# **SAFETY DATA SHEET**



ARALDITE KIT 680 A CI

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

### Identification of the substance or mixture

Product name Product type Product description Use of the substance/mixture	:	ARALDITE KIT 680 A CI Liquid. Preparation Resin for adhesive systems
Supplier	:	Huntsman Advanced Materials (Europe)BVBA Everslaan 45 3078 Everberg / Belgium Tel.: +41 61 299 20 41 Fax: +41 61 299 20 40
Emergency telephone number	:	EUROPE: +32 35 75 1234 France ORFILA: +33(0)145425959 ASIA: +65 6336-6011 China: +86 20 39377888 Australia: 1800 786 152 New Zealand: 0800 767 437 USA: +1/800/424.9300

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### 2. HAZARDS IDENTIFICATION

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The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification	: Muta. Cat. 3; R68 Xi; R36/38 R43 N; R51/53
Human health hazards	<ul> <li>Possible risk of irreversible effects. Irritating to eyes and skin. May cause sensitisation by skin contact.</li> </ul>
Environmental hazards	: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See Section 11 for more detailed information on health effects and symptoms.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient name	CAS number	%	Number	Classification		
reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight < 700)	25068-38-6	30 - 60		Xi; R36/38 [1] R43 N; R51/53		
o-cresyl glycidyl ether	2210-79-9	7 - 13		Muta. Cat. 3; [1] R68 Xi; R38 R43 N; R51/53		
4,4'-isopropylidenediphenol	80-05-7	3 - 7		Repr. Cat. 3; [1] R62 Xi; R41, R37 R43		

#### 3 COMPOSITION/INFORMATION ON INGREDIENTS

			•
			R52
bisphenol F-epoxy resin	9003-36-5	1 - 3	Xi; R36/38 [1] R43 N; R51/53
See section 16 for the full text of the R-phrases declared above			

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] PBT-substance

[4] vPvB-substance

Occupational exposure limits, if available, are listed in Section 8.

#### **FIRST AID MEASURES** 4.

First-aid measures	
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See Section 11 for more detailed information on health effects and symptoms.

#### **FIRE-FIGHTING MEASURES** 5.

Extinguishing media	
Suitable	: Use an extinguishing agent suitable for the surrounding fire.
Not suitable	: None known.
Special exposure hazards	: In a fire or if heated, a pressure increase will occur and the container may burst.

#### **FIRE-FIGHTING MEASURES** 5.

		Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	:	Burning produces obnoxious and toxic fumes., Carbon oxides
Special protective equipment for fire-fighters	:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
Methods for cleaning up	
Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spill product.

#### HANDLING AND STORAGE 7.

Handling	: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Refer to special instructions/safety data sheet. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Storage	: Store between the following temperatures: 2 to 40°C (35.6 to 104°F). Store in

accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

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### 7. HANDLING AND STORAGE

Storage hazard class Huntsman Advanced Materials : Storage class 10, Environmentally hazardous liquids

### **Packaging materials**

Recommended

: Use original container.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values	
Ingredient name	Occupational exposure limits
No exposure limit value known	
Recommended monitoring procedures	: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.
Exposure controls	
Occupational exposure controls	: If user operations generate dust, fumes, gas, vapour or mist, use process enclosures local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Respiratory protection	: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hand protection	<ul> <li>Material of gloves for long term application (BTT&gt;480min):</li> <li>(BTT = Break Through Time)</li> </ul>
	butyl rubber, Ethyl Vinyl Alcohol Laminate (EVAL)
	Material of gloves for short term/splash application (10min <btt<480min): neoprene<="" nitrile="" rubber,="" td=""></btt<480min):>
	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.
Eye protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
Skin protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist befor handling this product.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>General information</b>				
Appearance				
Physical state	: Liquid. [Paste.]			
Colour	: White.			
Odour	: mild			
Important health, safety	and environmental information			
Boiling point	: >200°C (>392°F)			
Flash point	: Closed cup: >100°C (>212°F)			
Decomposition temperature	: >300°C (>572°F)			
Density	: 1.5 g/cm <sup>3</sup> [25°C (77°F)]			
Water solubility	: Slightly soluble			
Viscosity	: Dynamic: 35000 to 75000 mPa-s (35000 to 75000 cP)	25	deg C	

## **10. STABILITY AND REACTIVITY**

Chemical stability Possibility of hazardous reactions	<ul><li>The product is stable.</li><li>Under normal conditions of storage and use, hazardous reactions will not occur.</li></ul>
Conditions to avoid Materials to avoid Hazardous decomposition products	<ul> <li>No specific data.</li> <li>strong acids, strong bases, strong oxidising agents</li> <li>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</li> <li>Burning produces obnoxious and toxic fumes., Carbon oxides</li> </ul>

## **11. TOXICOLOGICAL INFORMATION**

<u>Toxicokinetics</u>							
Absorption	:	Not availa	ıble.				
Distribution	1	Not availa	ıble.				
Metabolism	:	Not availa	available.				
Elimination	:	Not availa	ıble.				
Potential acute health effects	í.						
Inhalation	:	No known	n significant effects	or critical hazards	6.		
Ingestion	:	Irritating to	o mouth, throat and	d stomach.			
Skin contact	:	Irritating to	o skin. May cause	sensitisation by sk	in contact.		
Eye contact	:	Irritating to	o eyes.				
Acute toxicity							
Product/ingredient name ARALDITE KIT 680 A CI reaction product: bisphenol A epichlorhydrin); epoxy resin ( average molecular weight <	ínùi		<b>Result</b> LD50 Oral LD50 Dermal	<b>Species</b> Rat Rat - Male, Female	<mark>Dose</mark> >2000 mg/kg >2000 mg/kg	Exposure - -	
		- )	LD50 Oral LC0 Inhalation Vapour	Rat - Female Rat - Male	>2000 mg/kg 0.00001 ppm	- 5 hours	
4,4'-isopropylidenediphenol			LD50 Dermal LD50 Oral	Rabbit Rat	>2000 mg/kg >2000 mg/kg	-	
bisphenol F-epoxy resin			LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-	
			LD50 Oral	Rat - Male, Female	>5000 mg/kg	-	
<b>Conclusion/Summary</b>	:	Not availa	ıble.				
Potential chronic health effec	:ts						
Chronic toxicity							
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## **11. TOXICOLOGICAL INFORMATION**

Product/ingredient name	Result	Species	Dose	Exposure
reaction product: bisphenol A-(	Sub-chronic	Rat - Male,	50 mg/kg	14 weeks; 7 days
epichlorhydrin); epoxy resin (number average molecular weight < 700)	NOAEL Oral	Female	J. J.	per week
	Sub-chronic NOEL : Dermal	Rat - Male, Female	10 mg/kg	13 weeks; 5 days per week
	Sub-chronic NOAEL Dermal	Mouse - Male	100 mg/kg	13 weeks; 3 days per week
4,4'-isopropylidenediphenol	Sub-chronic NOAEL Oral	Dog - Male, Female	75 mg/kg	90 days; 7 days per week
	Sub-chronic NOEC Inhalation Dusts and mists	Rat - Male, Female	10 mg/m3	13 weeks; 6 hours per day
bisphenol F-epoxy resin	Sub-chronic NOAEL Oral	Rat - Male, Female	250 mg/kg	13 weeks; 7 days per week
Conclusion/Summary : Not avail	able.			
Irritation/Corrosion				
Conclusion/Summary : Not avail	able.			
<u>Sensitiser</u>				
Product/ingredient name	Route of exposure	Species	Result	
ARALDITE KIT 680 A CI	skin	Guinea pig	Sensitising	
reaction product: bisphenol A-( epichlorhydrin); epoxy resin (number average molecular weight < 700)	skin	Mouse	Sensitising	
bisphenol F-epoxy resin	skin	Mouse	Sensitising	
Conclusion/Summary : Not avail	able.		-	
Carcinogenicity				
Product/ingredient name	Result	Species	Dose	Exposure
reaction product: bisphenol A-( epichlorhydrin); epoxy resin (number average molecular weight < 700)	Negative - Oral - NOAEL	Rat - Male, Female	15 mg/kg	2 years; 7 days per week
	Negative - Dermal - NOEL :	Rat - Female	1 mg/kg	2 years; 5 days per week
	Negative - Dermal - NOEL :	Mouse - Male	0.1 mg/kg	2 years; 3 days per week
4,4'-isopropylidenediphenol	Negative - Oral - NOAEL	Rat - Male, Female	-	103 weeks; 7 days per week
Conclusion/Summary : Not avail	able.			
Mutagenicity				
Product/ingredient name	Test	Experime		Result
reaction product: bisphenol A-( epichlorhydrin); epoxy resin (number average molecular weight < 700)	-	Subject: I	ent: In vitro Bacteria c activation: +/-	Positive
	-	Experime	ent: In vitro Mammalian-	Positive
		Cell: Son	natic c activation: +/-	
	-	Subject: I Animal	ent: In vivo Mammalian-	Negative
	-	Subject: I Animal	ent: In vivo Mammalian-	Negative
4,4'-isopropylidenediphenol			natic ent: In vitro bacteria/yeast	Negative

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### **11. TOXICOLOGICAL INFORMATION**

	OECD 474 Mamr Erythrocyte Micronucleus Tes		Metabolic a Experimen Subject: M Animal		Negative
bisphenol F-epoxy resin	OECD 471 Bacte Reverse Mutation		Experimen Subject: Ba Metabolic a		Positive
	OECD 476 In vitro Mammalian Cell ( Mutation Test		Experimen Subject: M Animal Cell: Soma	t: In vitro ammalian-	Positive
	OECD 473 In vitro Mammalian Chromosomal Aberration Test	D	Human Cell: Soma	ammalian-	Positive
	OECD 474 Mamr Erythrocyte Micronucleus Tes		Experimen Subject: M Animal Cell: Soma	ammalian-	Negative
	OECD 486 Unscheduled DN Synthesis (UDS) with Mammalian I Cells in vivo	Test	Experimen Subject: M Animal Cell: Soma	ammalian-	Negative
Conclusion/Summary : Not availa	able.				
<b>Teratogenicity</b>					
<b>Product/ingredient name</b> reaction product: bisphenol A-( epichlorhydrin); epoxy resin (number	<b>Result</b> Negative - Oral	<mark>Speci</mark> Rat - I	<b>es</b> Female	<mark>Dose</mark> >540 mg/kg	Exposure 10 days

egative - R ermal	abbit - Female	00	13 days; 6 hours per day
J		0,0	13 days
egative - Oral R	at - Female 6	640 mg/kg	-
egative - R ermal	abbit - Female		13 days; 6 hours per day
	ermal egative - Oral R egative - Oral R egative - R	ermal egative - Oral Rabbit - Female egative - Oral Rat - Female ( egative - Rabbit - Female :	ermal egative - Oral Rabbit - Female 180 mg/kg egative - Oral Rat - Female 640 mg/kg egative - Rabbit - Female >300 mg/kg

#### **Conclusion/Summary** : Not available.

Reproductive toxicity						
Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
reaction product: bisphenol A-( epichlorhydrin); epoxy resin (number average molecular weight < 700)	-	-	-	Rat - Male, Female	Oral	238 days; 7 days per week
4,4'-isopropylidenediphenol	-	-	-	Rat - Male, Female	Oral	7 days per week
bisphenol F-epoxy resin	-	-	-	Rat - Male, Female	Oral	238 days; 7 days per week

Conclusion/Summary	: Not available.	
Product name	Carcinogenic effects	Mutagenic effects

Product name	Carcinogenic effects	Mutagenic effect	s Developmental effects	Fertility effects
o-cresyl glycidyl ether 4,4'-isopropylidenediphenol		Muta. Cat. 3; R68		Repr. Cat. 3; R62
Chronic effects	: Once sensitiz very low level		eaction may occur when	subsequently exposed to
Carcinogenicity	: No known sig	nificant effects or critic	al hazards.	
Mutagenicity	: May cause he	eritable genetic effects,	based on animal data.	
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## **11. TOXICOLOGICAL INFORMATION**

Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.
Over-exposure signs/symp	toms
Inhalation	: No specific data.
Ingestion	: No specific data.
Skin	: Adverse symptoms may include the following: irritation redness
Eyes	: Adverse symptoms may include the following: irritation watering redness

### **12. ECOLOGICAL INFORMATION**

**Environmental effects** 

: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Water polluting material. May be harmful to the environment if released in large quantities.

	OECD 202 Daphnia sp.	Acute EC50 1.7 mg/L Fresh water	Daphnia	48 hours Static
	Daphnia sp. Acute Immobilisation Test and	mg/L Fresh water		
	Reproduction Test			
	-	Acute IC50 >100 mg/L Fresh water	Bacteria	3 hours Static
	OECD 203 Fish, Acute Toxicity Test	Acute LC50 1.5 mg/L Fresh water	Fish	96 hours Static
	OECD 211 Daphnia Magna Reproduction Test	Chronic NOEC 0. 3 mg/L Fresh water	Daphnia	21 days Semi- static
4,4'-isopropylidenediphenol	-	Acute EC50 3.9 to 10.2 mg/L	Daphnia	48 hours
	-	Acute EC50 2.5 to 3.1 mg/L	Algae - Green algae	96 hours
	-	Acute LC50 7.5 mg/L	Fish - Rainbow trout ( Oncorhynchus mykiss, Salmo gairdneri)	96 hours
bisphenol F-epoxy resin	OECD 201 Alga, Growth Inhibition Test	Acute EC50 1.8 mg/L Fresh water	Algae	72 hours Static
	OECD OECD 202: Part I ( Daphnia sp., Acute Immobilisation test)	Acute EC50 1.6 mg/L Fresh water	Daphnia	48 hours Static
	-	Acute IC50 >100 mg/L Fresh water	Bacteria	3 hours Static

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12. ECOLOGICAL INFORMA	ATION			
	OECD 203 Fish, Acute Toxicity Test	Acute LC50 0.55 mg/L Fresh water	Fish	96 hours Semi- static
	OECD 211 Daphnia Magna Reproduction Test	Chronic NOEC 0. 3 mg/L Fresh water	Daphnia	21 days Semi- static
Conclusion/Summary : Not av	vailable.			
Other ecological information				
<b>Biodegradability</b>				
Product/ingredient name	Test	Result	Dose	Inoculum
reaction product: bisphenol A-(	OECD Derived	5 % - Inherent -	20 mg/L Oxygen	-
epichlorhydrin); epoxy resin (number average molecular weight < 700)	from OECD 301F (Biodegradation Test)	28 days	consumption	
4,4'-isopropylidenediphenol	-	1 to 2 % - Inherent - 28 days	-	-
bisphenol F-epoxy resin	EU	0 % - Inherent - 28 days	3 mg/L Oxygen consumption	Activated sludge
Conclusion/Summary : Not av	vailable.			
Bioaccumulative potential				
	<u>LogP₀w</u> 3.242	<u>ВС</u> 31	Pc lo	<mark>otential</mark> w
bisphenol F-epoxy resin	2.7 to 3.6	-	hi	gh
Other adverse effects : No kn	own significant effects	or critical hazards.		

## **13. DISPOSAL CONSIDERATIONS**

Methods of disposal	:	The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
European waste catalogue ( EWC)	•	The relevant EU Directives and local, regional and national regulations must be complied with. It is among the tasks of the end user to assign the waste to waste codes specific to industrial sectors and processes according to the European Waste catalogue. It is recommended that the details be agreed with the waste disposer responsible.
Hazardous waste	:	The classification of the product may meet the criteria for a hazardous waste.

## **14. TRANSPORT INFORMATION**

### International transport regulations

### Proper shipping name

ADR	:	Environmentally hazardous substance, liquid, n.o.s. BISPHENOL A EPOXY RESIN 1,2-CRES GLYCIDYL ETHER (NAPHTHALENE, BIS(1-METHYLETHYL)-)	SYL
IMDG	:	Environmentally hazardous substance, liquid, n.o.s. (1,2-CRESYL GLYCIDYL ETHER) ( BISPHENOL A EPOXY RESIN) (NAPHTHALENE, BIS(1-METHYLETHYL)-). Marine pollutant ( Reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weigh 700), )	
ΙΑΤΑ	:	Environmentally hazardous substance, liquid, n.o.s. (1,2-CRESYL GLYCIDYL ETHER) ( BISPHENOL A EPOXY RESIN) (NAPHTHALENE, BIS(1-METHYLETHYL)-)	
Date of issue/Da revision	te	of : 11/5/2010.	9/12

## 14. TRANSPORT INFORMATION

Regulatory information	UN number	Classes	Packing group	Label	Additional information
Land - road/ railway ADR/RID Class	UN3082	9		Le contraction de la contracti	Classification code M6 Hazard identification 90 number
Sea IMDG Class	UN3082	9	- 111	₹ ¥2	Emergency schedules (EmS) F-A, S-F Marine pollutant
Air IATA Class	UN3082	9	III		Passenger and Cargo Aircraft Quantity limitation: 450 L Packaging instructions: 914 Cargo Aircraft Only Quantity limitation: 450 L Packaging instructions: 914

### **15. REGULATORY INFORMATION**

### **EU regulations**

Hazard symbol or symbols

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC ( including amendments) and take into account the intended product use.



	Xn, N	Harmful, Dangerous for the environment	
Risk phrases	:	<ul> <li>R68- Possible risk of irreversible effects.</li> <li>R36/38- Irritating to eyes and skin.</li> <li>R43- May cause sensitisation by skin contact.</li> <li>R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in th aquatic environment.</li> </ul>	е
Safety phrases	:	S36/37- Wear suitable protective clothing and gloves. S61- Avoid release to the environment. Refer to special instructions/safety data	sheet.
Contains	:	reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight < 700) o-cresyl glycidyl ether 4,4'-isopropylidenediphenol bisphenol F-epoxy resin	
Exceptional labelling of special preparations	:	Contains epoxy constituents. See information supplied by the manufacturer.	
International regulations			
International lists			
Europe inventory	:	All components are listed or exempted.	
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## **15. REGULATORY INFORMATION**

United States inventory ( TSCA 8b)	: All components are listed or exempted.
Canada inventory	: All components are listed or exempted.
Australia inventory (AICS)	: All components are listed or exempted.
China inventory (IECSC)	: All components are listed or exempted.
Japan inventory (ENCS)	: All components are listed or exempted.
Korea inventory (KECI)	: All components are listed or exempted.
Philippines inventory ( PICCS)	: All components are listed or exempted.

### **16. OTHER INFORMATION**

Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK)		<ul> <li>R68- Possible risk of irreversible effects.</li> <li>R62- Possible risk of impaired fertility.</li> <li>R41- Risk of serious damage to eyes.</li> <li>R37- Irritating to respiratory system.</li> <li>R38- Irritating to skin.</li> <li>R36/38- Irritating to eyes and skin.</li> <li>R43- May cause sensitisation by skin contact.</li> <li>R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</li> <li>R52- Harmful to aquatic organisms.</li> </ul>	
Full text of classifications referred to in sections 2 and 3 - United Kingdom (UK)	:	Muta. Cat. 3 - Mutagen category 3 Repr. Cat. 3 - Toxic to reproduction category 3 Xi - Irritant N - Dangerous for the environment	

### References

Epoxy Resins and Curing Agents; Toxicology, Health, Safety and Environmental Aspects (Plastics Europe, May 2006) 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).

### **History**

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**V** Indicates information that has changed from previously issued version.

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### **16. OTHER INFORMATION**

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