SAFETY DATA SHEET

according to 1907/2006/EG, Article 31

SECTION 1 Designation of the substance or mixture and of the company *

1.1 Product identifier

Trade name: Resist 2K / LF/ colour / Primer - Component B
UFI: V360-A00N-300D-TRFU

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

Relevant identified use: Fuel resistant asphalt sealant
Uses advised against: No data available

1.3 Details of the supplier providing the safety data sheet

Manufacturer/supplier:
Company
VIALIT ASPHALT GesmbH & Co KG
Reiterstrasse 78
A - 5280 Braunau/ Inn

Telephone: +43 (0)7722/ 62977 - 0
Fax: +43 (0)7722/ 65758

Department providing information: Laboratory department, telephone: +43 (0)7722/ 62977 - 44;
Qualitaet@vialit.at
This number is only manned during office hours.

1.4 Emergency information

For Austria: Poisoning Information Centre, telephone: +43 (0)1/ 4064343

SECTION 2 Possible hazards

2.1 Classification according to Regulation 1272/2008/EG (CLP)

Special hazard warnings:

H-sets:
H302+H332
H314
H317
H361
H372
H412

P-sets:
P201
P260
P264
P270
P273
P280
P301+P330+P331
P310
P303+P361+P353
P333+P313
P312
P305+P351+P338
P308+P313

Other information
Full text of the codes, hazard statements and EU hazard statements in SECTION 16.

2.2 Labelling elements (Regulation 1272/2008/EC (CLP))

Signal word: Hazard

Hazard warnings:

H302+H332	Harmful if ingested or inhaled.
H314	Causes severe skin burns and eye damage.
H317	May cause allergic skin reactions.
H361	Suspected of damaging fertility or harming the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H412	Harmful for water organisms, with long-term effect.

Prevention:

P201:	Obtain special instructions before use
P260:	Do not inhale dust/fume/gas/mist/vapour/aerosol
P264:	Wash face, hands and all exposed skin thoroughly after use.
P270:	Do not eat, drink or smoke during use.
P273:	Avoid release to the environment.
P280:	Wear protective gloves/protective clothing/ eye protection/ face shield.
P301+P330+P331:	IF INGESTED: Rinse mouth. DO NOT induce vomiting.
P310:	Immediately call a POISON CENTRE or doctor.
P303+P361+P353:	IF IN CONTACT WITH SKIN (or hair): remove all contaminated clothing immediately. Wash skin with water [or shower].
P333+P313:	In case of skin irritation or rash: seek medical advice/attention.
P312:	If you feel unwell, call a POISON CENTRE or doctor.
P305+P351+P338:	FOLLOWING CONTACT WITH THE EYES: rinse carefully with water for several minutes. Remove any contact lenses if possible. Continue to rinse.
P308+P313:	IF exposed or concerned: seek medical advice/attention.

Contains:
Copolymer of aniline and formaldehyde, hydrogenated
Benzyl alcohol
2-piperazine-1-ylethylamine
4,4'-diamino-dicyclohexylmethane
2,4,6-tri(dimethylaminomethyl)phenol

2.3 Other hazards

PBT: not applicable.
vPvB: not applicable.
Endocrine-disrupting properties:
The substance/mixture does not contain components that exhibit endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% or more.

SECTION 3 Composition/ information on ingredients *

3.1 Materials

Not applicable, product is a mixture

3.2 Mixture

Hazardous ingredients:

Ingredient	CLP classification	CAS number EINECS number REACH registration number	Additional information:
35 - 40% copolymer of aniline and formaldehyde, hydrogenated	Acute tox. 3; H301 Skin corr. 1C; H314 Eye dam. 1; H318 Skin sens. 1; H317 STOT RE 2; H373 Aquatic chronic 3; H412	135108-88-2 603-894-6 01-2119983522-33	
20 - 40% benzyl alcohol	Acute tox. 4; H332 Acute tox. 4; H302 Eye irrit. 2; H319	100-51-6 202-859-9 01-2119492630-38	
15 - 25% 2,4,6-tris(dimethylaminomethyl)phenol	Acute tox. 4; H302 Skin corr. 1C; H314 Eye dam. 1; H318	90-72-2 202-013-9 01-2119560597-27	
13 - 16% 2-piperazine-1-ylethylamine	Acute tox. 3; H311 Acute tox. 4; H302 Skin corr. 1B; H314 Eye dam. 1; H318 Skin sens. 1; H317 Repr.: 2: H361 STOT RE: 1: H372 Aquatic chronic 3; H412	140-31-8 205-411-0 01-2119471486-30	
3 - 4% 4,4'-diamino-dicyclohexylmethane	Acute tox. 4; H302 Skin sens. 1; H317 STOT RE 2; H373 Skin corr. 1B; H314 Eye dam. 1; H318	1761-71-3 217-168-8 01-2119541673-38	
0.08 - 0.09% 4,4'-diamino-diphenyl-methane	Acute tox.: 3: H301 Skin sens.: 1: H317 Muta.: 2: H341 Carc.: 1B: H350 STOT SE: 1: H370 STOT RE: 2: H373 Aquatic acute: 1: H400; aquatic chronic: 1: H410	101-77-9 202-974-4 01- 2119491289-24	Aquatic toxicity acute: 1 Aquatic toxicity chronic: 10 SVHC substance

SECTION 4 First-aid measures *

4.1 Description of first aid measures

General information:

Always assess the safety of the accident site before attempting to rescue casualties and provide first aid.
Seek medical assistance. In the event of irregular breathing or respiratory arrest, initiate artificial respiration.
In the event of cardiac arrest, initiate immediate cardiopulmonary resuscitation (CPR).

After inhalation:

Get out into the fresh air.

After contact with skin:

Immediately remove soiled clothing and all excess chemicals from the outside, if possible without delay. Rinse carefully and continuously until medical help arrives. If medical care is not immediately available, continue flushing for one hour. Cover the wound with a sterile dressing. Remove soiled clothing and shoes immediately. Wash off immediately with soap and plenty of water.

After contact with eyes:
Pull eyelids apart and rinse cautiously and continuously until medical help arrives. If medical care is not immediately available, continue flushing for one hour. Rinse immediately with plenty of water for at least 15 minutes, also under the eyelids. Rinse immediately with plenty of water for at least 15 minutes.

After ingestion:
Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Prevent vomit from being inhaled. Turn the victim's head to the side.

Self-protection of the first aider:
No special instructions required.

4.2 Most important symptoms and effects, both acute and delayed

Corrosive effects; sensitising effects

4.3 Information on immediate medical assistance or specialised treatment

No information available

SECTION 5 Firefighting measures

5.1 Extinguishing agent

Suitable extinguishing agents:
Alcohol-resistant foam, carbon dioxide, dry extinguishing agent, dry sand, limestone powder, water spray jet

Unsuitable extinguishing agents:
Full water jet

5.2 Special hazards arising from the substance or mixture.

May produce ammonia gas. May produce toxic nitrogen oxides. Use of water can lead to the formation of very toxic aqueous solutions. Do not allow run-off water from fire-fighting operations to enter waste water or watercourses. Carbon monoxide can be produced by imperfect combustion. Personnel facing downwind must be evacuated. Burning produces harmful and toxic smoke.

5.3 Instructions for firefighting

Special firefighting procedures:
Avoid contact with skin. Wear face protection. Use PPE.

Special protective equipment for firefighting:
Use a full protective suit and self-contained breathing apparatus.

SECTION 6 Measures in the event of accidental release *

6.1 Personal precautions, protective equipment and emergency procedures

Use self-contained breathing apparatus and chemical protection suit. Wear suitable protective clothing, protective gloves and safety goggles/face protection when working. Bring people to safety.

Non-emergency personnel: evacuate area and do not approach spilled product. If possible, stop the product from escaping.

6.2 Environmental protection measures

Build a dam to prevent the spread.

6.3 Methods and material for retention and cleaning

Carefully approach the area with the suspected leak. Place in a container suitable for chemical waste.

6.4 Reference to other sections

See Section 13 for information on disposal.

SECTION 7 Handling and storage *

7.1 Protective measures for safe handling

Notes on safe handling:

Throw away contaminated leather articles. Remove contaminated clothing. Wet the affected area with water for at least 15 minutes. Provide easily accessible eyewash stations and safety showers. Wash your hands at the end of each shift and before eating, smoking or going to the toilet. Do not use sodium nitrite or other nitrating agents in formulations containing this product. Risk of formation of carcinogenic nitrosamines. Avoid contact with skin and eyes. Emergency showers and eye showers must be easily accessible. Observe the rules laid down by the authorities for working with these substances. Avoid contact with eyes. Wear personal protective equipment.

Measures for preventing fires:

Keep away from direct sources of ignition.

Measures for preventing aerosol and dust formation:

When used as directed, no aerosol formation occurs.

Measures for protecting the environment:

Do not allow to enter waterways or drains.

Advice on general hygiene in the workplace:

Keep away from food and drink, do not eat, drink or smoke while working;
Wash hands before breaks and after work

7.2 Conditions for safe storage in consideration of incompatibilities

Technical measures and storage conditions:
Keep storage and work rooms cool with sufficient ventilation.

Packaging materials:
Original container

Requirements for storage rooms and containers:
Do not store in containers made of iron or other reactive metals. Store in steel containers, preferably outdoors, above ground and surrounded by dams to contain spillages or leaks.

Storage instructions:
Do not store together with acids

Storage class:
10 according to VCI

Substances to be avoided:
Not relevant under normal storage conditions

Further information on storage conditions
Keep material well sealed.

7.3 Specific end uses

Specific use(s): 1.2; no further relevant information available.

SECTION 8 Exposure controls / personal protective equipment

8.1 Parameters to be monitored

Components with limit values that require monitoring at the workplace:

Chemical name	Type	Exposure limit values	Source
4,4'-diamino-diphenyl-methane	TRK	0.08 mg/m3	Austria, TRK list, Limit Value Ordinance, Federal Law Gazette. II, No. 184/2001, as amended (04 2021)
4,4'-diamino-diphenyl-methane	TRK STEL	0.32 mg/m3	Austria, TRK list, Limit Value Ordinance, Federal Law Gazette. II, No. 184/2001, as amended (04 2021)

DNEL values:

Critical component	Type	Exposure path	Health warnings	Remarks
Copolymer of aniline and formaldehyde, hydrogenated	Average population	Eyes	local effect;	High hazard (no threshold derived)
	Worker	Dermal	Systemic, long-term; 2 mg/kg	Toxicity of repeated doses
	Worker	Dermal	Systemic, short-term; 6 mg/kg	Toxicity of repeated doses
	Worker	Inhalative	Systemic, short-term; 2 mg/m3	Toxicity of repeated doses
	Worker	Inhalative	Systemic, long-term; 0.2 mg/m3	Toxicity of repeated doses
	Worker	Eyes	local effect;	High hazard (no threshold derived)
Benzyl alcohol	Average population	Inhalative	Systemic, short-term; 32.3 mg/m3	Acute toxicity
	Average population	Inhalative	Systemic, long-term; 12.9 mg/m3	Toxicity of repeated doses
	Worker	Inhalative	Systemic, long-term; 25.8 mg/m3	Toxicity of repeated doses
	Worker	Inhalative	Systemic, short-term; 129 mg/m3	Toxicity of repeated doses
	Worker	Dermal	Systemic, short-term; 40 mg/kg	Toxicity of repeated doses
	Average population	Dermal	Systemic, short-term; 20 mg/kg	Acute toxicity
	Worker	Inhalative	Systemic, long-term; 22 mg/m3	Toxicity of repeated doses
	Average population	Oral	Systemic, long-term; 4 mg/kg	Toxicity of repeated doses
	Worker	Dermal	Systemic, long-term; 8 mg/kg	Toxicity of repeated doses
	Average population	Inhalative	Systemic, short-term; 27 mg/m3	Acute toxicity
	Worker	Inhalative	Systemic, short-term; 110 mg/m3	Acute toxicity
	Average population	Inhalative	Systemic, long-term; 5.4 mg/m3	Toxicity of repeated doses
	Average population	Oral	Systemic, short-term; 20 mg/kg	Acute toxicity
	Average population	Dermal	Systemic, long-term; 4 mg/kg	Toxicity of repeated doses
	Worker	Eyes	local effect;	Low risk (no threshold value derived)
	Average population	Eyes	local effect;	Low risk (no threshold value derived)

2,4,6-tri-(dimethylaminomethyl)-phenol	Average population	Dermal	Systemic, short-term; 0.075 mg/kg	Toxicity of repeated doses
	Worker	Inhalative	Systemic, long-term; 0.53 mg/m3	Toxicity of repeated doses
	Worker	Dermal	Systemic, short-term; 0.6 mg/kg	Toxicity of repeated doses
	Worker	Inhalative	Systemic, short-term; 2.1 mg/m3	Toxicity of repeated doses
	Average population	Inhalative	Systemic, short-term; 0.13 mg/m3	Toxicity of repeated doses
	Worker	Dermal	Systemic, long-term; 0.15 mg/kg	Toxicity of repeated doses
	Average population	Dermal	Systemic, long-term; 0.075 mg/kg	Toxicity of repeated doses
	Average population	Inhalative	Systemic, long-term; 0.13 mg/m3	Toxicity of repeated doses
	Average population	Oral	Systemic, long-term; 0.075 mg/kg	Toxicity of repeated doses
	Average population	Eyes	local effect;	Medium risk (no threshold value derived)
	Worker	Eyes	local effect;	Medium risk (no threshold value derived)
2-piperazine-1-ylethylamine	Worker	Inhalative	Systemic, short-term; 10.6 mg/m3	Toxicity of repeated doses
	Average population	Eyes	local effect;	No hazard recognised
	Worker	Dermal	Systemic, long-term; 3.33 mg/kg	Toxicity of repeated doses
	Worker	Eyes	local effect;	No hazard recognised
	Worker	Inhalative	Systemic, long-term; 10.6 mg/m3	Toxicity of repeated doses
	Worker	Inhalative	Local, short-term; 80 mg/m3	Toxicity of repeated doses
	Worker	Inhalative	Local, long-term; 15 µg/m3	Toxicity of repeated doses
4,4'-diamino-dicyclohexylmethane	Average population	Dermal	Systemic, long-term; 0.06 mg/kg	Toxicity of repeated doses
	Worker	Inhalative	Systemic, long-term; 0.9 mg/m3	Toxicity of repeated doses
	Worker	Dermal	Systemic, long-term; 0.25 mg/kg	Toxicity of repeated doses
	Worker	Dermal	Systemic, long-term; 0.1 mg/kg	Toxicity of repeated doses
	Average population	Oral	Systemic, long-term; 0.06 mg/kg	Toxicity of repeated doses
	Average population	Inhalative	Systemic, long-term; 0.21 mg/m3	Toxicity of repeated doses
	Worker	Inhalative	Systemic, long-term; 1 mg/m3	Toxicity of repeated doses
	Average population	Eyes	local effect;	No hazard recognised
	Worker	Eyes	local effect;	High hazard (no threshold derived)
4,4'-diamino-diphenyl-methane	Worker	Inhalative	Systemic, long-term; 0.015 mg/m3	Carcinogenicity
	Worker	Dermal	Systemic, long-term; 0.004 mg/kg	Carcinogenicity
	Worker	Eyes	local effect;	No hazard recognised
	Average population	Eyes	local effect;	No hazard recognised

PNEC values:

Critical component	Environmental compartment	PNEC values	Remarks
Copolymer of aniline and formaldehyde, hydrogenated	Sediment (sea water)	1.5 mg/kg	
	Soil	1.8 mg/kg	
	Sewage treatment plant	1.9 mg/l	
	Sediment (fresh water)	15 mg/kg	
	Aquatic (fresh water)	0.015 mg/l	
	Aquatic (sea water)	0.002 mg/l	
Benzyl alcohol	Sediment (sea water)	0.527 mg/kg	
	Sewage treatment plant	39 mg/l	
	Aquatic (sea water)	0.102 mg/l	
	Aquatic (fresh water)	1 mg/l	
	Soil	0.456 mg/kg	
	Sediment (fresh water)	5.27 mg/kg	
2,4,6-tri-(dimethylaminomethyl)phenol	Sewage treatment plant	0.2 mg/l	
	Aquatic (fresh water)	0.046 mg/l	
	Soil	0.025 mg/kg	
	Sediment (sea water)	0.026 mg/kg	
	Sediment (fresh water)	0.262 mg/kg	
	Aquatic (sea water)	0.005 mg/l	
2-piperazine-1-ylethylamine	Sewage treatment plant	250 mg/l	
	Aquatic (fresh water)	0.058 mg/l	
	Aquatic (sea water)	0.006 mg/l	
	Sediment (fresh water)	215 mg/kg	
	Soil	1 mg/kg	
	Sediment (sea water)	21.5 mg/kg	
4,4'-diamino-dicyclohexylmethane	Predator	0.556 mg/kg	Oral
	Soil	4.56 mg/kg	
	Sediment (sea water)	1.46 mg/kg	
	Sediment (fresh water)	14.6 mg/kg	
	Aquatic (sea water)	0 .008 mg/l	
	Aquatic (fresh water)	0 .08 mg/l	
	Sewage treatment plant	3.2 mg/l	
4,4'-diamino-diphenyl-methane	Sediment (sea water)	0.037 mg/kg	
	Predator	270 mg/kg	Oral
	Aquatic (sea water)	0 mg/l	
	Sediment (fresh water)	0.375 mg/kg	
	Soil	1.12 mg/kg	
	Sewage treatment plant	10 mg/l	
	Aquatic (fresh water)	0 mg/l	

8.2 Exposure controls and monitoring

Suitable technical control equipment:
No special requirements

Personal protective equipment:

Eye protection: Safety goggles and full face shield Chemical-resistant safety goggles must be worn.

Skin protection: Impermeable protective clothing Full rubber suit (rain suit). Rubber or plastic boots Long-sleeved shirts and trousers without turn-ups.

Hand protection: Neoprene gloves, butyl rubber gloves, nitrile rubber gloves, impermeable gloves, disposable PVC gloves Additional information: Chemical-resistant, impervious gloves that meet a recognised standard must be worn at all times when working with chemicals

Respiratory protection: Not necessary if the room is well ventilated. For vapours / aerosol formation Filter A.

Limitation and monitoring of environmental exposure:
Not applicable

SECTION 9 Physical and chemical properties *

9.1 Information on basic physical and chemical properties

Aggregate state	liquid
Colour	amber
Odour	amine-like
Melting point/freezing point	n/d
Boiling point or start of boiling and boiling range	> 150 °C
Flammability	yes
Lower explosion limit	n/d
Upper explosion limit	n/d
Flash point	> 100 °C
Ignition temperature	n/d
Decomposition temperature	n/d
pH value	11
Kinematic viscosity	200 – 600 mm²/s
Solubility	miscible with water, 10 - 90%
Partition coefficient n-octanol/water (log value)	n/a
Vapour pressure	< 1 hPa at 20 °C
Density and/or relative density	0.95 – 1.05 kg/m³
Relative vapour density	n/d
Particle properties	n/a

n/d = not determined n/a = not applicable

9.2 Other information

No further safety-relevant information available

SECTION 10 Stability and reactivity *

10.1 Reactivity

No hazardous reactions are to be expected if used as intended.

10.2 Chemical stability

The product is stable under normal ambient conditions and under the temperature and pressure conditions to be expected during storage and handling.

10.3 Possibility of hazardous reactions

Reaction with peroxides leads to violent decomposition of the peroxide with possible explosion.

10.4 Conditions to avoid

No conditions known to be avoided if handled as directed.

10.5 Incompatible materials

Sodium hypochlorite, organic acids, mineral acids.
Slowly corrodes copper, aluminium, zinc and galvanised surfaces.
N-nitrosamines, many of which are known carcinogens, can be formed when the product comes into contact with nitrous acid, nitrites or atmospheres with high nitrogen oxide concentrations.

10.6 Hazardous decomposition products

Nitric acid, ammonia, nitrogen oxides (NOx), nitrogen oxide can react with water vapour to form corrosive nitric acid (MAK = 02 ppm), carbon monoxide, carbon dioxide (CO_2), aldehyde, flammable hydrocarbon fragments, nitrosamines.

SECTION 11 Toxicological information *

11.1 Information on toxicological effects

Acute toxicity:

Acute oral toxicity:

Product:	LD50(rat): > 300 mg/kg Method: Estimated.
Copolymer made from aniline and formaldehyde, hydrogenated:	LD50(rat): 300 mg/kg
Benzyl alcohol	LD50(rat): 1620 mg/kg
2,4,6-tris(dimethylaminomethyl)phenol:	LD50(rat): 2169 mg/kg Harmful if ingested, EU-CLP according to Regulation (EC) No 1272/2008, Annex VI
2-piperazine-1-ylethylamine	LD 50 (rat, male) : 2,140 mg/kg LD 50 (acute toxicity estimate) : 500 mg/kg EU-CLP according to Regulation (EC) No 1272/2008, Annex VI
4,4'-diaminodicyclohexylmethane:	LD50(rat): 380 mg/kg
4,4'-diamino-diphenyl-methane:	LD 50 (cat, female, male) : > 50 - 100 mg/kg

Acute dermal toxicity:

Product:	No data is available for the product itself. ATEmix (estimated acute toxicity of the mixture): > 2,000 mg/kg
Copolymer made from aniline and Formaldehyde, hydrogenated:	No data due to corrosive effect on the skin
Benzyl alcohol:	LD 50 (rabbit) : > 2,000 mg/kg Not classified
2,4,6-tri-(dimethylaminomethyl)phenol:	Not classified
2-piperazine-1-: ylethylamine	LD 50 (rabbit, male) : 866 mg/kg literature
4,4'-diaminodicyclohexylmethane:	LD 50 (rat) : 2,110 mg/kg
4,4'-diamino-diphenyl-methane:	LD 50 (rat, female, male) : 2,080 mg/kg

Acute inhalative toxicity:

Product:	No data is available for the product itself. ATEmix (estimated acute toxicity of the mixture): > 3.5 mg/l dust, mist and fume
Copolymer made from aniline and formaldehyde, hydrogenated:	No data due to corrosive effect on the skin, vapour No data due to corrosive effect on skin, dust, mist and fume

Benzyl alcohol:	No data is available. Dust, mist and smoke No data is available. Vapour moderately toxic after single exposure, dust, mist and fume, EU-CLP according to Regulation (EC) No 1272/2008, Annex VI
2,4,6- tri-(dimethylaminomethyl)phenol:	No data due to corrosive effect on the skin, vapou No data due to corrosive effect on skin, dust, mist and fume
2-piperazine-1-ylethylamine:	No data due to corrosive effect on skin, vapour No data due to corrosive effect on skin, dust, mist and fume
4,4'-diamino-dicyclohexylmethane:	No data due to corrosive effect on the skin, vapour No data due to corrosive effect on skin, dust, mist and fume
4,4'-diamino-diphenyl-methane:	Dust, fog and smoke Not applicable, vapour

Repeated dose toxicity

Product:	Mixed polycycloaliphatic amines were tested for systemic effects in rats in a subchronic (28-day) oral study at doses of 15 to 300 mg/kg/day. The effects observed at 300 mg/kg/day included: decreased survival rate, decreased weight gain, increased liver, kidney and adrenal gland weight and histological changes in the liver, kidney, adrenal gland and spleen. The highest concentration tested at which no adverse effect occurred (No Observed Adverse Effect Level: NOAEL) was 15 mg/kg/day.
Copolymer made from aniline and formaldehyde, hydrogenated:	NOEL (rat, oral): 15 mg/kg
Benzyl alcohol:	NOAEL (no observable adverse effect level) (rat, oral): 400 mg/kg
2,4,6- tri-(dimethylaminomethyl)phenol:	No data is available.
2-piperazine-1-ylethylamine:	No data is available.
4,4'-diamino-dicyclohexylmethane:	No data is available.
4,4'-diamino-diphenyl-methane:	No data is available.

Corrosive/irritant effect on the skin:

Product:	No data is available.
Copolymer made from aniline and formaldehyde, hydrogenated:	Corrosive.
Benzyl alcohol:	OECD 404 (rabbit): not corrosive
2-piperazine-1-ylethylamine:	(rabbit, > 3.01 min - < 1 h): corrosive.
2,4,6- tri-(dimethylaminomethyl)phenol:	OECD 404 (rabbit, > 1.01 - < 4 h): corrosive. Irritating. EU-CLP according to Regulation (EC) No 1272/2008, Annex VI
4,4'-diaminodicyclohexylmethane:	OECD 404 (rabbit, > 3.01 min - < 1 h): corrosive.
4,4'-diamino-diphenyl-methane:	(rabbit): not corrosive

Severe eye damage/irritation:

Product:	No data is available.
Copolymer made from aniline and formaldehyde, hydrogenated:	Risk of severe eye damage.
Benzyl alcohol:	OECD 405 (rabbit): corrosive.

2,4,6- tri-(dimethylaminomethyl)phenol:	(rabbit): Risk of severe eye damage. Irritating. EU-CLP according to Regulation (EC) No 1272/2008, Annex VI
2-piperazine-1-ylethylamine:	(rabbit): Risk of severe eye damage.
4,4'-diaminodicyclohexylmethane:	Risk of severe eye damage.
4,4'-diamino-diphenyl-methane:	(rabbit): not corrosive

Sensitisation of the respiratory tract/skin:

Product:	Some people showed skin sensitisation to this product or its components.
Copolymer made from aniline and formaldehyde, hydrogenated:	May cause sensitisation through skin contact.
Benzyl alcohol:	Sensitisation test, OECD 406 (guinea pig): Not a skin sensitiser.
2,4,6- tri-(dimethylaminomethyl)phenol:	Maximisation test, OECD 406 (guinea pig): Not a skin sensitiser.
2-piperazine-1-ylethylamine:	Maximisation test, OECD 406 (guinea pig): Skin sensitisation Literature
4,4'-diaminodicyclohexylmethane:	Magnussona i Kligmana, OECD 406 (guinea pig): Sensitisation of the skin Respiratory sensitiser: No data is available.
4,4'-diamino-diphenyl-methane:	(Human)Sensitisation possible through skin contact.

Germ cell mutagenicity:

In vitro

Product:	No data is available.
Copolymer made from aniline and formaldehyde, hydrogenated:	Ames test: negative (OECD 476)negative Chromosomal aberration (OECD 473): negative
Benzyl alcohol:	No data is available.
2,4,6- tri-(dimethylaminomethyl)phenol:	No data is available.
2-piperazine-1-ylethylamine:	No data is available.
4,4'-diamino-dicyclohexylmethane:	No data is available.
4,4'-diamino-diphenyl-methane:	No data is available.

In vivo

Product:	No data is available.
Copolymer made from aniline and formaldehyde, hydrogenated:	No data is available.
Benzyl alcohol:	No data is available.
2,4,6- tri-(dimethylaminomethyl)phenol:	No data is available.
2-piperazine-1-ylethylamine:	No data is available.
4,4'-diamino-dicyclohexylmethane:	No data is available.
4,4'-diamino-diphenyl-methane:	No data is available.

Carcinogenicity:

Product:	No data is available.
Copolymer made from aniline and formaldehyde, hydrogenated:	No data is available.
Benzyl alcohol:	not classified
2,4,6-tri-(dimethylaminomethyl)phenol:	No data is available.
2-piperazine-1-ylethylamine:	No data is available.
4,4'-diaminodicyclohexylmethane:	not classified
4,4'-diamino-diphenyl-methane:	Possible cancer risk.

Reproductive toxicity:

Product:	No data is available for the product itself.
Copolymer made from aniline and formaldehyde, hydrogenated:	No data is available.
Benzyl alcohol:	not classified
2,4,6-tri-(dimethylaminomethyl)phenol:	No data is available.
2-piperazine-1-ylethylamine:	Suspected of damaging fertility or harming the unborn child.
4,4'-diaminodicyclohexylmethane:	not classified
4,4'-diamino-diphenyl-methane:	No data is available.

Specific target organ toxicity at single exposure:

Product:	No data is available.
Copolymer made from aniline and formaldehyde, hydrogenated:	No data is available.
Benzyl alcohol:	not classified
2,4,6-tri-(dimethylaminomethyl)phenol:	No data is available.
2-piperazine-1-ylethylamine:	No data is available.
4,4'-diamino-dicyclohexylmethane:	No data is available.
4,4'-diamino-diphenyl-methane:	Category 1 damages the organs.

Specific target organ toxicity with repeated exposure:

Product:	Oral: kidneyMay cause damage to organs through prolonged or repeated exposure.
Copolymer made from aniline and formaldehyde, hydrogenated:	Kidney - Category 2 May cause damage to organs through prolonged or repeated exposure.
Benzyl alcohol:	not classified
2,4,6-tri-(dimethylaminomethyl)phenol:	No data is available.
2-piperazine-1-ylethylamine:	Inhalation - Vapour: Upper respiratory tract - Category 1 Causes damage to organs through prolonged or repeated exposure. Literature
4,4'-diaminodicyclohexylmethane:	Liver, skeletal muscle - Category 2 May cause damage to organs through prolonged or repeated exposure.
4,4'-diamino-diphenyl-methane:	Liver - Category 2 May cause damage to organs through prolonged or repeated exposure.

Danger of aspiration:

Product:	No data is available.
Copolymer made from aniline and formaldehyde, hydrogenated:	not classified
Benzyl alcohol:	not classified
2,4,6-tri-(dimethylaminomethyl)phenol:	not classified
2-piperazine-1-ylethylamine:	not classified
4,4'-diaminodicyclohexylmethane:	not classified
4,4'-diamino-diphenyl-methane:	Not applicable

11.2 Information on other hazards

Endocrine-disrupting properties:

Product:	The substance/mixture does not contain components that exhibit endocrine*disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% or more;
Copolymer made from aniline and formaldehyde, hydrogenated:	No data is available.
Benzyl alcohol:	No data is available.
2,4,6-tri-(dimethylaminomethyl)phenol:	No data is available.
2-piperazine-1-ylethylamine:	No data is available.
4,4'-diamino-dicyclohexylmethane:	No data is available.
4,4'-diamino-diphenyl-methane:	No data is available.

SECTION 12 Environmental information

12.1 Toxicity

No further relevant data available

12.1 Toxicity

No data is available for the product.

Fish toxicity:

Polymer from formaldehyde and aminobenzene, hydrogenated:	LC50(Poecilia reticulata) 96h:	63 mg/l
Benzyl alcohol:	LC50(Oryzias latipes) 96h:	460 mg/l
4,4'-methylenebis(cyclohexylamine):	LC0(Leuciscus idus) 96h:	46 mg/l
4,4'-methylenebis(cyclohexylamine):	LC50(Leuciscus idus) 96h:	> 100 mg/l
2,4,6-tris(dimethylaminomethyl)phenol:	LC50(Cyprinus carpio) 96h:	175 mg/l

Daphnia toxicity:

Polymer from formaldehyde and aminobenzene, hydrogenated:	EC50(Daphnia magna) 48h:	15.4 mg/l
Benzyl alcohol:	EC50(Daphnia magna) 48h:	230 mg/l

4,4'-methylenebis(cyclohexylamine):	EC50(Daphnia magna) 48h:	6.84 mg/l
2,4,6-tris(dimethylaminomethyl)phenol:	EC50(Palaemonetes) 96h:	718 mg/l

Algal toxicity:

Benzyl alcohol:	EC50(Pseudokirchneriella subcapitata)) 72h:	390 mg/l
4,4'-methylenbis(cyclohexylamine):	EC50(Algae) 72h:	140 – 200 mg/l
2,4,6-tris(dimethylaminomethyl)phenol:	EC50(Desmodesmus subspicatus) 72h:	84 mg/l

Toxicity to other organisms:

Polymer from formaldehyde and aminobenzene, hydrogenated:	EC50(activated sludge) 48h:	187 mg/l
Benzyl alcohol:	EC50(nitrobacteria) 24h:	390 mg/l
2,4,6-tris(dimethylaminomethyl)phenol:	EC50(activated sludge) 28h:	2 mg/l

12.2 Persistence and degradability

No further relevant data available

12.3 Bioaccumulative potential

No further relevant data available

12.4 Mobility in soil

No further relevant data available

12.5 Results of the PBT and vPvB assessment

No further relevant data available

12.6 Endocrine disrupting properties

No further relevant data available

12.6 Other adverse effects

Water hazard class 2 (according to calculation rule for preparations AwSV)

SECTION 13 Notes on disposal

Product:	Do not dispose of via household waste or sewer, hand over to a hazardous waste collector.
Packaging:	Disposal in accordance with official regulations.
Waste code:	ÖNORM 2100, code number 55 352 EN waste catalogue, code number 08 01 11

SECTION 14 Transport details *

14.1 UN number

ADN	UN2735
ADR	UN2735
RID	UN2735
IMDG code	UN2735
IATA-DGR	UN2735

14.2 UN proper shipping name

ADN	AMINES, LIQUID, CORROSIVE, N.O.S. (Modified cycloaliphatic amine, Heterocyclic amine)
ADR	AMINES, LIQUID, CORROSIVE, N.O.S. (Modified cycloaliphatic amine, Heterocyclic amine)
RID	AMINES, LIQUID, CORROSIVE, N.O.S. (Modified cycloaliphatic amine, Heterocyclic amine)
IMDG code	Amines, liquid, corrosive, N.O.S. (Modified cycloaliphatic amine, Heterocyclic amine)
IATA-DGR	Amines, liquid, corrosive, N.O.S. (Modified cycloaliphatic amine, Heterocyclic amine)

14.3 Transport hazard classes

ADN	8
ADR	8
RID	8
IMDG code	8
IATA-DGR	8

14.4 Packaging group

ADN	
Packaging group	II
Classification code	C7
Hazard identification number	80
Hazard label	8

ADR	
Packaging group	II
Classification code	C7
Hazard identification number	80
Hazard label	8
Tunnel restriction code	(E)

RID	
Packaging group	II
Classification code	C7
Hazard identification number	80
Hazard label	8

IMDG code	
Packaging group	II
Hazard label	8
EmS code	F-A, S-B

IATA-DGR (transport aircraft)	
Packaging instructions	855
Packaging instructions (LQ)	Y840
Packaging group	II
Hazard label	8

IATA-DGR (passenger aircraft)	
Packaging instructions	851
Packaging instructions (LQ)	Y840
Packaging group	II
Hazard label	8

14.5 Environmental hazards

ADN	
Environmentally hazardous	no
ADR	
Environmentally hazardous	no

RID	
Environmentally hazardous	no
IMDG code	
Marine pollutant	no
IATA-DGR	
Environmentally hazardous	no

14.6 Special precautions for the user

No data available.

14.7 Transport of bulk cargo by sea in accordance with IMO instruments

Not applicable to product as delivered.

SECTION 15 Legal regulations

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

REACH Regulation (EC) No. 1907/2006 as amended
CLP Regulation (EC) No 1272/2008 as amended
Water hazard class (Germany):WgK 2 (slightly hazardous to water)

15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

SECTION 16 Other information *

The information is based on the current state of knowledge and experience. This data sheet describes products with regard to safety requirements. The information does not have the meaning of a guarantee of properties.

Clear indication of changes:

Changes to the previous version are marked with the asterisk * in the right-hand margin.

Abbreviations and acronyms

(Q)SAR = Quantitative structure-activity relationship
ADN = European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR = Agreement on the International Carriage of Dangerous Goods by Road
AGW = limit value for exposure at the workplace
ASTM = International Standards Institute
ATE = acute toxicity estimate
AwSV = Ordinance on Installations for Handling Substances Hazardous to Water
BCF = bioconcentration factor
BGW = biological limit value
CAS No. = Chemical Abstracts Service Number
CLP = classification, labelling and packaging
Classification, labelling and packaging
CMR = carcinogen, mutagen or reproductive toxin
CSA = chemical safety assessment
CSR = chemical safety report
DMEL = derived exposure level with minimal impairment
DNEL = derived exposure level without impairment
EC50 = The effective concentration of a substance that causes 50% of the maximum possible reaction.
EC number = EINECS and ELINCS number (see also EINECS and ELINCS)
EINECS = European Inventory of Existing Commercial Substances
EL50 = effective level 50%
IATA = International Air Transport Association
IC50 = inhibitory concentration 50%
ICAO-TI = Technical Instructions for the Carriage of Dangerous Goods by Air
IMDG = International Maritime Dangerous Goods Code
Kow = octanol-water partition coefficient
Koc = organic soil carbon to water partition coefficient
LC50 = lethal concentration for 50% of a test population
LD50 = lethal dose for 50% of a test population (median lethal dose)
LGK = storage class
LL50 = lethal load 50%
LOAEC = lowest concentration with observable adverse effect
LOAEL = lowest observed adverse effect level
MAK = maximum workplace concentration
NOAEC = concentration with no observable adverse effect
NOAEL = dose with no observable adverse effect
NOEC = highest exposure concentration of a substance without observed effects
NOEL = highest dose of a substance with no observed effects
OECD = Organisation for Economic Co-operation and Development
PBT = persistent, bioaccumulative and toxic substance
PEC = estimated effect concentration
PNEC = estimated no-effect concentration
RID = Regulations on the International Carriage of Dangerous Goods by Rail
QSAR = Quantitative/Qualitative Structure-Effect Relationship
SVHC = substances of very high concern
STEL = maximum workplace concentration (MAK) - short-term value
TLV = maximum workplace concentration (MAK)
TRGS = Technical Rules for Hazardous Substances
TWA = maximum workplace concentration (MAK) - daily average value
UVCB = substances with unknown or variable composition, complex reaction products and biological materials
VCI = German Chemical Industry Association
vPvB = very persistent and very bioaccumulative

Important literature references and data sources:

Information from our suppliers and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to prepare this safety data sheet.

Methods used for product categorisation:

The classification for health, physico-chemical and environmental hazards was derived from a combination of calculation methods and, if available, test data.

Full text of the H & P phrases referred to in items 2 and 3:

H302 Harmful if ingested.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause allergic skin reactions.
H318 Causes severe eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure if ingested.
H412 Harmful for water organisms, with long-term effect.

Notes on training courses:

Workers must be regularly trained in the safe handling of the products based on the information in the safety data sheet and the local conditions of the workplace.
National regulations on the training of employees in the handling of hazardous substances must be observed.