

Safety Data Sheet Epoxy All-Round hardener



Safety Data Sheet dated 17/10/2018, version 6

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

1.1. Product identifier

Mixture identification: Trade name: Epoxy All-Round hardener

Trade code: Epoxy All-Round hardener

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

Recommended use:

Hardener for epoxy resin

Uses advised against:

All uses not listed among the uses recommended

1.3. Details of the supplier of the safety data sheet

Company:

Nedform BV

Hofdwardsweg 20, 6161DD Geleen, The Netherlands

Tel: +31 (0)46 4106260

Email: info@nedform.com

1.4. Emergency telephone number

National Poisons Information Service (NPIS)

h8.30-h12.30 / h13.30-h17.30 Monday to Friday

Emergency call (healthcare professionals):

(+44) 844 892 0111 - 0344 892 0111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

⚠ Danger, Skin Corr. 1B, Causes severe skin burns and eye damage.

⚠ Danger, Eye Dam. 1, Causes serious eye damage.

⚠ Warning, Skin Sens. 1, May cause an allergic skin reaction.

⚠ Danger, Repr. 1B, May damage fertility or the unborn child.

Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H360 May damage fertility or the unborn child.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash ... Thoroughly after handling.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P302+P352 IF ON SKIN: Wash with plenty of water/...
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P310 Immediately call a POISON CENTER/doctor/...
- P321 Specific treatment (see ... On this label).
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P363 Wash contaminated clothing before reuse.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contains

4,4'-Isopropylidenediphenol, oligomeric reaction products with
 1-chloro-2,3-epoxypropane, reaction products with
 3-aminomethyl-3,5,5-trimethylcyclohexylamine
 m-phenylenebis(methylamine)
 bisphenol A
 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 25% - < 50%	benzyl alcohol	Index number: CAS: EC: REACH No.: 603-057-00-5 100-51-6 202-859-9 01-2119492630-38	⚠ 3.1/4/Oral Acute Tox. 4 H302 ⚠ 3.3/2 Eye Irrit. 2 H319 ⚠ 3.1/4/Inhal Acute Tox. 4 H332

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>= 25% - < 50%	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS: 38294-64-3 EC: 500-101-4 REACH No.: 01-2119965165-33	<ul style="list-style-type: none"> ⚠ 3.2/1B Skin Corr. 1B H314 ⚠ 3.4.2/1 Skin Sens. 1 H317 4.1/C3 Aquatic Chronic 3 H412
>= 10% - < 25%	m-phenylenebis(methylamine)	CAS: 1477-55-0 EC: 216-032-5 REACH No.: 01-2119480150-50	<ul style="list-style-type: none"> ⚠ 3.1/4/Inhal Acute Tox. 4 H332 ⚠ 3.1/4/Oral Acute Tox. 4 H302 ⚠ 3.2/1B Skin Corr. 1B H314 ⚠ 3.4.2/1-1A-1B Skin Sens. 1, 1A, 1B H317 4.1/C3 Aquatic Chronic 3 H412
>= 5% - < 10%	3-aminomethyl-3,5,5-trimethylcyclohexylamine	Index number: 612-067-00-9 CAS: 2855-13-2 EC: 220-666-8 REACH No.: 01-2119514687-32	<ul style="list-style-type: none"> ⚠ 3.2/1B Skin Corr. 1B H314 ⚠ 3.1/4/Dermal Acute Tox. 4 H312 ⚠ 3.1/4/Oral Acute Tox. 4 H302 ⚠ 3.4.2/1 Skin Sens. 1 H317 4.1/C3 Aquatic Chronic 3 H412
>= 1% - < 2.5%	bisphenol A	CAS: 80-05-7 EC: 201-245-8 REACH No.: 01-2119457856-23	<ul style="list-style-type: none"> ⚠ 3.4.2/1 Skin Sens. 1 H317 ⚠ 3.3/1 Eye Dam. 1 H318 ⚠ 3.8/3 STOT SE 3 H335 ⚠ 3.7/1B Repr. 1B H360F ⚠ 4.1/C2 Aquatic Chronic 2 H411

SVHC Substances:

>= 1% - < 2.5% bisphenol A

REACH No.: 01-2119457856-23, CAS: 80-05-7, EC: 201-245-8
Substance SVHC

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.
OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

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- None
- 4.3. Indication of any immediate medical attention and special treatment needed
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
None
-

SECTION 5: Firefighting measures

- 5.1. Extinguishing media
Suitable extinguishing media:
Water.
Carbon dioxide (CO₂).
Extinguishing media which must not be used for safety reasons:
None in particular.
- 5.2. Special hazards arising from the substance or mixture
Do not inhale explosion and combustion gases.
Burning produces heavy smoke.
- 5.3. Advice for firefighters
Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.
-

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.
- 6.2. Environmental precautions
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up
Wash with plenty of water.
- 6.4. Reference to other sections
See also section 8 and 13
-

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Exercise the greatest care when handling or opening the container.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
Keep away from food, drink and feed.
Incompatible materials:
None in particular.

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Instructions as regards storage premises:
Adequately ventilated premises.

7.3. Specific end use(s)
None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

m-phenylenebis(methylamine) - CAS: 1477-55-0
ACGIH - STEL: Ceiling 0.1 mg/m³ - Notes: Skin - Eye, skin, and GI irr

bisphenol A - CAS: 80-05-7
EU - TWA(8h): 2 mg/m³ - Notes: Inhalable fraction

DNEL Exposure Limit Values

benzyl alcohol - CAS: 100-51-6
Consumer: 25 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects

Consumer: 5 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Worker Professional: 47 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects

Worker Professional: 9.5 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

4,4'-Isopropylidenediphenol, oligomeric reaction products with

1-chloro-2,3-epoxypropane, reaction products with

3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 38294-64-3

Worker Industry: 0.073 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, local effects

Worker Industry: 0.073 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effects

Consumer: 0.526 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects

bisphenol A - CAS: 80-05-7

Worker Industry: 2 mg/m³ - Consumer: 1 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Industry: 2 mg/m³ - Consumer: 1 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term (acute)

Worker Industry: 2 mg/m³ - Consumer: 1 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term (repeated)

Worker Industry: 2 mg/m³ - Consumer: 1 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Industry: 0.031 mg/kg - Consumer: 0.0019 mg/kg - Exposure: Human Dermal - Frequency: Short Term (acute)

Exposure: Human Dermal - Frequency: Short Term, local effects

Consumer: 0.0019 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 0.004 mg/kg - Exposure: Human Oral - Frequency: Short Term (acute)

Consumer: 0.004 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

benzyl alcohol - CAS: 100-51-6

Target: Soil (agricultural) - Value: 0.456 mg/kg

Target: Freshwater sediments - Value: 5.27 mg/kg

Target: Marine water sediments - Value: 0.527 mg/kg

Target: Marine water - Value: 0.1 mg/l

Target: Fresh Water - Value: 1 mg/l

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- 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 38294-64-3
 - Target: Acqua - Value: 0.06 mg/l
 - Target: Marine water - Value: 0.006 mg/l
 - Target: Freshwater sediments - Value: 5.784 mg/l
 - Target: Marine water sediments - Value: 0.578 mg/l
 - Target: Soil (agricultural) - Value: 1.121 mg/kg
- 3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2
 - Target: Fresh Water - Value: 0.06 mg/l
 - Target: Marine water - Value: 0.006 mg/l
 - Target: Freshwater sediments - Value: 5.784 mg/kg
 - Target: Marine water sediments - Value: 0.578 mg/kg
 - Target: Soil (agricultural) - Value: 1.121 mg/kg
- bisphenol A - CAS: 80-05-7
 - Target: Fresh Water - Value: 0.018 mg/l
 - Target: Marine water - Value: 0.018 mg/l
 - Target: Intermittent emissions - Value: 0.011 mg/l
 - Target: STP - Value: 320 mg/l
 - Target: Freshwater sediments - Value: 1.2 03
 - Target: Marine water sediments - Value: 0.24 03
 - Target: Soil (agricultural) - Value: 3.7 03

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	clear liquid, transparent	--	--
Odour:	characteristic	--	--
Odour threshold:	N.A.	--	--
pH:	N.A.	--	--

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Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	>190°C	--	--
Flash point:	>90 °C	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	1.09	--	--
Solubility in water:	insoluble	--	--
Solubility in oil:	alcooli, glicoleteri, idrocarburi aromatici	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

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SECTION 10: Stability and reactivity

- 10.1. Reactivity
Stable under normal conditions
- 10.2. Chemical stability
Stable under normal conditions
- 10.3. Possibility of hazardous reactions
It may generate flammable gases on contact with elementary metals (alkalis and alkaline earth) and powerful reducing agents.
It may generate toxic gases on contact with oxidising mineral acids, halogenated organic substances, organic peroxides and hydroperoxides, and powerful oxidising agents.
It may catch fire on contact with powerful oxidising agents.
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
None in particular.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
Toxicological information of the product:
N.A.
Toxicological information of the main substances found in the product:
benzyl alcohol - CAS: 100-51-6
 - a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 1620 mg/kg
Test: LC50 - Route: Inhalation Mist - Species: Rat > 4.178 mg/l - Duration: 4h
 - b) skin corrosion/irritation:
Test: Skin Irritant Negative
 - c) serious eye damage/irritation:
Test: Eye Irritant Positive
 - e) germ cell mutagenicity:
Test: Mutagenesis Positive - Source: OECD 476 in vitro
Test: Mutagenesis Negative - Source: OECD 474
 - g) reproductive toxicity:
Test: Reproductive Toxicity - Route: Oral - Species: Mouse Positive 750 mg/kg -
Notes: 192h
Test: Reproductive Toxicity - Route: Oral - Species: Mouse Negative 550 mg/kg -
Notes: 240h
- 4,4'-Isopropylidenediphenol, oligomeric reaction products with
1-chloro-2,3-epoxypropane, reaction products with
3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 38294-64-3
 - a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 1030 MGKGBW
Test: LC50 - Route: Inhalation - Species: Rat > 5.01 mg/l
Test: LD50 - Route: Skin - Species: Rat > 2000 MGKGBW
 - b) skin corrosion/irritation:
Route: Skin - Species: Rabbit Positive
 - c) serious eye damage/irritation:
Positive
 - d) respiratory or skin sensitisation:
Positive
m-phenylenebis(methylamine) - CAS: 1477-55-0

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- a) acute toxicity:
 - Test: LD50 - Route: Oral - Species: Rat = 930 mg/kg
 - Test: LD50 - Route: Skin - Species: Rabbit > 3100 mg/kg
 - Test: LC50 - Route: Inhalation - Species: Rat = 1.34 mg/l - Duration: 4h
 - b) skin corrosion/irritation:
 - Test: Skin Corrosive Positive
 - c) serious eye damage/irritation:
 - Test: Eye Corrosive Positive
 - e) germ cell mutagenicity:
 - Test: Mutagenesis Negative
 - f) carcinogenicity:
 - Test: Carcinogenicity Negative
- 3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2
- a) acute toxicity:
 - Test: LD50 - Route: Oral - Species: Rat = 1030 mg/kg
 - Test: LC50 - Route: Inhalation Mist - Species: Rat > 5.01 mg/l - Duration: 4h - Source: OCSE - linea guida 403
 - Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Source: OECD - linea guida 402
 - b) skin corrosion/irritation:
 - Test: Skin Corrosive - Route: Skin - Species: Rabbit Positive
 - Test: Eye Corrosive - Species: Rabbit Positive
 - d) respiratory or skin sensitisation:
 - Test: Skin Sensitization Positive - Source: Contatto ripetuto
 - e) germ cell mutagenicity:
 - Test: Mutagenesis Negative
 - f) carcinogenicity:
 - Test: Carcinogenicity Negative
 - g) reproductive toxicity:
 - Test: Reproductive Toxicity Negative
- bisphenol A - CAS: 80-05-7
- a) acute toxicity:
 - Test: LD50 - Route: Oral - Species: Rat = 4100 mg/kg - Notes: Ratto maschio
 - Test: Discriminating conc. - Route: Inhalation = 170 mg/m³
 - Test: LC50 - Species: Rabbit = 3000 mg/kg
 - b) skin corrosion/irritation:
 - Test: Skin Irritant Positive
 - c) serious eye damage/irritation:
 - Test: Eye Irritant Positive
 - d) respiratory or skin sensitisation:
 - Test: Respiratory Tract Irritant - Route: Inhalation Positive
 - g) reproductive toxicity:
 - Test: NOAEL - Route: Oral - Species: Rat = 50 MGKGBWDAY

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;

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- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.
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a) Aquatic acute toxicity:

= - Notes: WGK: 2

benzyl alcohol - CAS: 100-51-6

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 230 mg/l - Duration h: 48

Species: Algae = 700 mg/l - Duration h: 72

Endpoint: LC50 - Species: Fish = 460 mg/l - Duration h: 96

c) Bacteria toxicity:

Endpoint: EC50 = 390 mg/l - Duration h: 24

4,4'-Isopropylidenediphenol, oligomeric reaction products with

1-chloro-2,3-epoxypropane, reaction products with

3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 38294-64-3

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 110 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia = 23 mg/l - Duration h: 48

Endpoint: NOEC - Species: Daphnia = 3 mg/l - Notes: 21 days

Endpoint: EC50 - Species: Algae > 50 mg/l - Duration h: 72

m-phenylenebis(methylamine) - CAS: 1477-55-0

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 15.2 mg/l - Duration h: 48 - Notes: (OECD 202)

Endpoint: EC50 - Species: Algae = 20.3 mg/l - Duration h: 72 - Notes: (OECD 201)

Endpoint: LC50 - Species: Fish = 87.6 mg/l - Duration h: 96 - Notes: (OECD 203)

Endpoint: NOEC - Species: Daphnia = 4.7 mg/l - Notes: (OECD 211)

Endpoint: NOEC - Species: Algae = 10.5 mg/l - Duration h: 72 - Notes: (OECD 201)

3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 110 mg/l - Duration h: 96 - Notes: Leuciscus idus (Direttiva 84/449/CEE, C.1, semistatico)

Endpoint: EC50 - Species: Daphnia = 23 mg/l - Duration h: 48 - Notes: Daphnia magna (OECD - linea guida 202, parte 1, statico)

Endpoint: EC50 - Species: Algae > 50 mg/l - Duration h: 72 - Notes:

Scenedesmus subspicatus (Direttiva 88/302/CEE, parte C, p 89)

Endpoint: EC50 - Species: Daphnia = 388 mg/l - Duration h: 48 - Notes:

Chaetogammarus marinus (semistatico)

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia = 3 mg/l - Duration h: 504 - Notes: Daphnia magna (OECD - linea guida 202, parte 2, semistatico)

bisphenol A - CAS: 80-05-7

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 4.7 mg/l - Notes: Pimephales promelas

Endpoint: LC50 - Species: Daphnia = 10.2 mg/l - Notes: Daphnia magna

Endpoint: EC50 - Species: Algae = 2.73 mg/l - Duration h: 96

12.2. Persistence and degradability

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- None
- benzyl alcohol - CAS: 100-51-6
Biodegradability: Readily biodegradable - Test: N.A. - Duration: N.A. - %: N.A. - Notes: N.A.
- 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 38294-64-3
Biodegradability: Non-readily biodegradable - Test: N.A. - Duration: N.A. - %: N.A. - Notes: N.A.
- 3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2
Biodegradability: Non-readily biodegradable - Test: N.A. - Duration: N.A. - %: N.A. - Notes: N.A.
- 12.3. Bioaccumulative potential
- benzyl alcohol - CAS: 100-51-6
Bioaccumulation: Bioaccumulative - Test: BCF - Bioconcentration factor 1.37 - Duration: N.A. - Notes: N.A.
- 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 38294-64-3
Bioaccumulation: .2 - Test: N.A. N.A. - Duration: N.A. - Notes: N.A.
- 3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2
Bioaccumulation: Not bioaccumulative - Test: N.A. N.A. - Duration: N.A. - Notes: N.A.
- 12.4. Mobility in soil
- 3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2
Mobility in soil: Not mobile - Test: N.A. N.A. - Duration: N.A. - Notes: N.A.
- 12.5. Results of PBT and vPvB assessment
- vPvB Substances: None - PBT Substances: None
- 12.6. Other adverse effects
- None

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
- Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information



- 14.1. UN number
- | | |
|-----------------|------|
| ADR-UN Number: | 1760 |
| IATA-UN Number: | 1760 |
| IMDG-UN Number: | 1760 |
- 14.2. UN proper shipping name
- | | |
|--------------------|---|
| ADR-Shipping Name: | CORROSIVE LIQUID, N.O.S.
(4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine, |
|--------------------|---|

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- m-phenylenebis(methylamine))
IATA-Shipping Name: CORROSIVE LIQUID, N.O.S.
(4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine, m-phenylenebis(methylamine))
- IMDG-Shipping Name: CORROSIVE LIQUID, N.O.S.
(4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine, m-phenylenebis(methylamine))
- 14.3. Transport hazard class(es)
ADR-Class: 8
ADR - Hazard identification number: 80
IATA-Class: 8
IATA-Label: 8
IMDG-Class: 8
IMDG-Class: 8
- 14.4. Packing group
ADR-Packing Group: II
IATA-Packing group: II
IMDG-Packing group: II
- 14.5. Environmental hazards
ADR-Environmental Pollutant: No
IMDG-Marine pollutant: No
- 14.6. Special precautions for user
ADR-Subsidiary risks: -
ADR-S.P.: 274
ADR-Transport category (Tunnel restriction code): 2 (E)
IATA-Passenger Aircraft: 851
IATA-Subsidiary risks: -
IATA-Cargo Aircraft: 855
IATA-S.P.: A3 A803
IATA-ERG: 8L
IMDG-EmS: F-A , S-B
IMDG-Subsidiary risks: -
IMDG-Stowage and handling: Category B SW2
IMDG-Segregation: -
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
No

SECTION 15: Regulatory information

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

- Dir. 98/24/EC (Risks related to chemical agents at work)
- Dir. 2000/39/EC (Occupational exposure limit values)
- Regulation (EC) n. 1907/2006 (REACH)
- Regulation (EC) n. 1272/2008 (CLP)
- Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
- Regulation (EU) 2015/830
- Regulation (EU) n. 286/2011 (ATP 2 CLP)
- Regulation (EU) n. 618/2012 (ATP 3 CLP)

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Regulation (EU) n. 487/2013 (ATP 4 CLP)
 Regulation (EU) n. 944/2013 (ATP 5 CLP)
 Regulation (EU) n. 605/2014 (ATP 6 CLP)
 Regulation (EU) n. 2015/1221 (ATP 7 CLP)
 Regulation (EU) n. 2016/918 (ATP 8 CLP)
 Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Restrictions related to the product or the substances contained according to Annex XVII
 Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

Restriction 66

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

SVHC Substances:

Substances in candidate list (Art. 59 Reg. 1907/2006, REACH):

bisphenol A

Toxic to reproduction, Endocrine disruptor (human health)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Text of phrases referred to under heading 3:

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H360F May damage fertility.

H411 Toxic to aquatic life with long lasting effects.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H314 Causes severe skin burns and eye damage.

H412 Harmful to aquatic life with long lasting effects.

H312 Harmful in contact with skin.

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Eye Dam. 1	3.3/1	Serious eye damage, Category 1

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Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Skin Sens. 1,1A,1B	3.4.2/1-1A-1B	Skin Sensitisation, Category 1,1A,1B
Repr. 1B	3.7/1B	Reproductive toxicity, Category 1B
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Corr. 1B, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Repr. 1B, H360	Calculation method
Aquatic Chronic 3, H412	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
 SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 CAS: Chemical Abstracts Service (division of the American Chemical Society).
 CLP: Classification, Labeling, Packaging.
 DNEL: Derived No Effect Level.
 EINECS: European Inventory of Existing Commercial Chemical Substances.
 GefStoffVO: Ordinance on Hazardous Substances, Germany.
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

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IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.