

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC CS4(E) Part B

Revision date: 13.07.2018

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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:	DE-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

Hazard categories:

Acute toxicity: Acute Tox. 4

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Corr. 1

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Skin Sens. 1

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Harmful if inhaled.

Harmful if swallowed.

Causes severe skin burns and eye damage.

Causes serious eye damage.

May cause an allergic skin reaction.

May cause damage to organs through prolonged or repeated exposure.

Harmful to aquatic life with long lasting effects.

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2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Copolymer of benzenamine and formaldehyde, hydrogenated
benzyl alcohol
4,4'-methylenebis(cyclohexylamine)
2,4,6-tris(dimethylaminomethyl)phenol

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

P260	Do not breathe Aerosols.
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.
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

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
135108-88-2	Copolymer of benzenamine and formaldehyde, hydrogenated			55 - < 60 %
	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			
1761-71-3	4,4'-methylenebis(cyclohexylamine)			1 - < 5 %
	217-168-8		01-2119541673-38	
	Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1, STOT RE 2, Aquatic Chronic 2; H302 H314 H317 H373 H411			
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 Corr. 1C, Eye Dam. 1, Skin Sens. 1; H302 H314 H318 H317			

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

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

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.

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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 (CO₂). alcohol resistant foam. Water spray jet

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

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

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

See protective measures under point 7 and 8.

Provide adequate ventilation.

Personal protection equipment: see section 8

Remove persons to safety.

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

Absorb with liquid-binding material (e.g. 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

See protective measures under point 7 and 8. Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Advice on safe handling

See section 8.

Wear personal protection equipment (refer to 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.

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.

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

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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
1761-71-3	4,4'-methylenebis(cyclohexylamine)			
Worker DNEL, long-term		inhalation	systemic	1 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,1 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,21 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,06 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,06 mg/kg bw/day

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PNEC values

CAS No	Substance	
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
1761-71-3	4,4'-methylenebis(cyclohexylamine)	
	Freshwater	0,08 mg/l
	Marine water	0,008 mg/l
	Freshwater sediment	14,6 mg/kg
	Marine sediment	1,46 mg/kg
	Secondary poisoning	0,556 mg/kg
	Micro-organisms in sewage treatment plants (STP)	0,08 mg/l
	Soil	4,56 mg/kg

8.2. Exposure controls

Appropriate engineering controls

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

Protective and hygiene measures

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.

Eye/face protection

Suitable eye protection:

Eye glasses with side protection

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goggles

Hand protection

Tested protective gloves must be worn: DIN EN 374

NBR (Nitrile rubber), Butyl caoutchouc (butyl rubber)

Thickness of the glove material $\geq 0,4$ mm

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

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.

Observe the wear time limits as specified by the manufacturer.

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 (EN 14387) A-P2

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

pH-Value:	not determined
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Changes in the physical state

Melting point:	not determined
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Initial boiling point and boiling range:	219 °C
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Flash point:	104 °C
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Flammability

Solid:	not determined
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Gas:	not determined
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Explosive properties

No information available.

Lower explosion limits:	not applicable
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Upper explosion limits:	not applicable
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Ignition temperature:	not determined
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Auto-ignition temperature

Solid:	not determined
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Gas:	not determined
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Decomposition temperature:	not determined	ASTM D 2879-86
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Oxidizing properties

No information available.

Vapour pressure:	2,12 hPa
Density:	~1,05 g/cm ³
Water solubility:	Immiscible

Solubility in other solvents

No information available.

Partition coefficient:	not determined
Viscosity / dynamic: (at 23 °C)	~800 mPa·s
Vapour density:	>1 (Air=1)
Evaporation rate:	<1 (Ether=1)

9.2. Other 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

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Harmful if swallowed or if inhaled.

ATEmix calculated

ATE (oral) 503,4 mg/kg; ATE (inhalation aerosol) 3,222 mg/l

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
135108-88-2	Copolymer of benzenamine and formaldehyde, hydrogenated				
	oral	LD50 368 mg/kg	Rat	Study report (1995)	EU Method B.1 bis
	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) aerosol	LC50 >4.178 mg/l	Rat		
1761-71-3	4,4'-methylenebis(cyclohexylamine)				
	oral	LD50 > 670 - < 1000 mg/kg	Rat	Journal of Applied T	other: no informatio
	dermal	LD50 2110 mg/kg	Rabbit	Study report (1986)	EPA OPP 81-2
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol				
	oral	ATE 500 mg/kg			

Irritation and corrosivity

Causes severe skin burns and eye damage.

Sensitising effects

May cause an allergic skin reaction. (Copolymer of benzenamine and formaldehyde, hydrogenated; 4,4'-methylenebis(cyclohexylamine); 2,4,6-tris(dimethylaminomethyl)phenol)

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.

SECTION 12: Ecological information

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12.1. Toxicity

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	Pseudokirchneriella 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	(1385 mg/l)	3 h	activated sludge, domestic	Study report (1989)	OECD Guideline 209
1761-71-3	4,4'-methylenebis(cyclohexylamine)					
	Acute fish toxicity	LC50 > 100 mg/l	96 h	Leuciscus idus	Study report (1988)	other: German indust
	Acute algae toxicity	ErC50 140 - 200 mg/l	72 h		Study report (1990)	other: German Indust
	Acute crustacea toxicity	EC50 9,24 mg/l	48 h	Daphnia magna	Springer Verlag, Ber	other: Directive 79/
	Crustacea toxicity	NOEC 4 mg/l	21 d	Daphnia magna	Study report (2003)	OECD Guideline 211
	Acute bacteria toxicity	(ca. 100 mg/l)	0,5 h	activated sludge, industrial	Study report (1986)	OECD Guideline 209

12.2. Persistence and degradability

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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	
1761-71-3	4,4'-methylenebis(cyclohexylamine)			
	OECD 302B/ ISO 9888/ EEC 92/69/V, C.9	<10%	28	

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
1761-71-3	4,4'-methylenebis(cyclohexylamine)	2,2

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/
1761-71-3	4,4'-methylenebis(cyclohexylamine)	< 6	Cyprinus carpio	Study report (2002)

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. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

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:

UN 2735

14.2. UN proper shipping name:

AMINES, LIQUID, CORROSIVE, N.O.S. (Copolymer of benzenamine and formaldehyde, hydrogenated)

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<u>14.3. Transport hazard class(es):</u>	8
<u>14.4. Packing group:</u>	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)

<u>14.1. UN number:</u>	UN 2735
<u>14.2. UN proper shipping name:</u>	AMINES, LIQUID, CORROSIVE, N.O.S. (Copolymer of benzenamine and formaldehyde, hydrogenated)
<u>14.3. Transport hazard class(es):</u>	8
<u>14.4. Packing group:</u>	III
Hazard label:	8
Classification code:	C7
Special Provisions:	274
Limited quantity:	5 L
Excepted quantity:	E1

Marine transport (IMDG)

<u>14.1. UN number:</u>	UN 2735
<u>14.2. UN proper shipping name:</u>	AMINES, LIQUID, CORROSIVE, N.O.S. (Copolymer of benzenamine and formaldehyde, hydrogenated)
<u>14.3. Transport hazard class(es):</u>	8
<u>14.4. Packing group:</u>	III
Hazard label:	8
Special Provisions:	223, 274
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-A, S-B
Segregation group:	alkalis

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number:</u>	UN 2735
<u>14.2. UN proper shipping name:</u>	AMINES, LIQUID, CORROSIVE, N.O.S. (Copolymer of benzenamine and formaldehyde, hydrogenated)
<u>14.3. Transport hazard class(es):</u>	8
<u>14.4. Packing group:</u>	III
Hazard label:	8
Special Provisions:	A3 A803

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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. Transport in bulk according to Annex II of Marpol and the IBC Code

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: 2,4,6-tris(dimethylaminomethyl)phenol

National regulatory information

Water contaminating class (D): 2 - clearly water contaminating

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

4,4'-methylenebis(cyclohexylamine)

SECTION 16: Other information

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,

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LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 EC50: Effectice concentration, 50 percent
 DNEL: Derived No Effect Level
 PNEC: Predicted No Effect Concentration
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative

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

Classification	Classification procedure
Acute Tox. 4; H332	Calculation method
Acute Tox. 4; H302	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.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

This information is based solely on data provided by suppliers of the materials used, not on the mixture itself.
 No warranty is expressed or implied regarding the suitability of the product for the user's particular purpose.
 The user must make their own determination as to suitability.

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