

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

1.1 Product identifier

Trade name: Radiator Leak Stop

This safety data sheet pertains to the following products:

242701 = Radiator Leak Stop

409832 = Radiator Leak Stop

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

General use: sealant.
For commercial user only.

1.3 Details of the supplier of the safety data sheet

Company name: Berner Produkten b.v.

Street/POB-No.: Vogelzankweg 175

Postal Code, city: 6374 AC Landgraaf

Netherlands

WWW: www.berner.nl

E-mail: info@berner.nl

Telephone: +31 45 53 39 133

Department responsible for information:

E-mail: Productsafety.Chemicals@berner-group.com

1.4 Emergency telephone number

Berner Trading Holding GmbH: +49 (0)221 80260889 (9:00 – 17:00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

This mixture is classified as not hazardous.

2.2 Label elements

Labelling (CLP)

Hazard statements: not applicable

Precautionary statements: not applicable

Special labelling

EUH208 Contains 1,2-Benzisothiazol-3(2H)-one. May produce an allergic reaction.

2.3 Other hazards

Special danger of slipping by leaking/spilling product.

Endocrine disrupting properties, Results of PBT and vPvB assessment:

No data available

SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: Mixture of the substances listed below with non-hazardous additions

Hazardous ingredients:

Identifiers	Designation Classification	Content
REACH 01-2119487136-33-xxxx EC No. 215-181-3 CAS 1310-58-3	Potassium hydroxide Met. Corr. 1; H290. Acute Tox. 4; H302. Skin Corr. 1A; H314. Specific concentration limits (SCL): Skin Corr. 1A; H314: $C \geq 5\%$ / Skin Corr. 1B; H314: $2\% \leq C < 5\%$ / Skin Irrit. 2; H315: $0.5\% \leq C < 2\%$ / Eye Irrit. 2; H319: $0.5\% \leq C < 2\%$	< 0.5 %
EC No. 220-120-9 CAS 2634-33-5	1,2-Benzisothiazol-3(2H)-one Acute Tox. 4; H302. Skin Irrit. 2; H315. Eye Dam. 1; H318. Skin Sens. 1; H317. Aquatic Acute 1; H400. Specific concentration limits (SCL): Skin Sens. 1; H317: $C \geq 0,05\%$ M-factors: Aquatic Acute 1: M = 10.	< 0.05 %

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:	If medical advice is needed, have product container or label at hand. Take off contaminated clothing and wash it before reuse.
In case of inhalation:	Remove person to fresh air and keep comfortable for breathing. In the event of discomfort seek medical treatment.
Following skin contact:	Immediately clean with water and soap followed by thorough rinsing. In case of skin reactions, consult a physician.
After eye contact:	Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.
After swallowing:	Rinse mouth with water. Never give anything by mouth to an unconscious person. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

May cause allergic reactions in already sensitized persons.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water spray jet, Foam, Extinguishing powder, Carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet

5.2 Special hazards arising from the substance or mixture

May form dangerous gases and vapours in case of fire. Furthermore, there may develop: carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained breathing apparatus.

Additional information: Hazchem-Code: -

Do not allow fire water to penetrate into surface or ground water. 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

Avoid breathing mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Provide adequate ventilation.

Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse.

6.2 Environmental precautions

Do not allow to enter into surface water or drains.

If necessary notify appropriate authorities.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal.

Additional information: Special danger of slipping by leaking/spilling product.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Avoid breathing mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse. Have eye wash bottle or eye rinse ready at work place.

Precautions against fire and explosion:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Take action to prevent static discharges.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed and in a well-ventilated place.

Keep container dry. Keep only in the original container.

Protect from heat and direct sunlight.

Hints on joint storage:

keep away from: strong oxidizing agents.

Keep away from food, drink and animal feedingstuffs.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
1310-58-3	Potassium hydroxide	Great Britain: WEL-STEL	2 mg/m ³

8.2 Exposure controls

Provide good ventilation and/or an exhaust system in the work area.

Personal protection equipment

Occupational exposure controls

Respiratory protection:	In case of inadequate ventilation wear respiratory protection. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. Recommendation: Use filter type A (= against vapours of organic substances) according to BS EN 14387.
Hand protection:	Protective gloves according to EN 374. Glove material: Nitrile rubber Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
Eye protection:	Recommendation: Tightly sealed goggles according to BS EN ISO 16321-1:2022.
Body protection:	Wear suitable protective clothing.
General protection and hygiene measures:	Avoid breathing mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse. Have eye wash bottle or eye rinse ready at work place.

Environmental exposure controls

Refer to "6.2 Environmental precautions".

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Physical state at 20 °C and 101.3 kPa: liquid Colour: brown
Odour:	Characteristic
Odour threshold:	No data available
pH:	6 - 8
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	> 100 °C
Flash point/flash point range:	No data available
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Density:	at 20 °C: 1.025 g/mL
Water solubility:	Soluble
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	> 200 °C
Decomposition temperature:	No data available
Viscosity, kinematic:	No data available
Explosive properties:	No data available
Oxidizing characteristics:	No data available

9.2 Other information

Additional information:	No data available
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SECTION 10: Stability and reactivity

10.1 Reactivity

Refer to subsection "Possibility of hazardous reactions".

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Keep away from heat sources, sparks and open flames.
Protect from direct sunlight.

10.5 Incompatible materials

strong oxidizing agents

10.6 Hazardous decomposition products

No hazardous decomposition products when regulations for storage and handling are observed.

Thermal decomposition: No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicological effects:

- Acute toxicity (oral): Based on available data, the classification criteria are not met.
- Acute toxicity (dermal): Based on available data, the classification criteria are not met.
- Acute toxicity (inhalative): Based on available data, the classification criteria are not met.
- Skin corrosion/irritation: Based on available data, the classification criteria are not met.
- Serious eye damage/irritation: Based on available data, the classification criteria are not met.
- Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met.
- Skin sensitisation: Based on available data, the classification criteria are not met.
- Contains 1,2-Benzisothiazol-3(2H)-one. May produce an allergic reaction.
- Germ cell mutagenicity/Genotoxicity: 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.
- Effects on or via lactation: Lack of data.
- 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.
- Aspiration hazard: Based on available data, the classification criteria are not met.

Other information: Information about Potassium hydroxide:
LD50, Rat, oral: 333 mg/kg (OECD 425)

Symptoms

In case of inhalation: Nausea, Headache, Dizziness

In case of ingestion: gastrointestinal complaints

After contact with skin:

Irritation and redness may occur. May cause allergic reactions in already sensitized persons.

After eye contact: Irritation and redness may occur.

SECTION 12: Ecological information**12.1 Toxicity**

Further details: No data available

12.2 Persistence and degradability

Further details: No data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Waste key number: 08 04 09* = Waste adhesives and sealants containing organic solvents or other dangerous substances

* = Evidence for disposal must be provided.

Recommendation: Dispose of waste according to applicable legislation. Do not dispose of with household waste.

Package

Recommendation: Dispose of waste according to applicable legislation. Handle contaminated packages in the same way as the substance itself. Non-contaminated packages may be recycled.

SECTION 14: Transport information**14.1 UN number**

ADR/RID, IMDG, IATA-DGR: not applicable

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR: Not restricted

14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA-DGR: not applicable

14.4 Packing group

ADR/RID, IMDG, IATA-DGR: not applicable

14.5 Environmental hazards

Marine pollutant: no

14.6 Special precautions for user

No dangerous good in sense of these transport regulations.

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

No data available

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations - Great Britain**

Hazchem-Code: -

No data available

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information**Further information**

Wording of the H-phrases under paragraph 2 and 3:

H290 = May be corrosive to metals.

H302 = Harmful if swallowed.

H314 = Causes severe skin burns and eye damage.

H315 = Causes skin irritation.

H317 = May cause an allergic skin reaction.

H318 = Causes serious eye damage.

H400 = Very toxic to aquatic life.

EUH208 = Contains 1,2-Benzisothiazol-3(2H)-one. May produce an allergic reaction.

Abbreviations and acronyms:

- Acute Tox.: Acute toxicity
- ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- Aquatic Acute: Hazardous to the aquatic environment - acute
- AS/NZS: Australian Standards/New Zealand Standards
- CAS: Chemical Abstracts Service
- CFR: Code of Federal Regulations
- CLP: Classification, Labelling and Packaging
- DMEL: Derived minimal effect level
- DNEL: Derived no-effect level
- EC: European Community
- EN: European Standard
- EQ: Excepted quantities
- Eye Dam.: Eye damage
- Eye Irrit.: Eye irritation
- IATA: International Air Transport Association
- 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
- IMDG Code: International Maritime Dangerous Goods Code
- LD50: Lethal dose 50%
- MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
- Met. Corr.: Corrosive to metals
- M-factor: Multiplication factor
- OECD: Organisation for Economic Co-operation and Development
- OSHA: Occupational Safety and Health Administration
- PBT: Persistent, bioaccumulative and toxic
- PNEC: Predicted no-effect concentration
- RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
- Skin Corr.: Skin corrosion
- Skin Irrit.: Skin irritation
- Skin Sens.: Skin sensitisation
- TRGS: Technical Rules for Hazardous Substances
- vPvB: Very persistent and very bioaccumulative

Reason of change: **General revision**

Date of first version: **7/9/2021**

Department issuing data sheet

Contact person: **see section 1: Department responsible for information**

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.