Xi Irritant R-phrase(s) : R36/38 Irritating to eyes and skin. R43 May cause sensitization by skin contact. S-phrase(s) S26 In case of contact with eyes, rinse : immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves S36/37/39 and eye/face protection. Hazardous components : N(3-dimethylaminopropyl)-1,3-propylenediamine which must be listed on the EC-No.: 234-148-4 label **National legislation** Notification status EINECS yes : TSCA yes 2 : DSL yes : AICS yes : KECI (KR) yes 1 ENCS (JP) yes INV (CN) yes 1 PICCS (PH) no : **16. OTHER INFORMATION** List of R-phrases (Section 3)

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R21/22	Harmful in contact with skin and if swallowed.
R34	Causes burns.
R43	May cause sensitization by skin contact.

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.