

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 914
Print date: 27.12.2022
Version: 8.0

EPOSAN Härter
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 1 / 16

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

1.1. product identifiers

Article No. (manufacturer/supplier) 914
Trade name/designation EPOSAN Härter
farblos

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

Relevant identified uses:

Coating material to protecting surfaces

1.3. Details of the supplier of the safety data sheet

supplier (manufacturer/importer/downstream user/distributor)

Vismara Unternehmungen CH-5000 Aarau www.farbladen.ch

Department responsible for information:

laboratory Manager

E-mail (competent person)

info@knuchel.ch

1.4. Emergency telephone number

Emergency telephone number 145 (+41 (0)44 251 51 51)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Acute Tox. 4 / H302

Acute toxicity (oral)

Harmful if swallowed.

Skin Corr. 1B / H314

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Eye Dam. 1 / H318

Serious eye damage/eye irritation

Causes serious eye damage.

Skin Sens. 1 / H317

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Repr. 1B / H360

Reproductive toxicity

May damage fertility.

Aquatic Acute 1 / H400

Hazardous to the aquatic environment

Very toxic to aquatic organisms.

Aquatic Chronic 1 / H410

Hazardous to the aquatic environment

Very toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms



Danger

Hazard statements

H302

Harmful if swallowed.

H314

Causes severe skin burns and eye damage.

H317

May cause an allergic skin reaction.

H360

May damage fertility.

H410

Very toxic to aquatic life with long lasting effects.

Precautionary statements

P101

If medical advice is needed, have product container or label at hand.

P102

Keep out of reach of children.

P103

Read carefully and follow all instructions.

P202

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

P260

Do not breathe vapour.

P261

Avoid breathing vapours.

P264

Wash hands thoroughly after handling.

P270

Do not eat, drink or smoke when using this product.

P272

Contaminated work clothing should not be allowed out of the workplace.

P273

Avoid release to the environment.

P280

Wear protective gloves and eye/face protection.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 914
 Print date: 27.12.2022
 Version: 8.0

EPOSAN Härter
 Revision date: 10.12.2022
 Issue date: 10.12.2022

EN
 Page 2 / 16

P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P302 + P352	IF ON SKIN: Wash with plenty of soap and 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 or doctor/ physician.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P405	Keep locked up.
P501	Dispose of contents/container to industrial incineration plant.

Hazard components for labelling

benzyl alcohol
 3-aminomethyl-3,5,5-trimethylcyclohexylamine
 prodotti di reazione di acido grasso talloilico, bisfenolo A, epiclorigrina, glicidil tolil etere e trietilentetramina
 bisphenol A
 M-Xylylenediamine
 3-aminopropyldimethylamine

Supplemental hazard information

not applicable

2.3. **Other hazards**

No information available.

SECTION 3: Composition/information on ingredients

3.2. **Mixtures**

Description polyamine hardener, containing the following hazardous substances:

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

EC No. CAS No. Index No.	REACH No. Designation classification // Remark	weight-%
186321-96-0	01-2119983521-35 prodotti di reazione di acido grasso talloilico, bisfenolo A, epiclorigrina, glicidil tolil etere e trietilentetramina Skin Irrit. 2 H315 / Eye Dam. 1 H318 / Skin Sens. 1 H317 / Aquatic Acute 1 H400 / Aquatic Chronic 1 H410	40 - 60
202-859-9 100-51-6 603-057-00-5	01-2119492630-38 benzyl alcohol Acute Tox. 4 H302 / Acute Tox. 4 H332 Acute toxicity estimate (ATE), ATE (oral): 1 mg/kg bw	25 - 40
220-666-8 2855-13-2 612-067-00-9	01-2119514687-32 3-aminomethyl-3,5,5-trimethylcyclohexylamine Acute Tox. 4 H312 / Acute Tox. 4 H302 / Skin Corr. 1B H314 / Skin Sens. 1 H317 / Aquatic Chronic 3 H412 Acute toxicity estimate (ATE), ATE (oral): 1 mg/kg bw / ATE (dermal): 1840 mg/kg bw	10 - 15
216-032-5 1477-55-0	01-2119480150-50 M-Xylylenediamine Acute Tox. 4 H302 / Acute Tox. 3 H331 / Skin Corr. 1B H314 / Skin Sens. 1B H317 / Aquatic Chronic 3 H412 Acute toxicity estimate (ATE), ATE (oral): 1200 mg/kg bw	5 - 10

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 914
Print date: 27.12.2022
Version: 8.0

EPOSAN Härter
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 3 / 16

201-245-8 80-05-7 604-030-00-0	01-2119457856-23 bisphenol A Repr. 1B H360 / STOT SE 3 H335 / Eye Dam. 1 H318 / Skin Sens. 1 H317 This substance has been listed as SVHC (substance of very high concern) in the Candidate List according to Article 59 of REACH.	1 - 5
202-013-9 90-72-2 603-069-00-0	01-2119560597-27 2,4,6-tris(dimethylaminomethyl)phenol Acute Tox. 4 H302 / Eye Irrit. 2 H319 / Skin Irrit. 2 H315 Acute toxicity estimate (ATE), ATE (oral): 500 mg/kg bw	1 - 5
203-680-9 109-55-7 612-061-00-6	01-2119486842-27 3-aminopropyl dimethylamine Flam. Liq. 3 H226 / Acute Tox. 4 H302 / Skin Corr. 1B H314 / Skin Sens. 1 H317	1 - 5
200-712-3 69-72-7 607-732-00-5	01-2119486984-17 salicylic acid Repr. 2 H361 / Acute Tox. 4 H302 / Eye Dam. 1 H318	1 - 5

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

Following ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Unsuitable extinguishing media

strong water jet

5.2. Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice for firefighters

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 914
Print date: 27.12.2022
Version: 8.0

EPOSAN Härter
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 4 / 16

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

Further information

Vapours are heavier than air. Vapours form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRGS 727)".

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values:

bisphenol A

Index No. 604-030-00-0 / EC No. 201-245-8 / CAS No. 80-05-7

WEL, TWA: 2 mg/m³

Additional information

TWA : Long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

DNEL:

benzyl alcohol

Index No. 603-057-00-5 / EC No. 202-859-9 / CAS No. 100-51-6

DNEL acute dermal, short-term (systemic), Workers: 40 mg/kg

DNEL long-term dermal (systemic), Workers: 8 mg/kg

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 914
Print date: 27.12.2022
Version: 8.0

EPOSAN Härter
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 5 / 16

DNEL acute inhalative (systemic), Workers: 110 mg/m³
DNEL long-term inhalative (systemic), Workers: 22 mg/m³
DNEL acute dermal, short-term (systemic), Consumer: 20 mg/kg
DNEL long-term dermal (systemic), Consumer: 4 mg/kg
DNEL acute inhalative (systemic), Consumer: 27 mg/m³
DNEL long-term inhalative (systemic), Consumer: 5,4 mg/m³

bisphenol A

Index No. 604-030-00-0 / EC No. 201-245-8 / CAS No. 80-05-7
DNEL acute dermal, short-term (systemic), Workers: 1,4 mg/kg dw
DNEL long-term dermal (systemic), Workers: 1,4 mg/kg dw
DNEL acute inhalative (systemic), Workers: 10 mg/m³

salicylic acid

Index No. 607-732-00-5 / EC No. 200-712-3 / CAS No. 69-72-7
DNEL long-term dermal (systemic), Workers: 2,3 mg/kg bw/day
DNEL long-term inhalative (local), Workers: 5 mg/m³
DNEL long-term inhalative (systemic), Workers: 5 mg/m³
DNEL long-term oral (repeated), Consumer: 1 mg/kg bw/day
DNEL long-term dermal (systemic), Consumer: 1 mg/kg bw/day
DNEL long-term inhalative (local), Consumer: 0,2 mg/m³
DNEL short-term oral (systemic), Consumer: 4 mg/kg bw/day

prodotti di reazione di acido grasso talloilico, bisfenolo A, epicloiridrina, glicidil tolil etere e trietilentetramina
CAS No. 186321-96-0

DNEL long-term dermal (systemic), Workers: 3,33 mg/kg
DNEL long-term inhalative (systemic), Workers: 23,5 mg/m³

PNEC:

benzyl alcohol

Index No. 603-057-00-5 / EC No. 202-859-9 / CAS No. 100-51-6
PNEC aquatic, freshwater: 1 mg/L
PNEC aquatic, marine water: 0,1 mg/L
PNEC aquatic, intermittent release: 2,3 mg/L
PNEC sediment, freshwater: 5,27 mg/kg
PNEC sediment, marine water: 0,527 mg/kg
PNEC, soil: 0,456 mg/kg
PNEC sewage treatment plant (STP): 39 mg/L

2,4,6-tris(dimethylaminomethyl)phenol

Index No. 603-069-00-0 / EC No. 202-013-9 / CAS No. 90-72-2
PNEC aquatic, freshwater: 0,084 mg/L
PNEC aquatic, marine water: 0,008 mg/L
PNEC sewage treatment plant (STP): 0,2 mg/L

bisphenol A

Index No. 604-030-00-0 / EC No. 201-245-8 / CAS No. 80-05-7
PNEC aquatic, freshwater: 0,018 mg/L
PNEC aquatic, marine water: 0,016 mg/L
PNEC sediment, freshwater: 2,2 mg/kg
PNEC, soil: 3,7 mg/kg
PNEC sewage treatment plant (STP): 320 mg/L

salicylic acid

Index No. 607-732-00-5 / EC No. 200-712-3 / CAS No. 69-72-7
PNEC aquatic, freshwater: 0,2 mg/L
PNEC aquatic, marine water: 0,02 mg/L
PNEC aquatic, intermittent release: 1 mg/L
PNEC sediment, freshwater: 1,42 mg/kg
PNEC sediment, marine water: 0,142 mg/kg
PNEC, soil: 0,166 mg/kg
PNEC sewage treatment plant (STP): 162 mg/L

prodotti di reazione di acido grasso talloilico, bisfenolo A, epicloiridrina, glicidil tolil etere e trietilentetramina
CAS No. 186321-96-0

PNEC aquatic, freshwater: 0,186 µg/L
PNEC aquatic, marine water: 0,019 µg/L

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 914
Print date: 27.12.2022
Version: 8.0

EPOSAN Härter
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 6 / 16

PNEC sediment, freshwater: 0,005 mg/kg
PNEC sediment, marine water: 0,005 mg/kg
PNEC, soil: 0,008 mg/kg
PNEC sewage treatment plant (STP): 1,58 mg/L

8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Personal protection equipment

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)

Thickness of the glove material > 0,4 mm ; Breakthrough time: > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection

Wear closely fitting protective glasses in case of splashes.

Body protection

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	refer to label
Odour:	characteristic
Odour threshold:	not applicable
Melting point/freezing point:	-60 °C Source: prodotti di reazione di acido grasso talloilico, bisfenolo A, epiclordinina, glicidil tolil etere e trietilentetramina
Initial boiling point and boiling range:	204 °C Source: benzyl alcohol
Flammability:	not applicable
Lower and upper explosion limit:	
Lower explosion limit:	1.3 Vol-%
Upper explosion limit:	13 Vol-% Source: benzyl alcohol
Flash point:	not applicable
Auto-ignition temperature:	435 °C Source: benzyl alcohol
Decomposition temperature:	not applicable
pH at 20 °C:	not applicable
Cinematic viscosity (40°C):	< 300 mm²/s
Viscosity at 20 °C:	800 - 1100 mPas
Solubility(ies):	
Water solubility at 20 °C:	insoluble
Partition coefficient: n-octanol/water:	see section 12

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 914
Print date: 27.12.2022
Version: 8.0

EPOSAN Härter
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 7 / 16

Vapour pressure at 20 °C:	0.1 mbar Source: benzyl alcohol
Density and/or relative density:	
Density at 20 °C:	1.03 g/cm³
Relative vapour density:	not applicable
particle characteristics:	not applicable
9.2. Other information	
Solid content:	74 weight-%
solvent content:	
Organic solvents:	26 weight-%
Water:	0 weight-%

SECTION 10: Stability and reactivity

- 10.1. **Reactivity**
No information available.
- 10.2. **Chemical stability**
Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.
- 10.3. **Possibility of hazardous reactions**
Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.
- 10.4. **Conditions to avoid**
Hazardous decomposition byproducts may form with exposure to high temperatures.
- 10.5. **Incompatible materials**
not applicable
- 10.6. **Hazardous decomposition products**
Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

SECTION 11: Toxicological information

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

Acute toxicity

Harmful if swallowed.

benzyl alcohol

oral, LD50, Rat: 1,23 mg/kg

dermal, LD50, Rat: 4,115 mg/kg

dermal, LD50, Rabbit: 2 mg/kg

oral, NOEL, Rat: 400 mg/kg

oral, NOEL, Mouse: 200 mg/kg

inhalative (vapours), NOAEC, Rat: 1072 mg/m³

Method: OECD 412

2,4,6-tris(dimethylaminomethyl)phenol

oral, LD50, Rat: 500 mg/kg

3-aminomethyl-3,5,5-trimethylcyclohexylamine

oral, LD50, Rat: 1,03 mg/kg

dermal, LD50, Rabbit: 1840 mg/kg

bisphenol A

oral, LD50, Rat: 3250 mg/kg 2000 - 5000 mg/kg

Method: OECD 401

dermal, LD50, Rabbit: 3000 mg/kg

inhalative (vapours), LC50, Rat: 17 mg/L (6 h)

M-Xylylenediamine

oral, LD50, Rat: 1200 mg/kg

dermal, LD50, Rabbit: 2000 mg/kg

Method: OECD 402

inhalative (vapours), LC50, Rat: 1,34 mg/L (4 h)

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 914
Print date: 27.12.2022
Version: 8.0

EPOSAN Härter
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 8 / 16

Method: OECD 403
oral, LD50, Rat, female: 980 mg/kg
Method: OECD 401
dermal, LC50, Rat: 2000 mg/L (4 h)

salicylic acid

dermal, LD50, Rat: > 2000 mg/kg
Method: OECD 402
oral, LD50, Rat, male: 891 mg/L
Method: OECD 401
oral, NOAEL, Rat: 250 mg/kg
Method: OECD 416
oral, NOAEL, Mouse: 100 mg/kg
Method: OECD 416

Skin corrosion/irritation; Serious eye damage/eye irritation

Causes severe skin burns and eye damage.

benzyl alcohol

Skin, Rabbit (4 h)
Method: OECD 404
non-irritant.; not corrosive
eyes, Rabbit
Method: OECD 405
Causes serious eye irritation.; not corrosive

2,4,6-tris(dimethylaminomethyl)phenol

Skin (4 h)
Causes severe burns.
eyes
Causes serious eye damage.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Skin, Rabbit (4 h)
Causes severe burns.
eyes
Causes serious eye damage.; Risk of blindness!

bisphenol A

Skin, Rabbit (4 h)
Method: OECD 404
No skin irritation
eyes, Rabbit
Method: OECD 405
Causes serious eye damage.

M-Xylylenediamine

Skin, Rat (4 h)
Directive 67/548/EEC, Annex V, B.4.
eyes, Rabbit (24 h)
Severe eye irritation

salicylic acid

Skin, Rabbit (4 h)
Method: OECD 404
non-irritant.
eyes, Rabbit
Draize Test; strongly irritant.

prodotti di reazione di acido grasso talloilico, bisfenolo A, epicloridrina, glicidil tolil etere e trietilentetramina

Skin (4 h)
No data available
eyes
No data available

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 914
Print date: 27.12.2022
Version: 8.0

EPOSAN Härter
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 9 / 16

benzyl alcohol

Skin, Guinea pig: ; Evaluation not sensitising.
Method: OECD 406

2,4,6-tris(dimethylaminomethyl)phenol

Skin: ; Evaluation Not to be classified as an inhalation or skin allergen.
Respiratory system: ; Evaluation Not to be classified as an inhalation or skin allergen.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Skin, Guinea pig: ; Evaluation positive
Method: OECD 406
May cause an allergic skin reaction.

bisphenol A

Skin:
May cause an allergic skin reaction.
Respiratory system, Mouse: ; Evaluation negative
Method: OECD 429
Local lymph node test (LLNA)

M-Xylylenediamine

Skin, Mouse:
Method: Oecd 429
in-vivo; May cause sensitization by skin contact.
Respiratory system:
No data available

salicylic acid

Skin, Mouse: ; Evaluation not sensitising.
Method: Oecd 429
Respiratory system:
Not to be classified as an inhalation or skin allergen.

prodotti di reazione di acido grasso talloilico, bisfenolo A, epiclorldrina, glicidil toliil etere e trietilentetramina

Skin:
No data available
Respiratory system:
No data available

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

May damage fertility.

benzyl alcohol

Germ cell mutagenicity
Based on available data, the classification criteria are not met.
Carcinogenicity
Based on available data, the classification criteria are not met.
Reproductive toxicity
Based on available data, the classification criteria are not met.

2,4,6-tris(dimethylaminomethyl)phenol

Germ cell mutagenicity; Evaluation Not to be classified as germ cell mutagen (mutagen).
Carcinogenicity; Evaluation Does not qualify as a carcinogen.
Reproductive toxicity; Evaluation Does not qualify as a carcinogen.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Germ cell mutagenicity
Based on available data, the classification criteria are not met.
Carcinogenicity
Based on available data, the classification criteria are not met.
Reproductive toxicity
Based on available data, the classification criteria are not met.
Genotoxicity in vivo; Evaluation negative
Mutagenicity (mammalian cell test): Micronucleus.
Genotoxicity in vitro; Evaluation negative
Ames test

bisphenol A

Germ cell mutagenicity; Evaluation negative

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 914
Print date: 27.12.2022
Version: 8.0

EPOSAN Härter
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 10 / 16

Ames test; Escherichia coli
Carcinogenicity; Evaluation negative
Reproductive toxicity
May damage fertility.
Lactation
No data available
Germ cell mutagenicity; Evaluation negative
Mutagenicity (mammalian cell test): chromosome aberration. Ovarian cells of Chinese hamster Result: negative
In vitro gene mutation test on mammalian cells ; Evaluation negative
Mouse lymphoma test
Germ cell mutagenicity; Evaluation negative
Mouse; bone marrow

M-Xylylenediamine

Germ cell mutagenicity; Evaluation negative
Ames Test; S. typhimurium
Carcinogenicity; Evaluation negative
Reproductive toxicity
No data available
Germ cell mutagenicity; Evaluation negative
Mutagenicity (micronucleus test) Result: negative; Mouse

salicylic acid

Germ cell mutagenicity; Evaluation negative
Method: OECD 475
In vitro gene mutation test on mammalian cells ; mouse lymphoma cells
Carcinogenicity; Evaluation negative
Reproductive toxicity; Evaluation Suspected of damaging the unborn child.

prodotti di reazione di acido grasso talloilico, bisfenolo A, epicloridrina, glicidil tolil etere e trietilentetramina

Germ cell mutagenicity
No data available
Carcinogenicity
No data available
Reproductive toxicity
No data available

STOT-single exposure; STOT-repeated exposure

benzyl alcohol

Specific target organ toxicity (single exposure)
Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)
Based on available data, the classification criteria are not met.
Repeated dose toxicity (subacute, subchronic, chronic)
No data available

2,4,6-tris(dimethylaminomethyl)phenol

Specific target organ toxicity (single exposure) Evaluation Not to be classified as specific target organ toxic (single exposure).
Specific target organ toxicity (repeated exposure) Evaluation Not to be classified as specific target organ toxic (repeated exposure).

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Specific target organ toxicity (single exposure)
The substance/mixture is not classified as toxic to target organs, single exposure.
Specific target organ toxicity (repeated exposure)
The substance/mixture is not classified as target organ toxic, repeated exposure.

bisphenol A

Specific target organ toxicity (single exposure)
Inhalation; May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)
No data available

M-Xylylenediamine

Specific target organ toxicity (single exposure)
No data available

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 914
Print date: 27.12.2022
Version: 8.0

EPOSAN Härter
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 11 / 16

Specific target organ toxicity (repeated exposure)
No data available

salicylic acid

Specific target organ toxicity (single exposure) Evaluation Not to be classified as specific target organ toxic (single exposure).

Specific target organ toxicity (repeated exposure) Evaluation Not to be classified as specific target organ toxic (repeated exposure).

prodotti di reazione di acido grasso talloilico, bisfenolo A, epicloridrina, glicidil tolil etere e trietilentetramina

Specific target organ toxicity (single exposure)

No data available

Specific target organ toxicity (repeated exposure)

No data available

Aspiration hazard

benzyl alcohol

Aspiration hazard

May be harmful if swallowed.; May be harmful if inhaled.; non-irritant.

2,4,6-tris(dimethylaminomethyl)phenol

Aspiration hazard; Evaluation Not to be classified as aspirational.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Aspiration hazard

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

M-Xylylenediamine

Aspiration hazard

No data available

salicylic acid

Aspiration hazard; Evaluation Not to be classified as aspirational.

prodotti di reazione di acido grasso talloilico, bisfenolo A, epicloridrina, glicidil tolil etere e trietilentetramina

Aspiration hazard

No data available

Practical experience/human evidence

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

Overall assessment on CMR properties

EC No. CAS No.	Designation	Classification according to Regulation (EC) No 1272/2008 [CLP]
201-245-8 80-05-7	bisphenol A	Repr. 1B

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

SECTION 12: Ecological information

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

Do not allow to enter into surface water or drains.

12.1. Toxicity

Very toxic to aquatic organisms.

benzyl alcohol

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 2,18 mg/L (96 h)

Daphnia toxicity, EC50, Daphnia pulex (water flea): 2,94 mg/L (48 h)

Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 0,11 mg/L (72 h)

Fish toxicity, LC50, Lepomis macrochirus (Bluegill): 10 ppm (96 h)

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 914
Print date: 27.12.2022
Version: 8.0

EPOSAN Härter
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 12 / 16

Algae toxicity, EC50, Algae: 2,6 mg/L (72 h)
Algae toxicity, NOEC, *Skeletonema costatum*: 0,027 mg/L (72 h)

2,4,6-tris(dimethylaminomethyl)phenol
Algae toxicity, ErC50: 84 mg/L (72 h)

3-aminomethyl-3,5,5-trimethylcyclohexylamine
Fish toxicity, LC50, *Leuciscus idus* (golden orfe): 185 mg/L (48 h)
Daphnia toxicity, NOEC, *Daphnia magna* (Big water flea): 3 mg/L (21 d)
Daphnia toxicity, EC50, *Daphnia magna* (Big water flea): 42 mg/L (24 h)
Algae toxicity, EC50, *Scenedesmus subspicatus*: 50 mg/L (72 h)
Bacteria toxicity, EC10, *Pseudomonas putida*: 1120 mg/L (18 h)
Fish toxicity, LC50, *Danio rerio* (zebrafish): 110 mg/L (96 h)

bisphenol A
Fish toxicity, LC50, *Pimephales promelas* (fathead minnow): 4,6 mg/L (96 h)
Method: OECD 203
Daphnia toxicity, EC50: 7,75 mg/L (48 h)
Algae toxicity, ErC50, *Pseudokirchneriella subcapitata*: 2,9 mg/L 2,73 - 3,1 mg/L (96 h)
Method: (US-EPA)
Static test
Fish toxicity, LC50, *Cyprinodon variegatus*: 11 mg/L (96 h)
Method: OECD 203
Algae toxicity, EC10, *Pseudokirchneriella subcapitata*: 1,36 mg/L (96 h)
Method: (US-EPA)
Static test
Bacteria toxicity, EC10, *Pseudomonas putida*: > 320 mg/L (18 h)
Method: DIN 38421 / PART 8
Static test
Fish toxicity, NOEC: 0,016 mg/L
Daphnia toxicity, NOEC: 1,8 mg/L

M-Xylylenediamine
Fish toxicity, LC50, *Oryzias latipes*: 87,6 mg/L (96 h)
Method: OECD 203
semistatic
Daphnia toxicity, EC50, *Daphnia magna* (Big water flea): 15,2 mg/L (48 h)
Method: OECD 202
Static test
Algae toxicity, EC50, *Selenastrum capricornutum*: 32,1 mg/L (72 h)
Method: OECD 201
Static test
Bacteria toxicity, EC50, Sludge treatment: > 1000 mg/L (30 h)
Method: OECD 209
respiratory inhibition
Fish toxicity, LC50, *Oncorhynchus mykiss* (Rainbow trout): > 100 mg/L (96 h)
Algae toxicity, IC50: 12 mg/L (72 h)

salicylic acid
Fish toxicity, LC50, *Pimephales promelas* (fathead minnow): 1370 mg/L (96 h)
Method: OECD 203
By analogy with similar compounds.
Daphnia toxicity, EC50, *Daphnia magna* (Big water flea): 870 mg/L (48 h)
Method: OECD 202
Algae toxicity, ErC50, growth inhibition: > 100 mg/L (72 h)
Method: OECD 201
Bacteria toxicity, EC50, *Pseudomonas putida*: 380 mg/L (16 h)
Static test
Daphnia toxicity, EC50: 180 mg/L (24 h)

prodotti di reazione di acido grasso talloilico, bisfenolo A, epiclorldrina, glicidil toliil etere e trietilentetramina
Fish toxicity, LC50, *Oncorhynchus mykiss* (Rainbow trout): 1,086 mg/L (96 h)
Method: OECD 203
Daphnia toxicity, EC50, *Daphnia magna* (Big water flea): 0,705 mg/L (48 h)
Method: OECD 202
Algae toxicity, ErC50, *Selenastrum capricornutum*: 0,186 mg/L (72 h)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 914
Print date: 27.12.2022
Version: 8.0

EPOSAN Härter
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 13 / 16

Method: OECD 201

Long-term Ecotoxicity

Very toxic to aquatic life with long lasting effects.

salicylic acid

Daphnia toxicity, NOEC: 10 mg/L (21 d)

Toxicity of Microorganisms, EC50: 380 mg/L (16 h)

Toxicity of Microorganisms, growth test (Eb-Cx) 10%“ : 140 mg/L (16 h)

12.2. Persistence and degradability

benzyl alcohol

Biodegradation: 92 - 96 (14 d)

Method: OECD 301C

Readily biodegradable (according to OECD criteria)

2,4,6-tris(dimethylaminomethyl)phenol

Biodegradation: 4 percent (28 d)

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Biodegradation: < 10 percent (28 d); Evaluation Poorly eliminated from water.

bisphenol A

Biodegradation: 89 percent (28 d); Evaluation Readily biodegradable (according to OECD criteria).

Method: OECD 301F

aerobic

M-Xylylenediamine

Biodegradation: 49 percent (28 d); Evaluation Not readily biodegradable (according to OECD criteria)

Method: OECD 301B

aerobic

salicylic acid

Biodegradation: > 90 percent (4 d); Evaluation Biodegradable.

aerobic; Regulation (EC) No 440/2008, Annex, C.9

prodotti di reazione di acido grasso talloilico, bisfenolo A, epicloridrina, glicidil tolil etere e trietilentetramina

Biodegradation: Evaluation The product is not biodegradable.

12.3. Bioaccumulative potential

benzyl alcohol

Distribution coefficient n-octanol/water (log KOW): 1,05

Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.

2,4,6-tris(dimethylaminomethyl)phenol

Distribution coefficient n-octanol/water (log KOW): -0,66 ; Evaluation Does not significantly accumulate in organisms.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Distribution coefficient n-octanol/water (log KOW):

No further relevant information available.

bisphenol A

Distribution coefficient n-octanol/water (log KOW): 3,3

M-Xylylenediamine

Distribution coefficient n-octanol/water (log KOW):

No significant bioaccumulation.

salicylic acid

Distribution coefficient n-octanol/water (log KOW): 2,25

prodotti di reazione di acido grasso talloilico, bisfenolo A, epicloridrina, glicidil tolil etere e trietilentetramina

Distribution coefficient n-octanol/water (log KOW): 3,38

Bioconcentration factor (BCF)

benzyl alcohol

Bioconcentration factor (BCF), fish: 1,37

12.4. Mobility in soil

benzyl alcohol

soil:

No further relevant information available.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 914
Print date: 27.12.2022
Version: 8.0

EPOSAN Härter
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 14 / 16

2,4,6-tris(dimethylaminomethyl)phenol

soil:

No data available

3-aminomethyl-3,5,5-trimethylcyclohexylamine

soil:

No data available

bisphenol A

soil:

No data available

M-Xylylenediamine

soil:

No data available

salicylic acid

soil: 1,545

The adsorption coefficient standardised to organic carbon (Organic Carbon).

prodotti di reazione di acido grasso talloilico, bisfenolo A, epicloridrina, glicidil toliil etere e trietilentetramina

soil:

No data available

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Dispose of waste according to applicable legislation.

List of proposed waste codes/waste designations in accordance with EWC

080111* Waste paint and varnish containing organic solvents or other dangerous substances

*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Appropriate disposal / Package Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1. UN number or ID number

UN 2735

14.2. UN proper shipping name

Land transport (ADR/RID):

Amines, liquid, corrosive, n.o.s.
((1,3-Bis(aminomethyl)benzene)

Sea transport (IMDG):

AMINES, LIQUID, CORROSIVE, N.O.S.

Air transport (ICAO-TI / IATA-DGR):

((1,3-Bis(aminomethyl)benzene, Reaktionsprodukt von Tallölfettsäure, Bisphenol A, Epichlorhydrin, Glycidyl-Tolyl-ether und Triethyltetramin)
Amines, liquid, corrosive, n.o.s.
((1,3-Bis(aminomethyl)benzene)

14.3. Transport hazard class(es)

8

14.4. Packing group

II

14.5. Environmental hazards

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 914
Print date: 27.12.2022
Version: 8.0

EPOSAN Härter
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 15 / 16

Land transport (ADR/RID)

UMWELTGEFÄHRDEND

Marine pollutant

p / Reaktionsprodukt von Tallöfettsäure, Bisphenol A, Epichlorhydrin, Glycidyl-Tolyl-ether und Triethylentetramin

14.6. Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

Further information

Land transport (ADR/RID)

Tunnel restriction code

E

Sea transport (IMDG)

EmS-No.

F-A, S-B

in packages <= 5 litres

not restricted 2.10.2.7

14.7. Maritime transport in bulk according to IMO instruments

No transport as bulk according IBC - Code.

SECTION 15: Regulatory information

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

EU legislation

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]

VOC-value (in g/L): 270

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive 92/85/EEC or stricter national regulations, if applicable.

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC) or stricter national regulations, if applicable.

15.2. Chemical Safety Assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

EC No. CAS No.	Designation	REACH No.
186321-96-0	prodotti di reazione di acido grasso talloilico, bisfenolo A, epicloridrina, glicidil tolil etere e trietilentetramina	01-2119983521-35
202-859-9 100-51-6	benzyl alcohol	01-2119492630-38
220-666-8 2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	01-2119514687-32
216-032-5 1477-55-0	M-Xylylenediamine	01-2119480150-50
201-245-8 80-05-7	bisphenol A	01-2119457856-23
202-013-9 90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	01-2119560597-27
203-680-9 109-55-7	3-aminopropyldimethylamine	01-2119486842-27
200-712-3 69-72-7	salicylic acid	01-2119486984-17

SECTION 16: Other information

Full text of classification in section 3

Skin Irrit. 2 / H315

Skin corrosion/irritation

Causes skin irritation.

Eye Dam. 1 / H318

Serious eye damage/eye irritation

Causes serious eye damage.

Skin Sens. 1 / H317

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Aquatic Acute 1 / H400

Hazardous to the aquatic environment

Very toxic to aquatic organisms.

Aquatic Chronic 1 / H410

Hazardous to the aquatic environment

Very toxic to aquatic life with long lasting

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 914
Print date: 27.12.2022
Version: 8.0

EPOSAN Härter
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 16 / 16

Acute Tox. 4 / H302	Acute toxicity (oral)	effects.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if swallowed.
Acute Tox. 4 / H312	Acute toxicity (dermal)	Harmful if inhaled.
Skin Corr. 1B / H314	Skin corrosion/irritation	Harmful in contact with skin.
Aquatic Chronic 3 / H412	Hazardous to the aquatic environment	Causes severe skin burns and eye damage.
Acute Tox. 3 / H331	Acute toxicity (inhalative)	Harmful to aquatic life with long lasting effects.
Skin Sens. 1B / H317	Respiratory or skin sensitisation	Toxic if inhaled.
Repr. 1B / H360	Reproductive toxicity	May cause an allergic skin reaction.
STOT SE 3 / H335	STOT-single exposure	May damage fertility.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	May cause respiratory irritation.
Flam. Liq. 3 / H226	Flammable liquids	Causes serious eye irritation.
Repr. 2 / H361	Reproductive toxicity	Flammable liquid and vapour.

Suspected of damaging the unborn child.

Classification procedure

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

Acute Tox. 4	Acute toxicity (oral)	Calculation method.
Skin Corr. 1B	Skin corrosion/irritation	Calculation method.
Eye Dam. 1	Serious eye damage/eye irritation	Calculation method.
Skin Sens. 1	Respiratory or skin sensitisation	Calculation method.
Repr. 1B	Reproductive toxicity	Calculation method.
Aquatic Acute 1	Hazardous to the aquatic environment	Calculation method.
Aquatic Chronic 1	Hazardous to the aquatic environment	Calculation method.

Abbreviations and acronyms

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit Value
BLV	Biological Limit Value
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic
DIN	German Institute for Standardization / German industrial standard
DNEL	Derived No-Effect Level
EAKV	European Waste Catalogue Directive
EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG Code	International Maritime Code for Dangerous Goods
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MARPOL	Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative

Further information

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

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in section 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.