

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC MX2(E) Part B

Revision date: 22.08.2022

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

ARC MX2(E) Part B

UFI: HDM5-W5D7-0C03-6S7J

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

ARC Polymer Composite. Repair damage caused by impact, abrasion, erosion or corrosion; rebuild worn areas; fill holes and cracks; provide abrasion resistant surfaces.

Uses advised against

No information available.

1.3. Details of the supplier of the safety data sheet

Company name:	Chesterton International GmbH	
Street:	Am Lenzenfleck 23	
Place:	D-85737 Ismaning GERMANY	
Telephone:	+49 89 99 65 46 - 0	Telefax: +49 89 99 65 46 - 50
e-mail:	eu-sds@chesterton.com	
e-mail (Contact person):	eu-sds@chesterton.com	
Internet:	www.chesterton.com	
Responsible Department:	eu-sds@chesterton.com	

1.4. Emergency telephone number:

+49(0) 551 - 1 92 40 (GIZ-Nord, 24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute Tox. 4; H302
Skin Corr. 1B; H314
Eye Dam. 1; H318
Skin Sens. 1; H317

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

Diethylenetriamine (2,2'-iminodi(ethylamine))
benzyl alcohol
N-(3-(trimethoxysilyl)propyl)ethylenediamine

Signal word: Danger

Pictograms:



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Hazard statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.

Precautionary statements

P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310	Immediately call a POISON CENTER/doctor.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents/container to an appropriate recycling or disposal facility.

2.3. Other hazards

The safety and health hazards are detailed separately for Part A and Part B. The final cured material is considered nonhazardous. Upon machining, refer to the precautions in the safety data sheets for Part A and Part B.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	Classification (Regulation (EC) No 1272/2008)	
68411-71-2	1,2-Ethanediamine, N-(2-aminoethyl)-, reaction products with bisphenol A diglycidyl ether homopolymer (Epoxyaminaddukt)	10 - < 15 %
	270-141-2	
	Acute Tox. 4; H302	
111-40-0	Diethylenetriamine (2,2'-iminodi(ethylamine))	5 - < 10 %
	203-865-4	
	612-058-00-X	
	01-2119473793-27	
	Acute Tox. 2, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1, STOT SE 3; H330 H312 H302 H314 H317 H335	
100-51-6	benzyl alcohol	< 5 %
	202-859-9	
	603-057-00-5	
	01-2119492630-38	
	Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2; H332 H302 H319	
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine	< 1 %
	217-164-6	
	01-2119970215-39	
	Eye Dam. 1, Skin Sens. 1, STOT SE 3; H318 H317 H335	

Full text of H and EUH statements: see section 16.

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Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
68411-71-2	270-141-2	1,2-Ethanediamine, N-(2-aminoethyl)-, reaction products with bisphenol A diglycidyl ether homopolymer (Epoxyaminaddukt)	10 - < 15 %
		oral: ATE = 500 mg/kg	
111-40-0	203-865-4	Diethylenetriamine (2,2'-iminodi(ethylamine))	5 - < 10 %
		inhalation: LC50 = >0,89 mg/l (vapours); inhalation: LC50 = 0.07 mg/l (dusts or mists); dermal: LD50 = 1090 mg/kg; oral: LD50 = ca. 1140 mg/kg	
100-51-6	202-859-9	benzyl alcohol	<5 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: LC50 = >4,178 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 1580 mg/kg	
1760-24-3	217-164-6	N-(3-(trimethoxysilyl)propyl)ethylenediamine	< 1 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = 2295 mg/kg	

Further Information

Diethylenetriamine (2,2'-iminodi(ethylamine)): This component is toxic by inhalation if sprayed or if aerosol/mist is created. The mixture is neither present in aerosol form nor may aerosols occur.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection!
Take off immediately all contaminated clothing and wash it before reuse.
IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.

After inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.
Immediately call a doctor.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. Seek medical advice immediately.
Do not wash with: Solvents/Thinner

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Let 1 glass of water be drunken in little sips (dilution effect).
Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage.
Toxic in contact with skin.
Skin sensitisation

4.3. Indication of any immediate medical attention and special treatment needed

First Aid, decontamination, treatment of symptoms.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

- alcohol resistant foam
- Water spray jet
- Carbon dioxide (CO₂)
- Dry extinguishing powder

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated:

- Carbon monoxide
- Carbon dioxide
- Nitrogen oxides (NO_x)

5.3. Advice for firefighters

Co-ordinate fire-fighting measures to the fire surroundings.

In case of fire: Wear self-contained breathing apparatus.

Special protective equipment for firefighters: Protective clothing.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Dispose of waste according to applicable legislation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

- Remove persons to safety.
- Provide adequate ventilation.
- Clear spills immediately.
- Avoid contact with skin, eyes and clothes.
- Safe handling: see section 7
- Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Cover drains. Adverse environmental effects

6.3. Methods and material for containment and cleaning up

For containment

Take up mechanically, placing in appropriate containers for disposal. Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

- Safe handling: see section 7
- Personal protection equipment: see section 8
- Disposal: see section 13

SECTION 7: Handling and storage

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7.1. Precautions for safe handling

Advice on safe handling

Personal protection equipment: see section 8
 Avoid breathing dust/fume/gas/mist/vapours/spray.
 Avoid contact with skin, eyes and clothes.
 Take off contaminated clothing and wash it before reuse.
 Contaminated work clothing should not be allowed out of the workplace.
 When using do not eat, drink or smoke.
 Never use pressure to empty container. Keep/Store only in original container.
 Do not allow to enter into surface water or drains.

Advice on protection against fire and explosion

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Advice on general occupational hygiene

Avoid contact with skin, eyes and clothes. Use protective skin cream before handling the product. Remove contaminated, saturated clothing immediately. When using do not eat, drink, smoke, sniff. Wash hands and face before breaks and after work and take a shower if necessary.

Further information on handling

Wash hands before breaks and after work. Used working clothes should not be worn outside the work area.
 Street clothing should be stored separately from work clothing.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Keep/Store only in original container.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Keep away from:

- Frost
- Heat
- Humidity

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m ³	fib/cm ³	Category	Origin
1344-28-1	Aluminium oxides, respirable dust	-	4		TWA (8 h)	
111-40-0	Diethylene triamine	1	4		TWA (8 h)	

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DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
1344-28-1	Aluminium oxide			
Worker DNEL, long-term		inhalation	systemic	3 mg/m ³
Worker DNEL, long-term		inhalation	local	3 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,84 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,75 mg/m ³
Consumer DNEL, long-term		inhalation	local	0,75 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,3 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	1,32 mg/kg bw/day
111-40-0	Diethylenetriamine (2,2'-iminodi(ethylamine))			
Worker DNEL, long-term		inhalation	systemic	15,4 mg/m ³
Worker DNEL, acute		inhalation	systemic	92,1 mg/m ³
Worker DNEL, long-term		inhalation	local	0,87 mg/m ³
Worker DNEL, acute		inhalation	local	2,6 mg/m ³
Worker DNEL, long-term		dermal	systemic	11,4 mg/kg bw/day
Worker DNEL, long-term		dermal	local	1,1 mg/cm ²
Consumer DNEL, long-term		inhalation	systemic	4,6 mg/m ³
Consumer DNEL, acute		inhalation	systemic	27,5 mg/m ³
Consumer DNEL, long-term		dermal	systemic	4,88 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	4,88 mg/kg bw/day
100-51-6	benzyl alcohol			
Worker DNEL, long-term		inhalation	systemic	22 mg/m ³
Worker DNEL, acute		inhalation	systemic	110 mg/m ³
Worker DNEL, long-term		dermal	systemic	8 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	40 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	5,4 mg/m ³
Consumer DNEL, acute		inhalation	systemic	27 mg/m ³
Consumer DNEL, long-term		dermal	systemic	4 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	20 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	4 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	20 mg/kg bw/day

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1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine		
Worker DNEL, long-term	inhalation	local	0,6 mg/m ³
Worker DNEL, acute	inhalation	local	5,36 mg/m ³
Consumer DNEL, long-term	inhalation	local	0,1 mg/m ³
Consumer DNEL, acute	inhalation	local	4 mg/m ³
Worker DNEL, long-term	inhalation	systemic	260 mg/m ³
Worker DNEL, acute	inhalation	systemic	260 mg/m ³
Worker DNEL, long-term	dermal	systemic	5 mg/kg bw/day
Worker DNEL, acute	dermal	systemic	5 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	50 mg/m ³
Consumer DNEL, acute	inhalation	systemic	50 mg/m ³
Consumer DNEL, long-term	dermal	systemic	2,5 mg/kg bw/day
Consumer DNEL, acute	dermal	systemic	17 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	8 mg/kg bw/day

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PNEC values

CAS No	Substance	
	Environmental compartment	Value
111-40-0	Diethylenetriamine (2,2'-iminodi(ethylamine))	
	Freshwater	0,56 mg/l
	Freshwater (intermittent releases)	0,32 mg/l
	Marine water	0,056 mg/l
	Freshwater sediment	1072 mg/kg
	Marine sediment	107,2 mg/kg
	Micro-organisms in sewage treatment plants (STP)	6 mg/l
	Soil	7,97 mg/kg
100-51-6	benzyl alcohol	
	Freshwater	1 mg/l
	Freshwater (intermittent releases)	2,3 mg/l
	Marine water	0,1 mg/l
	Freshwater sediment	5,27 mg/kg
	Marine sediment	0,527 mg/kg
	Micro-organisms in sewage treatment plants (STP)	39 mg/l
	Soil	0,456 mg/kg
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine	
	Freshwater	0,062 mg/l
	Freshwater (intermittent releases)	0,62 mg/l
	Marine water	0,006 mg/l
	Freshwater sediment	0,22 mg/kg
	Marine sediment	0,022 mg/kg
	Micro-organisms in sewage treatment plants (STP)	25 mg/l
	Soil	0,009 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Provide adequate ventilation. If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection:

- Eye glasses with side protection
- goggles

Hand protection

Tested protective gloves must be worn: EN ISO 374

NBR (Nitrile rubber),

Wearing time with permanent contact: Thickness of the glove material: $\geq 0,4$ mm, Breakthrough time: >480

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min

Wearing time with occasional contact (splashes): Thickness of the glove material: $\geq 0,1$ mm, Breakthrough time: > 30 min

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Wear suitable protective clothing.

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Combination filtering device A-P2

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

Thermal hazards

No data available

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Paste
Colour:	white
Odour:	Ammonia (NH ₃)

Test method

Changes in the physical state

Melting point/freezing point:	No data available
Boiling point or initial boiling point and boiling range:	No data available
Flash point:	> 200 °C

Flammability

Solid/liquid:	No data available
Gas:	No data available

Explosive properties

No information available.

Lower explosion limits:	No data available
Upper explosion limits:	No data available
Auto-ignition temperature:	No data available

Self-ignition temperature

Solid:	No data available
Gas:	No data available

Decomposition temperature:	No data available
pH-Value:	No data available

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Viscosity / dynamic:	50.000 mPa·s
Water solubility:	Immiscible
Solubility in other solvents	
No information available.	
Partition coefficient n-octanol/water:	No data available
Vapour pressure:	>1 (air=1) hPa
Density:	2,4 g/cm ³
Relative vapour density:	>1 (air = 1)

9.2. Other information

Information with regard to physical hazard classes

Oxidizing properties
No information available.

Other safety characteristics

Evaporation rate: <1 (Ether = 1)

Further Information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable under storage at normal ambient temperatures.

10.2. Chemical stability

Does not decompose when used for intended uses. No known hazardous decomposition products.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Acid, Oxidising agent

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

10.5. Incompatible materials

Acid, Oxidising agent

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Harmful if swallowed.

ATEmix calculated

ATE (oral) 3210,8 mg/kg; ATE (dermal) 20062,6 mg/kg; ATE (inhalation vapour) 9,08 mg/l; ATE (inhalation dust/mist) 1,271 mg/l

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CAS No	Chemical name					
	Exposure route	Dose	Species	Source	Method	
68411-71-2	1,2-Ethanediamine, N-(2-aminoethyl)-, reaction products with bisphenol A diglycidyl ether homopolymer (Epoxyaminaddukt)					
	oral	ATE 500 mg/kg				
111-40-0	Diethylenetriamine (2,2'-iminodi(ethylamine))					
	oral	LD50 ca. 1140 mg/kg	Rat	Study report (1957)	Conducted prior to guidelines	
	dermal	LD50 1090 mg/kg	Rabbit			
	inhalation (4 h) vapour	LC50 >0,89 mg/l	Ratte	Manufacturer		
	inhalation (4 h) dust/mist	LC50 0.07 mg/l	Ratte	Manufacturer		
100-51-6	benzyl alcohol					
	oral	LD50 1580 mg/kg	Mouse	Cosmet. Toxicol. 11, 1011-1013 (1973) (1)	OECD Guideline 401	
	dermal	LD50 > 2000 mg/kg	Rabbit	Raw Material Data Handbook, Vol.1:(Orga	EPA OTS 798.1100	
	inhalation vapour	ATE 11 mg/l				
	inhalation (4 h) dust/mist	LC50 >4,178 mg/l	Rat	ECHA	OECD 403	
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine					
	oral	LD50 2295 mg/kg	Rat	Study report (2001)	EPA OPPTS 870.1100	
	dermal	LD50 > 2000 mg/kg	Rabbit	Study report (2000)	EPA OPPTS 870.1200	

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (Diethylenetriamine (2,2'-iminodi(ethylamine))); N-(3-(trimethoxysilyl)propyl)ethylenediamine)

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

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Endocrine disrupting properties

No data available

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
111-40-0	Diethylenetriamine (2,2'-iminodi(ethylamine))					
	Acute fish toxicity	LC50 430 mg/l	96 h	Poecilia reticulata	Study report (1989)	EU Method C.1
	Acute algae toxicity	ErC50 1164 mg/l	72 h	Pseudokirchneriella subcapitata	Study report (1990)	OECD Guideline 201
	Acute crustacea toxicity	EC50 64,6 mg/l	48 h	Daphnia magna	Study report (1989)	EU Method C.2
	Fish toxicity	NOEC > 10 mg/l	28 d	Gasterosteus aculeatus	Study report (1992)	OECD Guideline 210
	Crustacea toxicity	NOEC 5,6 mg/l	21 d	Daphnia magna	Study report (1992)	EU Method C.20
	Acute bacteria toxicity	(EC50 32,7 mg/l)	3 h	nitrifying bacteria	Study report (1989)	other: Blok, 1974; Respirometric measure
100-51-6	benzyl alcohol					
	Acute fish toxicity	LC50 > 100 mg/l	96 h	Oryzias latipes	Review article or handbook (2009)	OECD Guideline 203
	Acute algae toxicity	ErC50 770 mg/l	72 h	Raphidocelis subcapitata	Review article or handbook (2009)	OECD Guideline 201
	Acute crustacea toxicity	EC50 230 mg/l	48 h	Daphnia magna	Review article or handbook (2009)	OECD Guideline 202
	Fish toxicity	NOEC 48,897 mg/l	30 d	Fish species	http://epa.gov/oppt/exposure/pubs/episui	other: QSAR
	Algae toxicity	NOEC 51 mg/l	3 d			
	Crustacea toxicity	NOEC 51 mg/l	21 d	Daphnia magna	Review article or handbook (2009)	OECD Guideline 211
	Acute bacteria toxicity	(EC50 1385 mg/l)	3 h	activated sludge, domestic	Study report (1989)	OECD Guideline 209
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine					
	Acute fish toxicity	LC50 597 mg/l	96 h	Danio rerio	REACH Registration Dossier	EU Method C.1
	Acute algae toxicity	ErC50 8,8 mg/l	72 h	Raphidocelis subcapitata	REACH Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 81 mg/l	48 h	Daphnia magna	REACH Registration Dossier	EU Method C.2

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12.2. Persistence and degradability

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
100-51-6	benzyl alcohol			
	OECD 301A/ ISO 7827/ EEC 92/69V, C.4-A	95 - 97%	21	
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
111-40-0	Diethylenetriamine (2,2'-iminodi(ethylamine))	-1,58
100-51-6	benzyl alcohol	1
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine	-0,3

BCF

CAS No	Chemical name	BCF	Species	Source
111-40-0	Diethylenetriamine (2,2'-iminodi(ethylamine))	> 2,8	Cyprinus carpio	Publication (1992)
100-51-6	benzyl alcohol	1,371	QSAR model	http://epa.gov/oppt/

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Packing which cannot be properly cleaned must be disposed of.

Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:

UN 1760

14.2. UN proper shipping name:

CORROSIVE LIQUID, N.O.S.(DIETHYLENETRIAMINE)

14.3. Transport hazard class(es):

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14.4. Packing group: III
 Hazard label: 8
 Classification code: C9
 Special Provisions: 274
 Limited quantity: 5 L
 Excepted quantity: E1
 Transport category: 3
 Hazard No: 80
 Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 1760
14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S.(DIETHYLENETRIAMINE)
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8
 Classification code: C9
 Special Provisions: 274
 Limited quantity: 5 L
 Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number or ID number: UN 1760
14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S.(DIETHYLENETRIAMINE)
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8
 Special Provisions: 223, 274
 Limited quantity: 5 L
 Excepted quantity: E1
 EmS: F-A, S-B
 Segregation group: 18 - alkalis

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1760
14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S.(DIETHYLENETRIAMINE)
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8
 Special Provisions: A3 A803
 Limited quantity Passenger: 1 L
 Passenger LQ: Y841
 Excepted quantity: E1
 IATA-packing instructions - Passenger: 852
 IATA-max. quantity - Passenger: 5 L
 IATA-packing instructions - Cargo: 856
 IATA-max. quantity - Cargo: 60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

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14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

No information available.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

Diethylenetriamine (2,2'-iminodi(ethylamine))

benzyl alcohol

N-(3-(trimethoxysilyl)propyl)ethylenediamine

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,4,5,6,7,8,9,11,13,14,15.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer

(Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

CAS: Chemical Abstracts Service (division of the American Chemical Society)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CLP: Regulation on Classification, Labelling and Packaging of Substances and Mixtures,

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

EC50: Effectice concentration, 50 percent

DNEL: Derived No Effect Level

PNEC: Predicted No Effect Concentration

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Skin Corr. 1B; H314	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)