

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ARC S1HB(E) Part B

Revision date: 18.02.2021

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

1.1. Product identifier

ARC S1HB(E) Part B

UFI: UXAK-E158-Q2RW-9688

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

Use of the substance/mixture

For use as a high build coating on properly prepared surface where mild chemical and abrasion exposures are anticipated.

Uses advised against

No data 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

Hazard categories:

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 Acute 1

Hazardous to the aquatic environment: Aquatic Chronic 1

Hazard Statements:

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.

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

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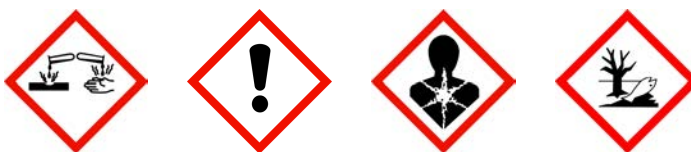
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Hazard components for labelling

Fatty acids, tall-oil, reaction products with tetraethylenepentamine
Copolymer of benzenamine and formaldehyde, hydrogenated
3,6,9-triazaundecamethylenediamine; tetraethylenepentamine
N-(3-(trimethoxysilyl)propyl)ethylenediamine

Signal word: Danger

Pictograms:



Hazard statements

H302 Harmful if swallowed.
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.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
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.
P314 Get medical advice/attention if you feel unwell.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.

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	
	GHS Classification			
68953-36-6	Fatty acids, tall-oil, reaction products with tetraethylenepentamine			25 - < 30 %
	273-201-6			
	Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H314 H318 H317 H400 H410			
135108-88-2	Copolymer of benzenamine and formaldehyde, hydrogenated			20 - < 25 %
	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			15 - < 20 %
	202-859-9	603-057-00-5	01-2119492630-38	
	Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2; H332 H302 H319			
112-57-2	3,6,9-triazaundecamethylenediamine; tetraethylenepentamine			5 - < 10 %
	203-986-2	612-060-00-0		
	Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1, Aquatic Chronic 2; H312 H302 H314 H317 H411			
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine			< 1 %
	217-164-6		01-2119970215-39	
	Acute Tox. 4, Eye Dam. 1, Skin Sens. 1, STOT RE 2; H332 H318 H317 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 Conc. Limits, M-factors and ATE		
135108-88-2	603-894-6	Copolymer of benzenamine and formaldehyde, hydrogenated	20 - < 25 %
	dermal: LD50 = > 1000 mg/kg; oral: LD50 = > 50 - < 300 mg/kg		
100-51-6	202-859-9	benzyl alcohol	15 - < 20 %
	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		
112-57-2	203-986-2	3,6,9-triazaundecamethylenediamine; tetraethylenepentamine	5 - < 10 %
	dermal: LD50 = 660 mg/kg; oral: ATE = 500 mg/kg		
1760-24-3	217-164-6	N-(3-(trimethoxysilyl)propyl)ethylenediamine	< 1 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 2295 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove affected person from the danger area and lay down. In case of allergic symptoms, especially in the

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breathing area, seek medical advice immediately. 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 accident by inhalation: remove casualty to fresh air and keep at rest. If breathing is irregular or stopped, administer artificial respiration. Immediately call a doctor.

After contact with skin

Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Take off contaminated clothing and wash it before reuse. In case of skin irritation, consult a physician.

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. Do NOT induce vomiting.

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

Processing vapours can irritate the respiratory tracts, skin and eyes.
May produce an allergic reaction.

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

- Carbon monoxide
- Ammonia (NH₃)
- Nitrogen oxides (NO_x).

5.3. Advice for firefighters

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

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 measures

Avoid contact with skin, eyes and clothes.
Avoid release to the environment.

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Safe handling: see section 7

Personal protection equipment: see section 8

6.2. Environmental precautions

Keep container tightly closed in a cool, well-ventilated place. Store in a dry place.

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.

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

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

Wear personal protection equipment (refer to section 8).

Wash hands and face before breaks and after work and take a shower if necessary. Take off immediately all contaminated clothing and wash it before reuse. Contaminated leather including shoes cannot be decontaminated and should be discarded. Avoid creating and breathing dust during removal, drilling, grinding, sawing or sanding. Contaminated work clothing should not be allowed out of the workplace.

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. Store in a dry place.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

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

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PNEC values

CAS No	Substance	
	Environmental compartment	Value
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
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine	
	Freshwater	0,062 mg/l
	Freshwater (intermittent releases)	0,62 mg/l
	Marine water	0,006 mg/l
	Freshwater sediment	0,22 mg/kg
	Marine sediment	0,022 mg/kg
	Micro-organisms in sewage treatment plants (STP)	25 mg/l
	Soil	0,009 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations. Avoid dust formation. Knock down dust with water spray jet.

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

Eye glasses with side protection goggles

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Hand protection

Tested protective gloves must be worn: EN ISO 374
 NBR (Nitrile rubber) PVC (polyvinyl chloride)
 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.
 Wearing time with occasional contact (splashes): max. 480 min. (NBR (Nitrile rubber))
 Wearing time with permanent contact 240 - 480 min (NBR (Nitrile rubber))
 Observe the wear time limits as specified by the manufacturer.
 Wear cotton underneath if possible.

Skin protection

Chemical protection clothing

Respiratory protection

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

Environmental exposure controls

Section 6: Accidental Release Measures
 Section 12: Ecological Information (non-mandatory)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Paste
Colour:	beige
Odour:	Amines

Test method

pH-Value: not applicable

Changes in the physical state

Melting point:	No data available
Boiling point or initial boiling point and boiling range:	No data available
Flash point:	122 °C
Sustaining combustion:	Not sustaining combustion

Flammability

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

Explosive properties

No information available.

Lower explosion limits:	No data available
Upper explosion limits:	No data available

Self-ignition temperature

Solid:	No data available
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Gas: No data available
Decomposition temperature: No data available

Oxidizing properties

No information available.

Vapour pressure: No data available

Density: 1,25 g/cm³

Water solubility: practically insoluble

Solubility in other solvents

No information available.

Viscosity / dynamic:
(at 25 °C) 8000 mPa·s

Relative 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

Information is given in subsection 10.3., 10.5

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

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 acid
Strong alkali
Oxidising agent, strong
Chlorine
Oxygen,

10.6. Hazardous decomposition products

Nitrogen oxides (NO_x), Carbon monoxide, Carbon dioxide (CO₂), Nitric acid, Gases/vapours, toxic

SECTION 11: Toxicological information

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

Acute toxicity

Harmful if swallowed.

ATEmix calculated

ATE (oral) 1549,0 mg/kg

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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 > 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) aerosol	LC50 >4,178 mg/l	Rat	ECHA	OECD 403
112-57-2	3,6,9-triazaundecamethylenediamine; tetraethylenepentamine				
	oral	ATE 500 mg/kg			
	dermal	LD50 660 mg/kg	Rabbit	RTECS	
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine				
	oral	LD50 2295 mg/kg	Rat	Study report (2001)	EPA OPPTS 870.1100
	dermal	LD50 > 2000 mg/kg	Rabbit	Study report (2000)	EPA OPPTS 870.1200
	inhalation vapour	ATE 11 mg/l			
	inhalation aerosol	ATE 1,5 mg/l			

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (Fatty acids, tall-oil, reaction products with tetraethylenepentamine; Copolymer of benzenamine and formaldehyde, hydrogenated; 3,6,9-triazaundecamethylenediamine; tetraethylenepentamine; 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

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

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Aspiration hazard

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

SECTION 12: Ecological information

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
112-57-2	3,6,9-triazaundecamethylenediamine; tetraethylenepentamine					
	Acute fish toxicity	LC50 420 mg/l	96 h	Poecilia reticulata		
	Acute algae toxicity	ErC50 2,1 mg/l	72 h	Selenastrum capricornutum		
	Acute crustacea toxicity	EC50 24,1 mg/l	48 h	Daphnia magna		
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine					
	Acute fish toxicity	LC50 597 mg/l	96 h	Danio rerio	REACH Registration Dossier	EU Method C.1
	Acute algae toxicity	ErC50 8,8 mg/l	72 h	Pseudokirchneriella subcapitata	REACH Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 81 mg/l	48 h	Daphnia magna	REACH Registration Dossier	EU Method C.2

12.2. Persistence and degradability

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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	
	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
112-57-2	3,6,9-triazaundecamethylenediamine; tetraethylenepentamine	-1,05
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine	-0,3

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/

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

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:

UN 2735

14.2. UN proper shipping name:

AMINES, LIQUID, CORROSIVE, N.O.S. (Fatty acids, tall-oil, reaction products with tetraethylenepentamine)

14.3. Transport hazard class(es):

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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: UN 2735
14.2. UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (Fatty acids, tall-oil, reaction products with tetraethylenepentamine)
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: UN 2735
14.2. UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (Fatty acids, tall-oil, reaction products with tetraethylenepentamine)
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: UN 2735
14.2. UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (Fatty acids, tall-oil, reaction products with tetraethylenepentamine)
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

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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:	Yes
Danger releasing substance:	Fatty acids, tall-oil, reaction products with tetraethylenepentamine, 3,6,9-triazaundecamethylenediamine; tetraethylenepentamine

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

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

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:

Fatty acids, tall-oil, reaction products with tetraethylenepentamine

Copolymer of benzenamine and formaldehyde, hydrogenated

benzyl alcohol

N-(3-(trimethoxysilyl)propyl)ethylenediamine

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)

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

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UN: United Nations
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
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 Acute 1; H400	Calculation method
Aquatic Chronic 1; H410	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.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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.



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