

according to Regulation (EC) No 1907/2006

## ARC S2(E) GN Part B, ARC S2(E) GY Part B

Revision date: 06.10.2022

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

#### 1.1. Product identifier

ARC S2(E) GN Part B, ARC S2(E) GY Part B

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

#### number:

## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

## Regulation (EC) No 1272/2008

### Hazard components for labelling

3-aminomethyl-3,5,5-trimethylcyclohexylamine
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine
Fatty acids, C18, unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and
1,3-propanediamine
N-(3-(trimethoxysilyl)propyl)ethylenediamine
Signal word: Danger

IRL - EN



UFI: D2R4-Y3RF-AY03-G50F

Revision No: 2,07 - Replaces version: 2,06



according to Regulation (EC) No 1907/2006

#### ARC S2(E) GN Part B, ARC S2(E) GY Part B Revision date: 06.10.2022 Page 2 of 19 Pictograms: **Hazard statements** H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H412 Harmful to aquatic life with long lasting effects. **Precautionary statements** Do not breathe dust/fume/gas/mist/vapours/spray. P260 P264 Wash hands thoroughly after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/doctor. 2.3. Other hazards No information available.

## **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures



according to Regulation (EC) No 1907/2006

## ARC S2(E) GN Part B, ARC S2(E) GY Part B

Revision date: 06.10.2022

Page 3 of 19

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No			
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclo	ohexylamine		25 - < 30 %
	220-666-8	612-067-00-9	01-2119514687-32	
	Acute Tox. 4, Acute Tox. 4, Skin C H302 H314 H318 H317 H412	orr. 1B, Eye Dam. 1, Skin Ser	ns. 1A, Aquatic Chronic 3; H312	
100-51-6	benzyl alcohol			25 - < 30 %
	202-859-9	603-057-00-5	01-2119492630-38	
	Acute Tox. 4, Acute Tox. 4, Eye Irr			
38294-64-3	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine			5 - < 10 %
	500-101-4		01-2119965165-33	
	Skin Corr. 1B, Skin Sens. 1A, Aqu			
162627-17-0	Fatty acids, C18, unsatd., dimers, 1,3-propanediamine	reaction products with N,N-dir	nethyl-1,3-propanediamine and	< 1 %
	605-296-0		01-2119970640-38	
	Skin Sens. 1; H317			
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethyler	nediamine		< 1 %
	217-164-6		01-2119970215-39	
	Eye Dam. 1, Skin Sens. 1, STOT SE 3, STOT RE 2; H318 H317 H335 H373			

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 Cond	c. Limits, M-factors and ATE	
2855-13-2	220-666-8	3-aminomethyl-3,5,5-trimethylcyclohexylamine	25 - < 30 %
		C50 = >5,01 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: ATE 1030 Sens. 1A; H317: >= 0,001 - 100	
100-51-6	202-859-9	benzyl alcohol	25 - < 30 %
		TE = 11 mg/l (vapours); inhalation: LC50 = >4,178 mg/l (dusts or mists); dermal: )0 mg/kg; oral: LD50 = 1580 mg/kg	
162627-17-0	605-296-0	Fatty acids, C18, unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine	< 1 %
	oral: LD50 = > 10000 mg/kg		
1760-24-3	217-164-6	N-(3-(trimethoxysilyl)propyl)ethylenediamine	< 1 %
	dermal: LD50	0 = > 2000 mg/kg; oral: LD50 = 2295 mg/kg	

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures



according to Regulation (EC) No 1907/2006

## ARC S2(E) GN Part B, ARC S2(E) GY Part B

#### Revision date: 06.10.2022

Page 4 of 19

## **General information**

Change contaminated, saturated clothing. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

### After inhalation

In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still.

## 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

Immediate medical treatment required because corrosive injuries that are not treated are hard to cure. Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

#### 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

- 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 (NOx)

## 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.

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Revision No: 2,07 - Replaces version: 2,06
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according to Regulation (EC) No 1907/2006

## ARC S2(E) GN Part B, ARC S2(E) GY Part B

Revision date: 06.10.2022

Page 5 of 19

### 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. 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

Personal protection equipment: see section 8

#### 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

#### Requirements for storage rooms and vessels

Store in a cool dry place. Keep container tightly closed. Keep/Store only in original container. Protect from direct sunlight. Protect against: Frost

#### Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Revision No: 2,07 - Replaces version: 2,06

IRL - EN



according to Regulation (EC) No 1907/2006

## ARC S2(E) GN Part B, ARC S2(E) GY Part B

### Revision date: 06.10.2022

Page 6 of 19

## 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/m³	fib/cm³	Category	Origin
409-21-2	Silicon carbide, respirable dust	-	3		TWA (8 h)	



according to Regulation (EC) No 1907/2006

## ARC S2(E) GN Part B, ARC S2(E) GY Part B

Revision date: 06.10.2022

Page 7 of 19

### **DNEL/DMEL** values

CAS No	Substance		-	
DNEL type		Exposure route	Effect	Value
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexy	lamine		
Consumer DI	NEL, acute	oral	systemic	0,3 mg/kg bw/day
Worker DNE	L, long-term	inhalation	local	0,073 mg/m³
Worker DNE	L, acute	inhalation	local	0,073 mg/m³
Consumer DNEL, long-term		oral	systemic	0,3 mg/kg bw/day
100-51-6	benzyl alcohol			
Worker DNE	L, long-term	inhalation	systemic	22 mg/m <sup>3</sup>
Worker DNEI	L, acute	inhalation	systemic	110 mg/m <sup>3</sup>
Worker DNEI	L, long-term	dermal	systemic	8 mg/kg bw/day
Worker DNEI	L, acute	dermal	systemic	40 mg/kg bw/day
Consumer DI	NEL, long-term	inhalation	systemic	5,4 mg/m³
Consumer Dl	NEL, acute	inhalation	systemic	27 mg/m³
Consumer DI	NEL, long-term	dermal	systemic	4 mg/kg bw/day
Consumer DI	NEL, acute	dermal	systemic	20 mg/kg bw/day
Consumer DI	NEL, long-term	oral	systemic	4 mg/kg bw/day
Consumer DI	NEL, acute	oral	systemic	20 mg/kg bw/day
,				
409-21-2	Silicon carbide			
Worker DNE	L, acute	inhalation	systemic	94 mg/m³
Consumer DI	NEL, acute	inhalation	systemic	23 mg/m <sup>3</sup>
Consumer DI	NEL, acute	dermal	systemic	200 mg/kg bw/day
Consumer DI	NEL, acute	oral	systemic	13 mg/kg bw/day
,				
38294-64-3	4,4'-Isopropylidenediphenol, oligomeric 3-aminomethyl-3,5,5-trimethylcyclohexy		ooxypropane, reaction	products with
Worker DNEI	L, long-term	inhalation	systemic	0,493 mg/m³
Worker DNE	L, long-term	dermal	systemic	0,14 mg/kg bw/day
Consumer DI	NEL, long-term	inhalation	systemic	0,175 mg/m³
Consumer DNEL, long-term		dermal	systemic	0,05 mg/kg bw/day
Consumer DI	NEL, long-term	oral	systemic	0,05 mg/kg bw/day

Revision No: 2,07 - Replaces version: 2,06

Print date: 25.11.2022



according to Regulation (EC) No 1907/2006

# ARC S2(E) GN Part B, ARC S2(E) GY Part B

Page 8 of 19

Revision date: 06.10.2022			Page 8 of
Worker DNEL, long-term	inhalation	local	0,6 mg/m³
Worker DNEL, acute	inhalation	local	5,36 mg/m <sup>3</sup>
Consumer DNEL, long-term	inhalation	local	0,1 mg/m³
Consumer DNEL, acute	inhalation	local	4 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



according to Regulation (EC) No 1907/2006

ARC S2(E) GN Part B, ARC S2(E) GY Part B

Revision date: 06.10.2022

**PNEC** values

Page 9 of 19

	CAS No Substance			
Environmental compartment				
2855-13-2 3-aminomethy				

Environmenta	al compartment	Value		
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine			
Freshwater		0,06 mg/l		
Freshwater (ir	0,23 mg/l			
Marine water	0,006 mg/l			
Freshwater se	ediment	5,784 mg/kg		
Marine sedim	ent	0,578 mg/kg		
Micro-organis	sms in sewage treatment plants (STP)	3,18 mg/l		
Soil		1,121 mg/kg		
100-51-6	benzyl alcohol			
Freshwater		1 mg/l		
Freshwater (ir	ntermittent releases)	2,3 mg/l		
Marine water		0,1 mg/l		
Freshwater se	ediment	5,27 mg/kg		
Marine sedim	ent	0,527 mg/kg		
Micro-organis	sms in sewage treatment plants (STP)	39 mg/l		
Soil		0,456 mg/kg		
38294-64-3	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypr 3-aminomethyl-3,5,5-trimethylcyclohexylamine	ropane, reaction products with		
Freshwater		0,011 mg/l		
Freshwater (ir	ntermittent releases)	0,111 mg/l		
Marine water		0,001 mg/l		
Marine water	Freshwater sediment			
	ediment	4320 mg/kg		
Freshwater se				
Freshwater se Marine sedim	ent	4320 mg/kg		
Freshwater se Marine sedim Secondary po	ent	4320 mg/kg 432 mg/kg		
Freshwater se Marine sedim Secondary po Micro-organis	ent pisoning	4320 mg/kg 432 mg/kg 1 mg/kg		
Freshwater se Marine sedim Secondary po	ent pisoning	4320 mg/kg 432 mg/kg 1 mg/kg 10 mg/l 864 mg/kg		
Freshwater se Marine sedim Secondary po Micro-organis Soil 162627-17-0	ent bisoning sms in sewage treatment plants (STP) Fatty acids, C18, unsatd., dimers, reaction products with N,N-dimethyl-1,3-propaned	4320 mg/kg 432 mg/kg 1 mg/kg 10 mg/l 864 mg/kg		
Freshwater se Marine sedim Secondary po Micro-organis Soil 162627-17-0	ent bisoning sms in sewage treatment plants (STP) Fatty acids, C18, unsatd., dimers, reaction products with N,N-dimethyl-1,3-propaned	4320 mg/kg 432 mg/kg 1 mg/kg 10 mg/l 864 mg/kg diamine and		
Freshwater se Marine sedim Secondary po Micro-organis Soil 162627-17-0 Soil 1760-24-3	ent bisoning sms in sewage treatment plants (STP) Fatty acids, C18, unsatd., dimers, reaction products with N,N-dimethyl-1,3-propaned 1,3-propanediamine	4320 mg/kg 432 mg/kg 1 mg/kg 10 mg/l 864 mg/kg diamine and		
Freshwater se Marine sedim Secondary po Micro-organis Soil 162627-17-0 Soil 1760-24-3 Freshwater	ent bisoning sms in sewage treatment plants (STP) Fatty acids, C18, unsatd., dimers, reaction products with N,N-dimethyl-1,3-propaned 1,3-propanediamine	4320 mg/kg 432 mg/kg 1 mg/kg 10 mg/l 864 mg/kg diamine and 5,8 mg/kg		
Freshwater se Marine sedim Secondary po Micro-organis Soil 162627-17-0 Soil 1760-24-3 Freshwater	ent bisoning sms in sewage treatment plants (STP) Fatty acids, C18, unsatd., dimers, reaction products with N,N-dimethyl-1,3-propaned 1,3-propanediamine N-(3-(trimethoxysilyl)propyl)ethylenediamine	4320 mg/kg 432 mg/kg 1 mg/kg 10 mg/l 864 mg/kg diamine and 5,8 mg/kg 0,05 mg/l		

Revision No: 2,07 - Replaces version: 2,06

Print date: 25.11.2022



according to Regulation (EC) No 1907/2006

## ARC S2(E) GN Part B, ARC S2(E) GY Part B

Page 10 of 19

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

Revision date: 06.10.2022

### 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), Butyl caoutchouc (butyl rubber)

Wearing time with permanent contact: Thickness of the glove material: >= 0,4 mm, Breakthrough time:: >480 min

Wearing time with occasional contact (splashes):: Thickness of the glove material: >= 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

Protective clothing

## **Respiratory protection**

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:	Liquid
Colour:	red; yellow
Odour:	like: Ammonia (NH3)
Melting point/freezing point:	
Boiling point or initial boiling point and	
boiling range:	
Flammability	

No data available > 200 °C

Revision No: 2,07 - Replaces version: 2,06

IRL - EN

Print date: 25.11.2022



according to Regulation (EC) No 1907/2006

## ARC S2(E) GN Part B, ARC S2(E) GY Part B

Page 11 of 19

Revision date: 06.10.2022	
Solid/liquid:	No data available
Gas:	No data available
Lower explosion limits:	No data available
Upper explosion limits:	No data available
Flash point:	>100 °C
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH-Value:	No data available
Water solubility:	partially soluble
Solubility in other solvents	
No information available.	
Partition coefficient n-octanol/water:	No data available
Vapour pressure:	> 1 (air=1) hPa
Density:	1,4 g/cm³
Relative vapour density:	No data available
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: (at 25 °C)	10k 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.

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Revision No: 2,07 - Replaces version: 2,06
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according to Regulation (EC) No 1907/2006

## ARC S2(E) GN Part B, ARC S2(E) GY Part B

Revision date: 06.10.2022

Page 12 of 19

# 10.5. Incompatible materials

Acid, Oxidising agent

## 10.6. Hazardous decomposition products

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

#### **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) 2394,9 mg/kg; ATE (dermal) 4225,0 mg/kg; ATE (inhalation vapour) 42,25 mg/l; ATE (inhalation dust/mist) 5,761 mg/l

CAS No	Chemical name						
	Exposure route Dose S		Species	Source	Method		
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine						
	oral	ATE 1030	mg/kg				
	dermal	LD50 mg/kg	> 2000	Rat	Study report (2010)	OECD Guideline 402	
	inhalation (4 h) dust/mist	LC50 mg/l	>5,01	Rat			
100-51-6	benzyl alcohol						
	oral	LD50 mg/kg	1580	Mouse	Cosmet. Toxicol. 11, 1011-1013 (1973) (1	OECD Guideline 401	
	dermal	LD50 mg/kg	> 2000	Rabbit	Raw Material Data Handbook, Vol.1:( Orga	EPA OTS 798.1100	
	inhalation vapour	ATE	11 mg/l				
	inhalation (4 h) dust/mist	LC50 mg/l	>4,178	Rat	ECHA	OECD 403	
162627-17-0	Fatty acids, C18, unsatd. 1,3-propanediamine	, dimers, rea	action produc	ts with N,N-dimethyl-1,3-p	propanediamine and		
	oral	LD50 mg/kg	> 10000	Rat	Study report (1985)	OECD Guideline 401	
1760-24-3	N-(3-(trimethoxysilyl)prop	yl)ethylened	liamine				
	oral	LD50 mg/kg	2295	Rat	Study report (2001)	EPA OPPTS 870.1100	
	dermal	LD50 mg/kg	> 2000	Rabbit	Study report (2000)	EPA OPPTS 870.1200	

### Irritation and corrosivity

Causes severe skin burns and eye damage. Causes serious eye damage.

Revision No: 2,07 - Replaces version: 2,06



according to Regulation (EC) No 1907/2006

## ARC S2(E) GN Part B, ARC S2(E) GY Part B

### Revision date: 06.10.2022

Page 13 of 19

### Sensitising effects

May cause an allergic skin reaction. (3-aminomethyl-3,5,5-trimethylcyclohexylamine;

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine; Fatty acids, C18, unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine; 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



according to Regulation (EC) No 1907/2006

## ARC S2(E) GN Part B, ARC S2(E) GY Part B

Revision date: 06.10.2022

Page 14 of 19

CAS No	Chemical name								
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method		
2855-13-2	3-aminomethyl-3,5,5-trime	ethylcyclohe	exylamine						
	Acute fish toxicity	LC50	110 mg/l	96 h	Leuciscus idus	REACh Registration Dossier	EU Method C.1		
	Acute algae toxicity	ErC50	37 mg/l	72 h	Desmodesmus subspicatus	REACh Registration Dossier	EU Method C.3		
	Acute crustacea toxicity	EC50	23 mg/l	48 h	Daphnia magna	REACh Registration Dossier	OECD Guideline 202		
	Crustacea toxicity	NOEC	3 mg/l	21 d	Daphnia magna	REACh Registration Dossier	other: OECD 202, part 2		
100-51-6	benzyl alcohol								
	Acute fish toxicity	LC50 mg/l	> 100	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 mg/l	48,897	30 d	Fish species	http://epa.gov/oppt /exposure/pubs/ep isui	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 mg/l)	1385	3 h	activated sludge, domestic	Study report (1989)	OECD Guideline 209		
38294-64-3	4,4'-Isopropylidenediphen 3-aminomethyl-3,5,5-trime	-		roducts v	vith 1-chloro-2,3-epoxypro	opane, reaction produ	cts with		
	Acute fish toxicity	LL50 mg/l	70,7	96 h	Oncorhynchus mykiss	REACh Registration Dossier	OECD Guideline 203		
	Acute algae toxicity	ErC50 mg/l	79,4	72 h	Raphidocelis subcapitata	REACh Registration Dossier	OECD Guideline 201		
	Acute crustacea toxicity	EL50 mg/l	11,1	48 h	Daphnia magna	REACh Registration Dossier	OECD Guideline 202		
	Acute bacteria toxicity	(EC50 mg/l)	>= 1000	3 h	activated sludge of a predominantly domestic sewag	REACh Registration Dossier	OECD Guideline 209		



according to Regulation (EC) No 1907/2006

## ARC S2(E) GN Part B, ARC S2(E) GY Part B

Revision date: 06.10.2022

162627-17-0 Fatty acids, C18, unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine ErC50 72 h Pseudokirchneriella REACh OECD Guideline Acute algae toxicity > 100 mg/l subcapitata Registration 201 Dossier REACh EL50 > 100 48 h Daphnia magna OECD Guideline Acute crustacea toxicity mg/l Registration 202 Dossier Crustacea toxicity NOEC >= 100 21 d Daphnia magna REACh OECD Guideline mg/l Registration 211 Dossier 1760-24-3 N-(3-(trimethoxysilyl)propyl)ethylenediamine Acute fish toxicity LC50 597 mg/l 96 h Danio rerio REACh EU Method C.1 Registration Dossier Acute algae toxicity ErC50 8,8 mg/l 72 h Raphidocelis REACh OECD Guideline subcapitata Registration 201 Dossier EC50 REACh EU Method C.2 Acute crustacea toxicity 81 mg/l 48 h Daphnia magna Registration Dossier

## 12.2. Persistence and degradability

CAS No	AS No Chemical name					
	Method	Value	(	d	Source	
	Evaluation					
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine					
	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A	8 %	2	8		
	Not readily biodegradable (according to OECD criteria)					
100-51-6	benzyl alcohol					
	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A	95 - 97%	2	1		
	Readily biodegradable (according to OECD criteria).					
38294-64-3 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro- 3-aminomethyl-3,5,5-trimethylcyclohexylamine		with 1-chloro-2,3-epoxy	propane, rea	ction	n products with	
	OECD 301F	0%	2	8		
	Not readily biodegradable (according to OECD criteria)					

12.3. Bioaccumulative potential

Page 15 of 19



according to Regulation (EC) No 1907/2006

## ARC S2(E) GN Part B, ARC S2(E) GY Part B

Revision date: 06.10.2022

Page 16 of 19

#### Partition coefficient n-octanol/water

CAS No Chemical name		Log Pow
2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine		0,99
100-51-6 benzyl alcohol		1
38294-64-3	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	3,6
162627-17-0	Fatty acids, C18, unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine	> 5,5
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine	-0,3

BCF

CAS No	AS No Chemical name		Species	Source
2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexy lamine		2,63		REACh Registration D
100-51-6	benzyl alcohol	1,371	QSAR model	http://epa.gov/oppt/
38294-64-3 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexy lamine		5,13		REACh Registration D

## 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.

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

## SECTION 14: Transport information

Land transport (ADR/RID)	
14.1. UN number or ID number:	UN 2735
14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (Isophorondiamine)

Revision No: 2,07 - Replaces version: 2,06

Print date: 25.11.2022



according to Regulation (EC) No 1907/2006

	ARC S2(E) GN Part B, ARC S2(E) GY Part B	
Revision date: 06.10.2022		Page 17 of 19
14.3. Transport hazard class(es):	8	
14.4. Packing group:	III	
Hazard label:	8	
Classification code:	C7	
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 2735	
14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (Isophorondiamine)	
<u>14.3. Transport hazard class(es):</u>	8	
14.4. Packing group:	III	
Hazard label:	8	
Classification code:	C7	
Special Provisions:	274	
Limited quantity:	5 L	
Excepted quantity:	E1	
Marine transport (IMDG)		
14.1. UN number or ID number:	UN 2735	
14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (Isophorondiamine)	
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 2735	
14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (Isophorondiamine)	
<u>14.3. Transport hazard class(es):</u>	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 - Passeng		
IATA-max. quantity - Passenger:	5 L	
IATA-packing instructions - Cargo:	856	
IATA-max. quantity - Cargo:	60 L	

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according to Regulation (EC) No 1907/2006

## ARC S2(E) GN Part B, ARC S2(E) GY Part B

Revision date: 06.10.2022

Page 18 of 19

## 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

#### 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 75

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: 3-aminomethyl-3,5,5-trimethylcyclohexylamine benzyl alcohol 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine Fatty acids, C18, unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine N-(3-(trimethoxysilyl)propyl)ethylenediamine

## **SECTION 16: Other information**

## Changes

This data sheet contains changes from the previous version in section(s): 2,5,6,7,8,9,11,12,14,15.

#### 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 conernat 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 Refulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) CLP: Classification, labelling and Packaging REACH: Registration, Evaluation and Authorization of Chemicals GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals UN: United Nations



according to Regulation (EC) No 1907/2006

## ARC S2(E) GN Part B, ARC S2(E) GY Part B

Revision date: 06.10.2022

Page 19 of 19

CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
SVHC: Substance of Very High Concern

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

Classification	Classification procedure
Skin Corr. 1B; H314	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
Aquatic Chronic 3; H412	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.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

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