

Safety Data Sheet

LINERWASTE Base

Replaces date: 28/03/2023

Revision date: 04/03/2025

Version: 1.0.1

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

1.1. Product identifier

Trade name: LINERWASTE Base

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

Recommended uses: Mainly used for: relining

1.3. Details of the supplier of the safety data sheet

Supplier

Company: Linervent AB
Address: Bryggavägen 117
Zip code: 178 31
City: Ekerö
Country: SWEDEN
Email: info@linervent.se

1.4. Emergency Telephone Number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP-classification: Skin Irrit. 2;H315
Skin Sens. 1;H317
Eye Irrit. 2;H319
Aquatic Chronic 2;H411

Most serious harmful effects: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.

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2.2. Label elements

Pictograms



Signal word:

Warning

Contains

Substance:

bis[4-(2,3-epoxypropoxy)phenyl]propane; Epoxy Novolac; 1,4-bis(2,3-epoxypropoxy)butane;

Hazard Statements

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

H319

Causes serious eye irritation.

H411

Toxic to aquatic life with long lasting effects.

Precautionary statements

P261

Avoid breathing dust/fume/gas/mist/vapours/spray.

P273

Avoid release to the environment.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P302+352

IF ON SKIN: Wash with plenty of soap and water.

P305+351+338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501

Dispose of contents/container in accordance with local regulation.

Supplemental information

EUH205

Contains epoxy constituents. May produce an allergic reaction.

2.3. Other hazards

When mixing two components, consult the safety data sheets for both components.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

| Substance | CAS No./ EC No./ REACH Reg. No. | Concentration | Notes | CLP-classification |
|--|---|---------------|-------|---|
| bis[4-(2,3-epoxypropoxy)phenyl]propane | 1675-54-3 216-823-5 01-2119456619-26 | 60 - 100 % | | Skin Irrit. 2;H315 Skin Sens. 1;H317 Eye Irrit. 2;H319 Aquatic Chronic 2;H411 C ≥ 5%: Skin Irrit. 2;H315 C ≥ 5%: Eye Irrit. 2;H319 |
| Epoxy Novolac | 9003-36-5 500-006-8 01-2119454392-40-0003 | 10 - 30 % | | Skin Irrit. 2;H315 Skin Sens. 1;H317 Aquatic Chronic 2;H411 |
| 1,4-bis(2,3-epoxypropoxy)butane | 2425-79-8 219-371-7 01-2119494060-45-0004 | 5 - 10 % | | Acute Tox. 4;H312 Skin Irrit. 2;H315 Skin Sens. 1;H317 Eye Irrit. 2;H319 Acute Tox. 4;H332 |

Please see section 16 for the full text of H- / EUH-phrases.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Seek fresh air. Seek medical advice in case of persistent discomfort.

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| | |
|----------------------|--|
| Ingestion: | Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Do not induce vomiting. Seek medical advice in case of persistent discomfort. |
| Skin contact: | Wash skin with soap and water. Do not use organic solvents. Take off contaminated clothing and wash before reuse. Seek medical advice in case of persistent discomfort. |
| Eye contact: | Flush immediately with water (preferably using eye wash equipment) for at least 5 minutes. Open eye wide. Remove any contact lenses. Seek medical advice. If the epoxy resin has been mixed with the hardener, rinse the eyes with water immediately and get medical attention immediately. Continue to rinse. |
| General: | Eye wash facilities must be available when handling this product. |

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

Contact with the skin may cause irritation and allergic contact eczema.

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

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Extinguish with powder, foam, carbon dioxide or water mist.

Unsuitable extinguishing media: Do not use water stream, as it may spread the fire.

5.2. Special hazards arising from the substance or mixture

Not flammable, but can sustain combustion. Hazardous flue gases are formed in fire conditions. Carbon monoxide and carbon dioxide.

5.3. Advice for firefighters

Firefighters exposed to combustion gases/decomposition products should use a respiratory protective device

Other Information: Notify proper authorities in case of contamination of soil or aquatic environment or discharge to drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Keep unnecessary people away, isolate hazard area and deny entry. Wear suitable protective clothing. Wear safety goggles if there is a risk of eye splash.

6.2. Environmental precautions

Prevent spillage from entering drains and/or surface water. Notify proper authorities in case of contamination of soil or aquatic environment or discharge to drains.

6.3. Methods and material for containment and cleaning up

Contain and absorb spill with sand or other absorbent material and transfer to suitable waste containers.

6.4. Reference to other sections

See section 7 for handling and storage. See section 8 for type of protective equipment. See section 13 for instructions on disposal.

SECTION 7: Handling and storage

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7.1. Precautions for safe handling

Containers should be kept tightly closed. Avoid contact with skin and eyes. All work must be carried out under well-ventilated conditions. Wash hands before breaks, before using restroom facilities, and at the end of work. Do not eat, drink or smoke during work.

7.2. Conditions for safe storage, including any incompatibilities

Keep in tightly closed original packaging. Store in a dry, cool, well-ventilated area.

7.3. Specific end use(s)

Polymerise together with part B during heat emission. Wear suitable protective clothing.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit: Contains no substances subject to reporting requirements.

Legal basis: Not known for the mixture.

8.2. Exposure controls

Personal protective equipment, eye/face protection: Wear safety goggles/face protection. Eye protection must conform to EN 16321.

Personal protective equipment, skin protection: Wear suitable protective clothing.

Personal protective equipment, hand protection: Wear gloves. Type of material: Nitrile rubber/ Butyl rubber. Penetration time of glove material: 3 hours. We have reduced the penetration time by a factor of 3, when the test standard EN 374-3 is done at 23°C, while the temperature inside the glove is approx. 35°C. In addition, the elastic material extends during use, thereby glove thickness and penetration time is reduced. Recommended thickness of the glove is ≥ 0.4 mm. Selection of the suitable gloves does not only depend on the material, but also on quality and these will vary between manufacturers.

Personal protective equipment, respiratory protection: When grinding not completely cured product, use special gas cartridge A / P3 (organic substances / especially fine dust).

Other Information: Wash hands before breaks, before using restroom facilities, and at the end of work. Take off contaminated clothing and wash before reuse.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Parameter | Value/unit |
|------------|--|
| State | Liquid |
| Colour | Transparent |
| Odour | No data |
| Solubility | Miscible with the following: Organic solvents. |

| Parameter | Value/unit | Remarks |
|---|------------|---------|
| Odour threshold | No data | |
| Melting point | No data | |
| Freezing point | No data | |
| Initial boiling point and boiling range | > 150 °C | 760mmHg |
| Flammability (solid, gas) | No data | |
| Flammability limits | No data | |
| Explosion limits | No data | |
| Flash Point | > 150 °C | |
| Auto-ignition temperature | > 150 °C | |

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| | | |
|---------------------------------------|---------|------|
| Decomposition temperature: | No data | |
| pH (solution for use) | No data | |
| pH (concentrate) | No data | |
| Kinematic viscosity | No data | |
| Viscosity | 5 Pas | 25°C |
| Partition coefficient n-octanol/water | No data | |
| Vapour pressure | No data | |
| Density | No data | |
| Relative density | No data | |
| Relative vapour density | No data | |
| Relative density (sat. air) | No data | |
| Particle characteristics | No data | |

9.2. Other information

Other Information: Solubility in water: Insoluble

SECTION 10: Stability and reactivity

10.1. Reactivity

No known data.

10.2. Chemical stability

The product is stable when used in accordance with the supplier's directions.

10.3. Possibility of hazardous reactions

May react under considerable heat buildup with amines.

10.4. Conditions to avoid

Avoid contact with the following: Acids/ Oxidisers.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Hazardous flue gases are formed in fire conditions. Carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

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

Acute toxicity - oral

bis[4-(2,3-epoxypropoxy)phenyl]propane, cas-no 1675-54-3

| Organism | Test Type | Exposure time | Value | Conclusion | Test method | Source |
|----------|-----------|---------------|-------------|------------|-------------|--------|
| Rat | LD50 | | 15000 mg/kg | | | |

Epoxy Novolac, cas-no 9003-36-5

| Organism | Test Type | Exposure time | Value | Conclusion | Test method | Source |
|----------|-----------|---------------|---------------|------------|-------------|--------|
| Rat | LD50 | | > 10000 mg/kg | | | |

1,4-bis(2,3 epoxypropoxy)butane, cas-no 2425-79-8

| Organism | Test Type | Exposure time | Value | Conclusion | Test method | Source |
|----------|-----------|---------------|------------|------------|-------------|--------|
| Rat | LD50 | | 1163 mg/kg | | | |

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May cause slight irritation of the mucous membrane.

Acute toxicity - dermal

bis[4-(2,3-epoxypropoxy)phenyl]propane, cas-no 1675-54-3

| Organism | Test Type | Exposure time | Value | Conclusion | Test method | Source |
|----------|-----------|---------------|-------------|------------|-------------|--------|
| Rabbit | LD50 | | 23000 mg/kg | | | |

Epoxy Novolac, cas-no 9003-36-5

| Organism | Test Type | Exposure time | Value | Conclusion | Test method | Source |
|----------|-----------|---------------|--------------|------------|-------------|--------|
| Rat | LD50 | | > 2000 mg/kg | | | |

1,4-bis(2,3 epoxypropoxy)butane, cas-no 2425-79-8

| Organism | Test Type | Exposure time | Value | Conclusion | Test method | Source |
|----------|-----------|---------------|--------------|------------|-------------|--------|
| Rabbit | LD50 | | > 2150 mg/kg | | | |

May cause reddening and sensitization or other allergic response.

Acute toxicity - inhalation: Inhalation of spray mist is irritating to the upper airways.

Skin corrosion/irritation: May cause sensitisation by skin contact.

Serious eye damage/eye irritation: May cause eye irritation.

Respiratory sensitisation or skin sensitisation: May cause sensitisation by skin contact.

11.2. Information on other hazards

Endocrine disrupting properties: None known.

SECTION 12: Ecological information

12.1. Toxicity

bis[4-(2,3-epoxypropoxy)phenyl]propane, cas-no 1675-54-3

| Organism | Species | Exposure time | Test Type | Value | Conclusion | Test method | Source |
|-----------|----------------|---------------|-----------|----------|------------|-------------|--------|
| Fish | Leuciscus idus | 96h | LC50 | 2 mg/l | | | |
| Crustacea | Daphnia magna | 48h | EC50 | 1.8 mg/l | | | |
| Algae | | 72h | EC50 | 11 mg/l | | | |

Epoxy Novolac, cas-no 9003-36-5

| Organism | Species | Exposure time | Test Type | Value | Conclusion | Test method | Source |
|-----------|----------------|---------------|-----------|-----------|------------|-------------|--------|
| Crustacea | Daphnia magna | 48h | LC50 | 2.55 mg/l | | | |
| Algae | | 72h | LC50 | 1.8 mg/l | | | |
| Fish | Leuciscus idus | 96h | EC50 | 2.54 mg/l | | | |

1,4-bis(2,3 epoxypropoxy)butane, cas-no 2425-79-8

| Organism | Species | Exposure time | Test Type | Value | Conclusion | Test method | Source |
|------------------|------------------|---------------|-----------|-----------|------------|-------------|--------|
| #Not translated# | | 24h | EC50 | 75 mg/l | | | |
| #Not translated# | #Not translated# | 96h | LC50 | 19.8 mg/l | | | |

No results from ecotoxicological tests are available. Ecotoxicological information only related to components.

12.2. Persistence and degradability

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Non-biodegradable.

12.3. Bioaccumulative potential

Test data are not available.

12.4. Mobility in soil

Test data are not available.

12.5. Results of PBT and vPvB assessment

Not applicable

12.6. Endocrine disrupting properties

None known.

12.7. Other adverse effects

Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

If this product as supplied becomes a waste, it meets the criteria of a hazardous waste (Dir. 2008/98/EU). Collect spills and waste in closed, leak-proof containers for disposal at the local hazardous waste site.

SECTION 14: Transport information

Land transport (ADR/RID)

| | | | |
|-----------------------------------|--|------------------------------|---|
| 14.1. UN number or ID number: | 3082 | 14.4. Packing group: | III |
| 14.2. UN proper shipping name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis[4-(2,3-epoxypropoxy)phenyl]propane) | 14.5. Environmental hazards: | The product must be labelled as an environmental hazard (symbol: fish and tree) in packaging sizes of more than 5 kg/l. |
| 14.3. Transport hazard class(es): | 9 | | |
| Hazard label(s): | 9 | | |
| Hazard identification number: | 90 | Tunnel restriction code: | - |

Inland water ways transport (ADN)

| | | | |
|-----------------------------------|--|------------------------------|---|
| 14.1. UN number or ID number: | 3082 | 14.4. Packing group: | III |
| 14.2. UN proper shipping name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis[4-(2,3-epoxypropoxy)phenyl]propane) | 14.5. Environmental hazards: | The product must be labelled as an environmental hazard (symbol: fish and tree) in packaging sizes of more than 5 kg/l. |
| 14.3. Transport hazard class(es): | 9 | | |
| Hazard label(s): | 9 | | |
| Transport in tank vessels: | | | |

Sea transport (IMDG)

| | | | |
|-------------------------------|------|----------------------|-----|
| 14.1. UN number or ID number: | 3082 | 14.4. Packing group: | III |
|-------------------------------|------|----------------------|-----|

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14.2. UN proper shipping name:

ENVIRONMENTALLY
HAZARDOUS SUBSTANCE,
LIQUID, N.O.S.
(bis[4-(2,3-
epoxypropoxy)phenyl]
propane)

14.5. Environmental hazards:

The product must be
labelled as a Marine
Pollutant (MP) in packaging
sizes of more than 5 kg/l.

14.3. Transport hazard class(es):

9

Environmental Hazardous Substance Name(s):

Hazard label(s):

9

EmS:

F-A, S-F

IMDG Code segregation group:

- None -

Air transport (ICAO-TI / IATA-DGR)

14.1. UN number or ID number:

3082

14.4. Packing group:

III

14.2. UN proper shipping name:

ENVIRONMENTALLY
HAZARDOUS SUBSTANCE,
LIQUID, N.O.S.
(bis[4-(2,3-
epoxypropoxy)phenyl]
propane)

14.5. Environmental hazards:

The product must be
labelled as an
environmental hazard
(symbol: fish and tree) in
packaging sizes of more
than 5 kg/l.

14.3. Transport hazard class(es):

9

Hazard label(s):

9

14.6. Special precautions for user

None.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

Special Provisions:

This product is assessed and classified in accordance with the requirements of the European Parliament and Council Regulation (EC) No 1272/2008 and subsequent amendments.

15.2. Chemical Safety Assessment

Other Information:

Chemical safety assessment has not been performed.

SECTION 16: Other information

Version history and indication of changes

| Version | Revision date | Responsible | Changes |
|---------|---------------|--------------|----------|
| 1.0.1 | 04/03/2025 | Linervent AB | Update |
| 1.0.0 | 28/03/2023 | Linervent AB | Approved |

Abbreviations:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

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Other Information:

The information contained herein is based on the best of our knowledge and shall describe our product under the aspect of safety. They are not meant to guarantee specific properties of the product. Recipients of our product must take responsibility for observing existing laws and regulations.

Classification method:

Calculation based on the hazards of the known components.

Hazard statements

| | |
|------|--|
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H411 | Toxic to aquatic life with long lasting effects. |

Supplemental hazard information

| | |
|--------|--|
| EUH205 | Contains epoxy constituents. May produce an allergic reaction. |
|--------|--|

Country:

EU