

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part A

Revision date: 15.03.2023

Page 1 of 15

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

1.1. Product identifier

ARC CS4(E) Part A

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

Use of the substance/mixture

ARC Polymer Composite. To be mixed with ARC CS4 (Part B) to provide protection to concrete in acid exposure environment.

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

Skin Irrit. 2; H315
Eye Irrit. 2; H319
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

Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane
Phenol, polymer with formaldehyde, glycidether
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Signal word: Warning

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part A

Revision date: 15.03.2023

Page 2 of 15

Pictograms:



Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part A

Revision date: 15.03.2023

Page 3 of 15

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
9003-36-5	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane			40 - < 45 %
	701-263-0		01-2119454392-40	
	Skin Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H317 H411			
28064-14-4	Phenol, polymer with formaldehyde, glycidether			20 - < 25 %
	608-164-0			
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H319 H317 H411			
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.			5 - < 10 %
	271-846-8	603-103-00-4	01-2119485289-22	
	Skin Irrit. 2, Skin Sens. 1; H315 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		
9003-36-5	701-263-0	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane	40 - < 45 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg		
28064-14-4	608-164-0	Phenol, polymer with formaldehyde, glycidether	20 - < 25 %
	dermal: LD50 = >2000 mg/kg; oral: LD50 = >2000 mg/kg		
68609-97-2	271-846-8	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	5 - < 10 %
	oral: LD50 = > 2000 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

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

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

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin irritation, consult a physician.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part A

Revision date: 15.03.2023

Page 4 of 15

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

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

No information available.

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 (NO_x)

5.3. Advice for firefighters

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

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part A

Revision date: 15.03.2023

Page 5 of 15

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

Do not breathe vapour/aerosol.

Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

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

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.

Further information on handling

Wash hands before breaks and after work. Only wear fitting, comfortable and clean protective clothing. 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.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part A

Revision date: 15.03.2023

Page 6 of 15

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
1309-37-1	Rouge, respirable dust	-	4		TWA (8 h)	

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
9003-36-5	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane			
Worker DNEL, long-term		inhalation	systemic	29,39 mg/m ³
Worker DNEL, long-term		dermal	systemic	104,15 mg/kg bw/day
Worker DNEL, long-term		inhalation	local	0,0083 mg/m ³
Consumer DNEL, long-term		inhalation	systemic	8,7 mg/m ³
Consumer DNEL, long-term		dermal	systemic	62,5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	6,25 mg/kg bw/day
28064-14-4	Phenol, polymer with formaldehyde, glycidether			
Worker DNEL,		dermal		104,15 mg/kg bw/day
Worker DNEL,		inhalation		29,39 mg/m ³
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.			
Worker DNEL, long-term		inhalation	systemic	3,6 mg/m ³
Worker DNEL, long-term		dermal	systemic	1 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,87 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,5 mg/kg bw/day
1309-37-1	Diiron trioxide			
Worker DNEL, long-term		inhalation	local	10 mg/m ³

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part A

Revision date: 15.03.2023

Page 7 of 15

PNEC values

CAS No	Substance	
	Environmental compartment	Value
9003-36-5	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane	
	Freshwater	0,003 mg/l
	Freshwater (intermittent releases)	0,025 mg/l
	Marine water	0 mg/l
	Freshwater sediment	0,294 mg/kg
	Marine sediment	0,029 mg/kg
	Micro-organisms in sewage treatment plants (STP)	10 mg/l
	Soil	0,237 mg/kg
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	
	Freshwater	0,106 mg/l
	Freshwater (intermittent releases)	0,072 mg/l
	Marine water	0,011 mg/l
	Freshwater sediment	307,16 mg/kg
	Marine sediment	30,72 mg/kg
	Micro-organisms in sewage treatment plants (STP)	10 mg/l
	Soil	1,234 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation as well as local exhaust 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: $\geq 0,4$ 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.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part A

Revision date: 15.03.2023

Page 8 of 15

Skin protection

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:	Liquid	
Colour:	red	
Odour:	characteristic	
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:		No data available
Upper explosion limits:		not applicable
Flash point:		122 °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:		1,35 g/cm ³
Relative vapour density:		No data available

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

No information available.

Sustaining combustion:

Not sustaining combustion

Self-ignition temperature

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part A

Revision date: 15.03.2023

Page 9 of 15

Solid: No data available
Gas: No data available
Oxidizing properties
No information available.

Other safety characteristics

Evaporation rate: No data available
Viscosity / dynamic:
(at 23 °C) 5000 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, 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.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part A

Revision date: 15.03.2023

Page 10 of 15

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
9003-36-5	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane				
	oral	LD50 > 5000 mg/kg	Rat	Study report (1988)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (1988)	OECD Guideline 402
28064-14-4	Phenol, polymer with formaldehyde, glycidether				
	oral	LD50 >2000 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rabbit		
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.				
	oral	LD50 > 2000 mg/kg	Rat	Study report (1977)	Three groups each of four female rats re

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

May cause an allergic skin reaction. (Reaction mass of 2,2'-

[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-

[methylenebis(2,1-phenyleneoxymethylene)]dioxirane; Phenol, polymer with formaldehyde, glycidether; oxirane, mono[(C12-14-alkyloxy)methyl] derivs.)

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part A

Revision date: 15.03.2023

Page 11 of 15

Toxic to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
9003-36-5	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane					
	Acute fish toxicity	LC50 > 1000 mg/l	96 h	Oncorhynchus mykiss	Study report (1998)	OECD Guideline 203
	Acute algae toxicity	ErC50 > 1,8 mg/l	72 h	Raphidocelis subcapitata	Study report (1993)	OECD Guideline 201
	Acute crustacea toxicity	EL50 > 1000 mg/l	48 h	Daphnia magna	Study report (1998)	OECD Guideline 202
	Crustacea toxicity	NOEC 0,3 mg/l	21 d	Daphnia magna	Study report (1984)	OECD Guideline 211
28064-14-4	Phenol, polymer with formaldehyde, glycidether					
	Acute fish toxicity	LC50 2,54 mg/l	96 h	Leuciscus idus (golden orfe)		
	Acute crustacea toxicity	EC50 2,55 mg/l	48 h	Daphnia magna (Big water flea)		
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.					
	Acute fish toxicity	LL50 > 100 mg/l	96 h	Oncorhynchus mykiss	Study report (2015)	OECD Guideline 203
	Crustacea toxicity	NOEC 56 mg/l	21 d	Daphnia magna	(2017)	OECD Guideline 211

12.2. Persistence and degradability

No information available.

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.				
	OECD 301F	87%	28		

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
9003-36-5	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane	2,7
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	3,77

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part A

Revision date: 15.03.2023

Page 12 of 15

BCF

CAS No	Chemical name	BCF	Species	Source
9003-36-5	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-{{ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane	150		Other company data (
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	>= 160		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.

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.

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)

14.1. UN number or ID number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9
Classification code:	M6
Special Provisions:	274 335 375 601
Limited quantity:	5 L
Excepted quantity:	E1

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part A

Revision date: 15.03.2023

Page 13 of 15

Transport category: 3
 Hazard No: 90
 Tunnel restriction code: -

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
 Hazard label: 9
 Classification code: M6
 Special Provisions: 274 335 375 601
 Limited quantity: 5 L
 Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number or ID number: UN 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
 Hazard label: 9
 Special Provisions: 274 335 969
 Limited quantity: 5 L
 Excepted quantity: E1
 EmS: F-A, S-F

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
 Hazard label: 9
 Special Provisions: A97 A158 A197 A215
 Limited quantity Passenger: 30 kg G
 Passenger LQ: Y964
 Excepted quantity: E1
 IATA-packing instructions - Passenger: 964
 IATA-max. quantity - Passenger: 450 L
 IATA-packing instructions - Cargo: 964
 IATA-max. quantity - Cargo: 450 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No
 Danger releasing substance: epoxy resin

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part A

Revision date: 15.03.2023

Page 14 of 15

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:

Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({ 2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy} methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane
Phenol, polymer with formaldehyde, glycidether
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 4,5,6,7,8,9,11,12,14,15.

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 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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part A

Revision date: 15.03.2023

Page 15 of 15

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 Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H411 Toxic 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.)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 1 of 18

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

1.1. Product identifier

ARC CS4(E) Part B

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

Use of the substance/mixture

ARC Polymer Composite. To be mixed with ARC CS4 (Part A) to provide protection to concrete in acid exposure environment.

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
Acute Tox. 4; H332
Skin Corr. 1; H314
Eye Dam. 1; H318
Skin Sens. 1; H317
STOT RE 2; H373
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

Copolymer of benzenamine and formaldehyde, hydrogenated
benzyl alcohol
2,4,6-tris(dimethylaminomethyl)phenol
salicylic acid

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 2 of 18

Signal word: Danger

Pictograms:



Hazard statements

H302+H332	Harmful if swallowed or if inhaled.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P310	Immediately call a POISON CENTER/doctor.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
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/hearing protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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.
P363	Wash contaminated clothing before reuse.
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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 3 of 18

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
135108-88-2	Copolymer of benzenamine and formaldehyde, hydrogenated			45 - < 50 %
	603-894-6		01-2119983522-33	
	Acute Tox. 4, Skin Corr. 1, Skin Sens. 1, STOT RE 2, Aquatic Chronic 3; H302 H314 H317 H373 H412			
100-51-6	benzyl alcohol			45 - < 50 %
	202-859-9	603-057-00-5	01-2119492630-38	
	Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2; H332 H302 H319			
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol			1 - < 5 %
	202-013-9	603-069-00-0	01-2119560597-27	
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2; H302 H315 H319			
69-72-7	salicylic acid			1 - < 5 %
	200-712-3	607-732-00-5	01-2119486984-17	
	Repr. 2, Acute Tox. 4, Eye Dam. 1; H361d H302 H318			

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	
135108-88-2	603-894-6	Copolymer of benzenamine and formaldehyde, hydrogenated	45 - < 50 %
		dermal: LD50 = > 1000 mg/kg; oral: LD50 = > 50 - < 300 mg/kg	
100-51-6	202-859-9	benzyl alcohol	45 - < 50 %
		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	
90-72-2	202-013-9	2,4,6-tris(dimethylaminomethyl)phenol	1 - < 5 %
		oral: LD50 = 2169 mg/kg	
69-72-7	200-712-3	salicylic acid	1 - < 5 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = 891 mg/kg	

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 4 of 18

respiration.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin irritation, consult a physician.

Do not wash with: Solvents/Thinner

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do. Continue rinsing.

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 drunk 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.

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

- 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:

- Nitrogen oxides (NO_x),
- Ammonia (NH₃),
- Carbon monoxide,
- Carbon dioxide (CO₂).

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.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 5 of 18

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

- Personal protection equipment: see section 8
- Do not breathe aerosol.
- 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.

Further information on handling

Wash hands before breaks and after work. Only wear fitting, comfortable and clean protective clothing. Used working clothes should not be worn outside the work area. Street clothing should be stored separately from

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 6 of 18

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 7 of 18

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
135108-88-2	Copolymer of benzenamine and formaldehyde, hydrogenated			
Worker DNEL, long-term		inhalation	systemic	0,2 mg/m ³
Worker DNEL, acute		inhalation	systemic	2 mg/m ³
Worker DNEL, long-term		dermal	systemic	2 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	6 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
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol			
Worker DNEL, long-term		dermal	systemic	0,15 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	0,53 mg/m ³
Worker DNEL, acute		inhalation	systemic	2,1 mg/m ³
Consumer DNEL, acute		inhalation	systemic	0,13 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,075 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	0,075 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	0,6 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,13 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,075 mg/kg bw/day
69-72-7	salicylic acid			
Worker DNEL, long-term		inhalation	systemic	5 mg/m ³

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 8 of 18

Worker DNEL, long-term	inhalation	local	5 mg/m ³
Worker DNEL, long-term	dermal	systemic	2,3 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	4 mg/m ³
Consumer DNEL, long-term	dermal	systemic	1 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	1 mg/kg bw/day
Consumer DNEL, acute	oral	systemic	4 mg/kg bw/day

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 9 of 18

PNEC values

CAS No	Substance	Value
Environmental compartment		Value
135108-88-2	Copolymer of benzenamine and formaldehyde, hydrogenated	
Freshwater		0,015 mg/l
Freshwater (intermittent releases)		0,15 mg/l
Marine water		0,002 mg/l
Freshwater sediment		15 mg/kg
Marine sediment		1,5 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,9 mg/l
Soil		1,8 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
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	
Freshwater		0,046 mg/l
Freshwater (intermittent releases)		0,46 mg/l
Marine water		0,005 mg/l
Freshwater sediment		0,262 mg/kg
Marine sediment		0,026 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,2 mg/l
Soil		0,025 mg/kg
69-72-7	salicylic acid	
Freshwater		0,2 mg/l
Freshwater (intermittent releases)		1 mg/l
Marine water		0,02 mg/l
Freshwater sediment		1,42 mg/kg
Marine sediment		0,142 mg/kg
Micro-organisms in sewage treatment plants (STP)		162 mg/l
Soil		0,166 mg/kg

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 10 of 18

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation as well as local exhaust 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: $\geq 0,4$ 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

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

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:	colourless
Odour:	like: Amines

	Test method
Melting point/freezing point:	No data available
Boiling point or initial boiling point and boiling range:	219 °C
Flammability	
Solid/liquid:	No data available
Lower explosion limits:	not applicable

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 11 of 18

Upper explosion limits:	not applicable
Flash point:	104 °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:	2,12 hPa
Density:	1,05 g/cm ³
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:

~ 800 mPa·s

(at 23 °C)

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

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Strong alkali , Oxidising agent

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 12 of 18

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.

Harmful if inhaled.

ATEmix calculated

ATE (oral) 758,1 mg/kg; ATE (inhalation vapour) 24,36 mg/l; ATE (inhalation dust/mist) 3,322 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
135108-88-2	Copolymer of benzenamine and formaldehyde, hydrogenated				
	oral	LD50 > 50 - < 300 mg/kg	Rat	Study report (2005)	OECD Guideline 423
	dermal	LD50 > 1000 mg/kg	Rabbit	Study report (1988)	other: 40CFR Part 158 Series 81-2, EPA P
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
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol				
	oral	LD50 2169 mg/kg	Rat	Study report (1992)	OECD Guideline 401
69-72-7	salicylic acid				
	oral	LD50 891 mg/kg	Rat	Study report (1971)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	J Am Coll Toxicol, Vol. 15, Suppl. 1, p.	OECD Guideline 402

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (Copolymer of benzenamine and formaldehyde, hydrogenated)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 13 of 18

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

May cause damage to organs through prolonged or repeated exposure. (Copolymer of benzenamine and formaldehyde, hydrogenated)

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

Harmful to aquatic life with long lasting effects.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 14 of 18

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
135108-88-2	Copolymer of benzenamine and formaldehyde, hydrogenated					
	Acute fish toxicity	LC50 63 mg/l	96 h	Poecilia reticulata	REACH Registration Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50 43,94 mg/l	72 h	Desmodesmus subspicatus	Study report (2012)	EU Method C.3
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
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol					
	Acute fish toxicity	LC50 > 100 mg/l	96 h	Cyprinus carpio	REACH Registration Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50 46,7 mg/l	72 h	Raphidocelis subcapitata	REACH Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 > 100 mg/l	48 h	Daphnia magna	REACH Registration Dossier	OECD Guideline 202
69-72-7	salicylic acid					
	Acute fish toxicity	LC50 1370 mg/l	96 h	Pimephales promelas	Publication (1985)	OECD Guideline 203
	Acute algae toxicity	ErC50 > 100 mg/l	72 h	Desmodesmus subspicatus	Regulatory Toxicology and Pharmacology 2	OECD Guideline 201
	Acute crustacea toxicity	EC50 870 mg/l	48 h	Daphnia magna	Chemosphere 59 255-261 (2005)	OECD Guideline 202
	Crustacea toxicity	NOEC 10 mg/l	21 d	Daphnia magna	Muench. Beitr. Abwasser-, Fisch.-Flussb	other: Cited as OECD Guide-line 202, par

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 15 of 18

	Acute bacteria toxicity (EC50 mg/l)	> 1000	3 h	activated sludge, domestic	Chemosphere 14 (9) : 1239-1251 (1985)	OECD Guideline 209
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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 92/69/V, 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
135108-88-2	Copolymer of benzenamine and formaldehyde, hydrogenated	2,68
100-51-6	benzyl alcohol	1
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	>= 0,219
69-72-7	salicylic acid	2,25

BCF

CAS No	Chemical name	BCF	Species	Source
135108-88-2	Copolymer of benzenamine and formaldehyde, hydrogenated	> 18 - < 22	Cyprinus carpio	Study report (1997)
100-51-6	benzyl alcohol	1,371	QSAR model	http://epa.gov/oppt/
69-72-7	salicylic acid	<100		

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.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 16 of 18

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. (Copolymer of benzenamine and formaldehyde, hydrogenated)
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. (Copolymer of benzenamine and formaldehyde, hydrogenated)
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

Marine transport (IMDG)

14.1. UN number or ID number:	UN 2735
14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (Copolymer of benzenamine and formaldehyde, hydrogenated)
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
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Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 17 of 18

14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (Copolymer of benzenamine and formaldehyde, hydrogenated)	
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

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:
 Copolymer of benzenamine and formaldehyde, hydrogenated
 benzyl alcohol
 2,4,6-tris(dimethylaminomethyl)phenol
 salicylic acid

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,4,5,6,7,8,9,11,12,14,15.

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)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 15.03.2023

Page 18 of 18

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: Effective 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
Acute Tox. 4; H302	Calculation method
Acute Tox. 4; H332	Calculation method
Skin Corr. 1; H314	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
STOT RE 2; H373	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H302+H332	Harmful if swallowed or if inhaled.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H361d	Suspected of damaging the unborn child.
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.)