

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### ARC BX5(E) Part B

Revision date: 23.10.2023

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

##### 1.1. Product identifier

ARC BX5(E) Part B

UFI: Q6N6-KKX7-CPEV-867X

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

###### 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	
Contact person:	eu-sds@chesterton.com	Telephone: +49 89 99 65 46 - 0
E-mail:	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

Skin Corr. 1; H314  
Eye Dam. 1; H318  
Skin Sens. 1; H317  
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

##### 2.2. Label elements

###### Regulation (EC) No 1272/2008

###### Hazard components for labelling

m-phenylenebis(methylamine)  
Calcium nitrate  
N-(3-(trimethoxysilyl)propyl)ethylenediamine

**Signal word:** Danger

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#### Pictograms:



#### Hazard statements

- H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H411 Toxic to aquatic life with long lasting effects.

#### Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P264 Wash hands thoroughly after handling.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P310 Immediately call a POISON CENTER/doctor.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
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.  
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

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#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
57214-10-5	Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine)			10 - < 15 %
	500-137-0			
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410			
1477-55-0	m-phenylenebis(methylamine)			10 - < 15 %
	216-032-5		01-2119480150-50	
	Acute Tox. 4, Acute Tox. 4, Skin Corr. 1, Eye Dam. 1, Skin Sens. 1, Aquatic Chronic 3; H332 H302 H314 H318 H317 H412 EUH071			
10124-37-5	Calcium nitrate			1 - < 5 %
	233-332-1		01-2119495093-35	
	Acute Tox. 4, Eye Dam. 1; H302 H318			
64-17-5	ethanol, ethyl alcohol			1 - < 5 %
	200-578-6	603-002-00-5	01-2119457610-43	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine			< 1 %
	217-164-6		01-2119970215-39	
	Acute Tox. 4, Eye Dam. 1, Skin Sens. 1; H332 H318 H317			

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

#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
1477-55-0	216-032-5	m-phenylenebis(methylamine)	10 - < 15 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: LC50 = 1,34 mg/l (dusts or mists); dermal: LD50 = > 3100 mg/kg; oral: LD50 = 930 mg/kg		
10124-37-5	233-332-1	Calcium nitrate	1 - < 5 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 300 - < 2000 mg/kg		
64-17-5	200-578-6	ethanol, ethyl alcohol	1 - < 5 %
	inhalation: LC50 = 124,7 mg/l (vapours); oral: LD50 = 10470 mg/kg Eye Irrit. 2; H319: >= 50 - 100		
1760-24-3	217-164-6	N-(3-(trimethoxysilyl)propyl)ethylenediamine	< 1 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 2295 mg/kg		

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

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#### 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

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Immediately call a doctor.

#### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. 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.

Do NOT induce vomiting.

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

Causes severe skin burns and eye damage.

Harmful if swallowed.

Skin sensitisation

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

First Aid, decontamination, treatment of symptoms.

### SECTION 5: Firefighting measures

#### **5.1. Extinguishing media**

##### Suitable extinguishing media

- Dry extinguishing powder.
- Carbon dioxide (CO<sub>2</sub>).
- alcohol resistant foam.
- Water spray jet

##### Unsuitable extinguishing media

Full water jet

#### **5.2. Special hazards arising from the substance or mixture**

- Carbon monoxide
- Carbon dioxide (CO<sub>2</sub>).
- Nitrogen oxides (NO<sub>x</sub>)

#### **5.3. Advice for firefighters**

Special protective equipment for firefighters Protective clothing. In case of fire: Wear self-contained breathing apparatus.

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

#### **Additional information**

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

### **SECTION 6: Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

##### **General advice**

- Provide adequate ventilation.
- Remove persons to safety.
- 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**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). 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**

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

- See section 8.
- Wear personal protection equipment (refer to 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**

Work in well-ventilated zones or use proper respiratory protection. Only wear fitting, comfortable and clean protective clothing. Avoid contact with skin, eyes and clothes. Wash hands and face before breaks and after work and take a shower if necessary.

#### **7.2. Conditions for safe storage, including any incompatibilities**

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#### Requirements for storage rooms and vessels

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

#### 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 <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
1302-74-5	Emery, respirable dust	-	4		TWA (8 h)	
64-17-5	Ethanol	1000	-		STEL (15 min)	
1477-55-0	m-Xylene alpha,alpha'-diamine (m-phenylenebis(methylamine))	-	0.1		TWA (8 h)	
409-21-2	Silicon carbide, respirable dust	-	3		TWA (8 h)	

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#### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
57214-10-5	Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine)			
Worker DNEL, long-term		inhalation	systemic	0,02 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	systemic	2 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	local	0,6 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	local	6 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	0,385 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	3,85 mg/kg bw/day
Worker DNEL, long-term		dermal	local	0,00028 mg/cm <sup>2</sup>
Worker DNEL, acute		dermal	local	0,0028 mg/cm <sup>2</sup>
Consumer DNEL, long-term		dermal	systemic	0,00772 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	0,00772 mg/kg bw/day
Consumer DNEL, long-term		dermal	local	0,000167 mg/cm <sup>2</sup>
Consumer DNEL, acute		dermal	local	0,000167 mg/cm <sup>2</sup>
Consumer DNEL, long-term		oral	systemic	3,33 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	3,33 mg/kg bw/day
1477-55-0	m-phenylenebis(methylamine)			
Worker DNEL, long-term		dermal	systemic	0,33 mg/kg bw/day
Worker DNEL, long-term		inhalation	local	0,2 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	systemic	1,2 mg/m <sup>3</sup>
409-21-2	Silicon carbide			
Worker DNEL, acute		inhalation	systemic	94 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	systemic	23 mg/m <sup>3</sup>
Consumer DNEL, acute		dermal	systemic	200 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	13 mg/kg bw/day
10124-37-5	Calcium nitrate			
Consumer DNEL, acute		oral	systemic	10 mg/kg bw/day

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64-17-5	ethanol, ethyl alcohol		
Worker DNEL, long-term	inhalation	systemic	380 mg/m <sup>3</sup>
Worker DNEL, acute	inhalation	local	1900 mg/m <sup>3</sup>
Worker DNEL, long-term	dermal	systemic	343 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	114 mg/m <sup>3</sup>
Consumer DNEL, acute	inhalation	local	950 mg/m <sup>3</sup>
Consumer DNEL, long-term	dermal	systemic	206 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	87 mg/kg bw/day
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine		
Consumer DNEL, acute	inhalation	local	4 mg/m <sup>3</sup>
Consumer DNEL, long-term	inhalation	local	0,1 mg/m <sup>3</sup>
Worker DNEL, long-term	inhalation	local	0,6 mg/m <sup>3</sup>
Worker DNEL, acute	inhalation	local	5,36 mg/m <sup>3</sup>
Worker DNEL, long-term	inhalation	systemic	130 mg/m <sup>3</sup>
Worker DNEL, acute	inhalation	systemic	260 mg/m <sup>3</sup>
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	26 mg/m <sup>3</sup>
Consumer DNEL, acute	inhalation	systemic	26400 mg/m <sup>3</sup>
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	4 mg/kg bw/day



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#### PNEC values

CAS No	Substance	Value
Environmental compartment		Value
57214-10-5	Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine)	
Freshwater		0,02 mg/l
Marine water		0,002 mg/l
1477-55-0	m-phenylenebis(methylamine)	
Freshwater		0,094 mg/l
Freshwater (intermittent releases)		0,152 mg/l
Marine water		0,009 mg/l
Freshwater sediment		12,4 mg/kg
Marine sediment		1,24 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		2,44 mg/kg
10124-37-5	Calcium nitrate	
Micro-organisms in sewage treatment plants (STP)		18 mg/l
64-17-5	ethanol, ethyl alcohol	
Freshwater		0,96 mg/l
Freshwater (intermittent releases)		2,75 mg/l
Marine water		0,79 mg/l
Freshwater sediment		3,6 mg/kg
Marine sediment		2,9 mg/kg
Secondary poisoning		380 mg/kg
Micro-organisms in sewage treatment plants (STP)		580 mg/l
Soil		0,63 mg/kg
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine	
Freshwater		0,05 mg/l
Freshwater (intermittent releases)		0,072 mg/l
Marine water		0,005 mg/l
Freshwater sediment		0,181 mg/kg
Marine sediment		0,018 mg/kg
Micro-organisms in sewage treatment plants (STP)		20 mg/l
Soil		0,007 mg/kg

#### 8.2. Exposure controls

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#### Appropriate engineering controls

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

#### 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:  $>480$  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

Usually no personal respirative protection necessary.

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

Combination filtering device A-P3

Self-contained respirator (breathing apparatus)

##### 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:	red brown
Odour:	characteristic

	Test method
Melting point/freezing point:	No data available
Boiling point or initial boiling point and boiling range:	No data available
Flammability	
Solid/liquid:	No data available
Lower explosion limits:	not applicable

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Upper explosion limits:	not applicable
Flash point:	77 °C
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH-Value:	No data available
Water solubility:	Immiscible
Solubility in other solvents	
No information available.	
Partition coefficient n-octanol/water:	No data available
Vapour pressure:	No data available
Density:	2,09 g/cm <sup>3</sup>
Relative vapour density:	>1 (Air=1)

#### 9.2. Other information

##### Information with regard to physical hazard classes

Explosive properties  
No information available.

Self-ignition temperature

Solid:

No data available

Gas:

No data available

Oxidizing properties

No information available.

##### Other safety characteristics

Evaporation rate:

<1 (Ether=1)

Viscosity / dynamic:

50000 mPa·s

##### 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,

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- 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

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

##### ATEmix calculated

ATE (oral) 6905 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) 135,7 mg/l; ATE (inhalation dust/mist) 16,53 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1477-55-0	m-phenylenebis(methylamine)				
	oral	LD50 930 mg/kg	Rat	Study report (1973)	OECD Guideline 401
	dermal	LD50 > 3100 mg/kg	Rat	Study report (1975)	TK 11813 was applied to a shaved area of
	inhalation vapour	ATE 11 mg/l			
	inhalation (4 h) dust/mist	LC50 1,34 mg/l	Rat		
10124-37-5	Calcium nitrate				
	oral	LD50 > 300 - < 2000 mg/kg	Rat	Study report (2010)	OECD Guideline 423
	dermal	LD50 > 2000 mg/kg	Rat	Study report (2007)	OECD Guideline 402
64-17-5	ethanol, ethyl alcohol				
	oral	LD50 10470 mg/kg	Rat	Study report (1976)	OECD Guideline 401
	inhalation (4 h) vapour	LC50 124,7 mg/l	Rat	Study report (1980)	OECD Guideline 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
	inhalation vapour	ATE 11 mg/l			
	inhalation dust/mist	ATE 1,5 mg/l			

#### Irritation and corrosivity

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Causes severe skin burns and eye damage.

Causes serious eye damage.

#### **Sensitising effects**

May cause an allergic skin reaction. (m-phenylenebis(methylamine); 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**

#### **Endocrine disrupting properties**

No data available

## **SECTION 12: Ecological information**

### **12.1. Toxicity**

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
1477-55-0	m-phenylenebis(methylamine)					
	Acute fish toxicity	LC50 > 100 mg/l	96 h	Oncorhynchus mykiss	REACH Registration Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50 12 mg/l	72 h	Desmodesmus subspicatus	REACH Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 15,2 mg/l	48 h	Daphnia magna (Big water flea)		
	Algae toxicity	NOEC 10,5 mg/l	3 d	Selenastrum capricornutum		
	Crustacea toxicity	NOEC 4,7 mg/l	21 d	Daphnia magna	REACH Registration Dossier	OECD Guideline 211
	Acute bacteria toxicity	(EC50 > 1000 mg/l)	0,5 h	Activated sludge from laboratory wastewater plant	Study report (2004)	OECD Guideline 209
10124-37-5	Calcium nitrate					
	Acute fish toxicity	LC50 > 100 mg/l	96 h	Oncorhynchus mykiss	REACH Registration Dossier	OECD Guideline 203
	Fish toxicity	NOEC 157 mg/l	32 d	Pimephales promelas	Study report (2009)	other: American Society for Testing Mate
64-17-5	ethanol, ethyl alcohol					
	Acute fish toxicity	LC50 15400 mg/l	96 h	Lepomis macrochirus	Bulletin of Environmental Contamination	other: EPA-660/3-75-009, 1975
	Acute algae toxicity	ErC50 ca. 22000 mg/l	96 h	Raphidocelis subcapitata	Ecotoxicology and Environmental Safety 7	OECD Guideline 201
	Acute crustacea toxicity	EC50 > 10000 mg/l	48 h	Daphnia magna	Water Research 23(4): 495-499 (1989)	other: DIN 38412 Teil 11
	Fish toxicity	NOEC > 79 mg/l	100 d	Oryzias latipes	Environmental Toxicology and Chemistry,	Chronic effects of substance on reproduc
	Algae toxicity	NOEC 5400 mg/l	5 d	Skeletonema costatum	Environ Toxicol Chem 8(5):451-455. (1989)	Study to determine the sensitivity of a

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	Crustacea toxicity	NOEC	2 mg/l	10 d	Ceriodaphnia dubia	Arch Environ Contam Toxicol 20(2):211-21	Follows the basic methodology for the th
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

### 12.2. Persistence and degradability

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
1477-55-0	m-phenylenebis(methylamine)			
	OECD 301B/ ISO 9439/ EEC 92/69V, C.4-C	49 %	28	
	Not readily biodegradable (according to OECD criteria)			
64-17-5	ethanol, ethyl alcohol			
		97%	28	
	Readily biodegradable (according to OECD criteria).			

### 12.3. Bioaccumulative potential

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
1477-55-0	m-phenylenebis(methylamine)	ca. 0,18
64-17-5	ethanol, ethyl alcohol	-0,77
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine	-0,3

#### BCF

CAS No	Chemical name	BCF	Species	Source
1477-55-0	m-phenylenebis(methylamine)	3,16	no data	Validated suite of c
64-17-5	ethanol, ethyl alcohol	1	Cyprinus carpio	Comparative Biochemi

### 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.

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#### **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.

No information available.

#### **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. Dispose of waste according to applicable legislation.

### SECTION 14: Transport information

#### **Land transport (ADR/RID)**

<b><u>14.1. UN number or ID number:</u></b>	UN 2735
<b><u>14.2. UN proper shipping name:</u></b>	AMINES, LIQUID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine))
<b><u>14.3. Transport hazard class(es):</u></b>	8
<b><u>14.4. Packing group:</u></b>	II
Hazard label:	8
Classification code:	C7
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	80
Tunnel restriction code:	E

#### **Inland waterways transport (ADN)**

<b><u>14.1. UN number or ID number:</u></b>	UN 2735
<b><u>14.2. UN proper shipping name:</u></b>	AMINES, LIQUID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine))
<b><u>14.3. Transport hazard class(es):</u></b>	8
<b><u>14.4. Packing group:</u></b>	II
Hazard label:	8
Classification code:	C7
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2

#### **Marine transport (IMDG)**

<b><u>14.1. UN number or ID number:</u></b>	UN 2735
<b><u>14.2. UN proper shipping name:</u></b>	AMINES, LIQUID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine))
<b><u>14.3. Transport hazard class(es):</u></b>	8



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**14.4. Packing group:** II  
 Hazard label: 8  
 Special Provisions: 274  
 Limited quantity: 1 L  
 Excepted quantity: E2  
 EmS: F-A, S-B  
 Segregation group: 18 - alkalis

#### Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number or ID number:** UN 2735  
**14.2. UN proper shipping name:** AMINES, LIQUID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine))  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** II  
 Hazard label: 8  
 Special Provisions: A3 A803  
 Limited quantity Passenger: 0.5 L  
 Passenger LQ: Y840  
 Excepted quantity: E2  
 IATA-packing instructions - Passenger: 851  
 IATA-max. quantity - Passenger: 1 L  
 IATA-packing instructions - Cargo: 855  
 IATA-max. quantity - Cargo: 30 L

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes

#### 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, Entry 40, Entry 75

##### National regulatory information

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

#### 15.2. Chemical safety assessment

For this substance a chemical safety assessment is not required.

### SECTION 16: Other information

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#### 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: Effect concentration, 50 percent  
DNEL: Derived No Effect Level  
PNEC: Predicted No Effect Concentration  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative

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

Classification	Classification procedure
Skin Corr. 1; H314	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
Aquatic Chronic 2; H411	Calculation method

#### Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.  
H302 Harmful if swallowed.  
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.  
H332 Harmful if inhaled.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H411 Toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.  
EUH071 Corrosive to the respiratory tract.

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