

ARDEX EP 2000 Hardener



Safety Data Sheet

according to Regulation (EU) 2015/830

Issue date: 12/14/2016

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

1.1. Product identifier

Product form : Mixture
Product name : ARDEX EP 2000 Hardener
Product code : 4699, 4691

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

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : Construction materials
Use of the substance/mixture : Substrate Preparation

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

ARDEX Baustoff GmbH

Hürmer Str. 40

A-3382 Loosdorf - Österreich

T +43/2754/7021-0 - F +43/2754/2490

E-mail address of competent person responsible for the SDS : produktion@ardex.at

1.4. Emergency telephone number

Emergency number : +43-(0)1-4064343 (Vergiftungsinformationszentrale Österreich)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4	H302
Acute toxicity (inhalation:vapour) Category 4	H332
Skin corrosion/irritation, Category 1, Sub-Category 1A	H314
Serious eye damage/eye irritation, Category 1	H318
Skin sensitisation, Category 1	H317
Reproductive toxicity, Category 2	H361
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Hazardous ingredients :

Isophorondiamine; 1,3-bis(aminomethyl)cyclohexane; trimethylhexane-1,6-diamine; m-phenylenebis(methylamine); salicylic acid

Hazard statements (CLP) :

H302+H332 - Harmful if swallowed or if inhaled
H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H361 - Suspected of damaging the unborn child..
H410 - Very toxic to aquatic life with long lasting effects.

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- Precautionary statements (CLP) : P102 - Keep out of reach of children.
P261 - Avoid breathing dust, vapours.
P280 - Wear protective gloves, protective clothing, eye protection.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .
P273 - Avoid release to the environment.
- Extra phrases : Dispose of contents/container in accordance with regional/national/international/local regulations.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Isophorondiamine	(CAS-No.) 2855-13-2 (EC-No.) 220-666-8 (EC Index-No.) 612-067-00-9 (REACH-no) 01-2119514687-32	10 - 30	Skin Sens. 1, H317 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412
m-phenylenebis(methylamine)	(CAS-No.) 1477-55-0 (EC-No.) 216-032-5 (REACH-no) 01-2119480150-50	10 - 20	Skin Sens. 1B, H317 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412
Phenol, styrolized	(CAS-No.) 61788-44-1 (EC-No.) 262-975-0 (REACH-no) 01-2119980970-27	< 15	Aquatic Acute 1, H400 Aquatic Chronic 2, H411
1-dodecanol	(CAS-No.) 112-53-8 (EC-No.) 203-982-0 (REACH-no) 01-2119485976-15	1 - 5	Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
salicylic acid	(CAS-No.) 69-72-7 (EC-No.) 200-712-3 (EC Index-No.) 607-732-00-5 (REACH-no) 01-2119486984-17	< 7,5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Repr. 2, H361d
trimethylhexane-1,6-diamine	(CAS-No.) 25513-64-8 (EC-No.) 247-063-2 (REACH-no) 01-2119560598-25	< 3	Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317
2,4,6-tris(dimethylaminomethyl)phenol	(CAS-No.) 90-72-2 (EC-No.) 202-013-9 (EC Index-No.) 603-069-00-0 (REACH-no) 01-2119560597-27	< 3	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315
diisopropyl-naphthalene	(CAS-No.) 38640-62-9 (EC-No.) 254-052-6 (REACH-no) 01-2119565150-48	1 - 3	Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3-aminopropyltriethoxysilane	(CAS-No.) 919-30-2 (EC-No.) 213-048-4 (EC Index-No.) 612-108-00-0 (REACH-no) 01-2119480479-24	< 3	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314

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

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Move to fresh air. If symptoms persist call a doctor.
- First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Get medical advice/attention.

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

Symptoms/effects after inhalation	: None reasonably foreseeable.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Severe eye irritation.
Symptoms/effects after ingestion	: Irritating to the respiratory system and mucous membranes.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: All extinguishing media allowed.
Unsuitable extinguishing media	: None.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Heat may cause pressure rise with explosion of tanks/drums.
Hazardous decomposition products in case of fire	: Carbon dioxide. Carbon monoxide.

5.3. Advice for firefighters

Precautionary measures fire	: Evacuate area.
Firefighting instructions	: Contain the extinguishing fluids by bunding. Do not allow run-off from fire-fighting to enter drains or water courses.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Absorb spillage to prevent material damage.
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6.1.1. For non-emergency personnel

Protective equipment	: Wear personal protective equipment.
Emergency procedures	: Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection. Protective gloves. Safety glasses. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Do not allow to enter drains or water courses.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Take up liquid spill into absorbent material.
Other information	: Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

6.4. Reference to other sections

See Heading 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: See Heading 8. When mixing the components: Please note the safety data sheet for the second component.
Precautions for safe handling	: Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only in well ventilated areas. Do not leave mixed material in the container - hardening can lead to strong heat development.
Hygiene measures	: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Provide local exhaust or general room ventilation.
Storage conditions	: Keep container closed when not in use. Store in original container.
Incompatible products	: Oxidizing agent. Strong bases. Strong acids.

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

m-phenylenebis(methylamine) (1477-55-0)		
Austria	Local name	α,α' -Diamino-1,3-xylol
Austria	MAK (OEL TWA)	0.1 mg/m ³ 0.1 mg/m ³
Austria	MAK (OEL STEL)	0.1 mg/m ³ (Mow)
Austria	OEL C	0.1 mg/m ³

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

Respiratory protection not required in normal conditions. In case of splash hazard: safety glasses. Gloves.

Hand protection:

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	1 (> 10 minutes)	0,1		
Reusable gloves	Nitrile rubber (NBR), Butyl rubber	6 (> 480 minutes)	0,5		EN ISO 374

Eye protection:

Type	Field of application	Characteristics	Standard
Safety goggles	Droplet	With side shields, Plastic	

Skin and body protection:

Type	Standard
Safety shoes, Skin protection appropriate to the conditions of use should be provided	



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Paste.
Colour	: Various.
Odour	: Amine-like.
Odour threshold	: No data available
pH	: 9
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 100 °C
Auto-ignition temperature	: > 350 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1
Solubility	: Material insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

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Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Product is not explosive.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

None.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed or in contact with skin. Harmful if inhaled.

ATE CLP (oral)	1382.089 mg/kg bodyweight
ATE CLP (vapours)	11 mg/l/4h

Isophorondiamine (2855-13-2)	
LD50 oral rat	1030 mg/kg (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 5.01 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))

1-dodecanol (112-53-8)	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral)
LD50 dermal rabbit	8000 – 12000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	> 71 mg/l (1 h, Rat, Male / female, Read-across, Inhalation (mist))

diisopropylnaphthalene (38640-62-9)	
LD50 oral rat	4130 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 4500 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 5.64 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))

Phenol, styrolized (61788-44-1)	
LD50 oral rat	2500 mg/kg
LD50 dermal rabbit	> 7940 mg/kg

m-phenylenebis(methylamine) (1477-55-0)	
LD50 oral rat	930 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 3100 mg/kg bodyweight (24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	1.34 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))

2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
LD50 oral rat	2169 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))

salicylic acid (69-72-7)	
LD50 oral rat	891 mg/kg bodyweight (Equivalent or similar to OECD 401, 14 day(s), Rat, Male, Experimental value, Oral, 14 day(s))

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salicylic acid (69-72-7)	
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LD50 dermal rabbit	> 10000 mg/kg (Rabbit, Dermal)
3-aminopropyltriethoxysilane (919-30-2)	
LD50 oral rat	1.57 – 2.83 ml/kg (EPA OTS 798.1175, Rat, Male / female, Experimental value, Oral)
LD50 dermal rabbit	4.29 ml/kg (EPA OTS 798.1100, 24 h, Rabbit, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat [ppm]	> 5 ppm (OECD 403: Acute Inhalation Toxicity, 6 h, Rat, Male, Experimental value, Inhalation (vapours))

Skin corrosion/irritation	: Causes severe skin burns. pH: 9
Serious eye damage/irritation	: Causes serious eye damage. pH: 9
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging the unborn child..
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Isophorondiamine (2855-13-2)	
LC50 - Fish [1]	110 mg/l (EU Method C.1, 96 h, Leuciscus idus, Semi-static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	23 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	37 mg/l (EU Method C.3, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Cell numbers)
1-dodecanol (112-53-8)	
LC50 - Fish [1]	1.01 mg/l (96 h, Pimephales promelas, Flow-through system)
EC50 - Crustacea [1]	320 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna)
EC50 96h - Algae [1]	0.97 mg/l (Scenedesmus subspicatus, Inhibition)
diisopropylinaphthalene (38640-62-9)	
LC50 - Fish [1]	> 0.5 mg/l (EU Method C.1, 96 h, Leuciscus idus, Semi-static system, Fresh water, Experimental value, GLP)
Phenol, styrolized (61788-44-1)	
EC50 - Crustacea [1]	> 0.249 mg/l (48 h, Daphnia sp., Literature study)
EC50 72h - Algae [1]	0.326 mg/l (Algae, Literature study)
m-phenylenebis(methylamine) (1477-55-0)	
LC50 - Fish [1]	87.6 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oryzias latipes, Semi-static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	15.2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	33.3 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Experimental value, Nominal concentration)
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
LC50 - Fish [1]	175 mg/l (APHA, 96 h, Cyprinus carpio, Static system, Fresh water, Experimental value, Nominal concentration)
ErC50 algae	84 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
salicylic acid (69-72-7)	
LC50 - Fish [1]	1370 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Read-across, Lethal)
EC50 - Crustacea [1]	870 mg/l (Equivalent or similar to OECD 202, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Experimental value)

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3-aminopropyltriethoxysilane (919-30-2)	
LC50 - Fish [1]	> 934 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	331 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 algae	> 1000 mg/l (EU Method C.3, 72 h, Scenedesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

12.2. Persistence and degradability

Isophorondiamine (2855-13-2)	
Persistence and degradability	Not readily biodegradable in water.

1-dodecanol (112-53-8)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
ThOD	3.09 g O ₂ /g substance
BOD (% of ThOD)	0.3

diisopropylanthracene (38640-62-9)	
Persistence and degradability	Not readily biodegradable in water.

Phenol, styrolized (61788-44-1)	
Persistence and degradability	Biodegradability in soil: no data available. Not readily biodegradable in water.

m-phenylenebis(methylamine) (1477-55-0)	
Persistence and degradability	Not readily biodegradable in water.

2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
Persistence and degradability	Not readily biodegradable in water.

salicylic acid (69-72-7)	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.95 g O ₂ /g substance
Chemical oxygen demand (COD)	1.58 g O ₂ /g substance
ThOD	1.623 g O ₂ /g substance
BOD (% of ThOD)	0.41 – 0.6

3-aminopropyltriethoxysilane (919-30-2)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

Isophorondiamine (2855-13-2)	
BCF - Fish [1]	1.827 – 3.16 (BCFBAF v3.01, Pisces, Estimated value)
Partition coefficient n-octanol/water (Log Pow)	0.99 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 23 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

1-dodecanol (112-53-8)	
Partition coefficient n-octanol/water (Log Pow)	5.13 (Experimental value)
Bioaccumulative potential	Bioaccumable.

diisopropylanthracene (38640-62-9)	
BCF - Fish [1]	770 – 6400 (OECD 305: Bioconcentration: Flow-Through Fish Test, 35 day(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value, GLP)
Partition coefficient n-octanol/water (Log Pow)	6.081 (Calculated, US EPA)
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).

Phenol, styrolized (61788-44-1)	
Partition coefficient n-octanol/water (Log Pow)	6.24 – 7.77 (Experimental value, OECD 123: Partition Coefficient (1-Octanol/Water): Slow-Stirring Method)
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).

m-phenylenebis(methylamine) (1477-55-0)	
Partition coefficient n-octanol/water (Log Pow)	0.18 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
Partition coefficient n-octanol/water (Log Pow)	-0.66 (Experimental value, EPA OPPTS 830.7550: Partition Coefficient (n-octanol/water), Shake Flask Method, 21.5 °C)
Bioaccumulative potential	Not bioaccumulative.

salicylic acid (69-72-7)	
Partition coefficient n-octanol/water (Log Pow)	2.25 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)

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salicylic acid (69-72-7)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

3-aminopropyltriethoxysilane (919-30-2)	
BCF - Fish [1]	3.4 (OECD 305: Bioconcentration: Flow-Through Fish Test, 8 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	1.7 (QSAR, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

Isophorondiamine (2855-13-2)	
Surface tension	3.47 N/m (23 °C)
Partition coefficient n-octanol/water (Log Koc)	2.97 (log Koc, QSAR)
Ecology - soil	Low potential for adsorption in soil.

1-dodecanol (112-53-8)	
Surface tension	31.8 mN/m (23 °C, 6.4 mg/l)
Ecology - soil	Adsorbs into the soil.

diisopropyl-naphthalene (38640-62-9)	
Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Koc)	4.558 (log Koc, QSAR)
Ecology - soil	Low potential for mobility in soil.

Phenol, styrolized (61788-44-1)	
Ecology - soil	No (test)data on mobility of the substance available.

m-phenylenebis(methylamine) (1477-55-0)	
Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Koc)	3.11 (log Koc, QSAR)
Ecology - soil	Low potential for mobility in soil.

2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
Partition coefficient n-octanol/water (Log Koc)	1.32 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

salicylic acid (69-72-7)	
Partition coefficient n-octanol/water (Log Koc)	1.54 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Ecology - soil	Highly mobile in soil.

3-aminopropyltriethoxysilane (919-30-2)	
Ecology - soil	No (test)data on mobility of the substance available.

12.5. Results of PBT and vPvB assessment

Component	
Isophorondiamine (2855-13-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
m-phenylenebis(methylamine) (1477-55-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
salicylic acid (69-72-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
diisopropyl-naphthalene (38640-62-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
3-aminopropyltriethoxysilane (919-30-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Avoid release to the environment.
European List of Waste (LoW) code	: 08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances






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SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
2735	2735	2735	2735	2735
14.2. UN proper shipping name				
AMINES, LIQUID, CORROSIVE, N.O.S. (Isophorondiamine)	AMINES, LIQUID, CORROSIVE, N.O.S. (Isophorondiamine)	Amines, liquid, corrosive, n.o.s. (Isophorondiamine)	AMINES, LIQUID, CORROSIVE, N.O.S. (Isophorondiamine)	AMINES, LIQUID, CORROSIVE, N.O.S. (Isophorondiamine)
Transport document description				
UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (Isophorondiamine), 8, III, (E), ENVIRONMENTALLY HAZARDOUS	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (Isophorondiamine), 8, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 2735 Amines, liquid, corrosive, n.o.s. (Isophorondiamine), 8, III, ENVIRONMENTALLY HAZARDOUS	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (Isophorondiamine), 8, III, ENVIRONMENTALLY HAZARDOUS	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (Isophorondiamine), 8, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
8	8	8	8	8
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : C7
 Limited quantities (ADR) : 5I
 Excepted quantities (ADR) : E1
 Transport category (ADR) : 3
 Orange plates :



Tunnel restriction code (ADR) : E

- Transport by sea

Special provisions (IMDG) : 223, 274
 Limited quantities (IMDG) : 5L
 EmS-No. (Fire) : F-A
 EmS-No. (Spillage) : S-B
 Segregation (IMDG) : SGG18, SG35

- Air transport

PCA Excepted quantities (IATA) : E1
 PCA Limited quantities (IATA) : Y841
 PCA limited quantity max net quantity (IATA) : 1L
 PCA max net quantity (IATA) : 5L

- Inland waterway transport

Classification code (ADN) : C7
 Limited quantities (ADN) : 5L
 Excepted quantities (ADN) : E1

- Rail transport

Classification code (RID) : C7

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Limited quantities (RID) : 5L
Excepted quantities (RID) : E1
Transport category (RID) : 3

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out

SECTION 16: Other information

Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	Derived-No Effect Level
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Full text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 2	Reproductive toxicity, Category 2
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.

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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.
H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
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.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.