

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Bromlösung etwa 0,05 mol Br₂/l etwa 0,1 N Lösung mit 135 g/l KBr in Wasser

Revision date: 01.06.2022

Product code: 28327

Page 1 of 12

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

1.1. Product identifier

Bromlösung etwa 0,05 mol Br₂/l etwa 0,1 N Lösung mit 135 g/l KBr in Wasser

UFI: 20FH-G2S6-H00K-TCDR

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

Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Uses advised against

Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

| | | |
|-------------------------|---------------------------------|------------------------------|
| Company name: | Fa. Bernd Kraft GmbH | |
| Street: | Stempelstraße 6 | |
| Place: | D-47167 Duisburg | |
| Telephone: | 0203/5194-0 | Telefax: 0203/5194-290 |
| e-mail: | info@berndkraft.de | |
| Contact person: | Abteilung Produktsicherheit | Telephone: 0203/5194-107/117 |
| e-mail: | produktsicherheit@berndkraft.de | |
| Internet: | www.berndkraft.de | |
| Responsible Department: | Abteilung Produktsicherheit | |

1.4. Emergency telephone number:

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

Further Information

This product is a mixture. REACH Registration Number see section 3.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute Tox. 3; H331

Eye Irrit. 2; H319

Aquatic Acute 1; H400

Full text of hazard statements: see SECTION 16.

2.2. Label elements

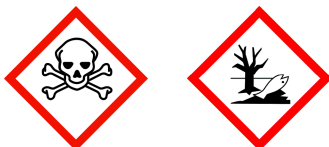
Regulation (EC) No 1272/2008

Hazard components for labelling

bromine

Signal word: Danger

Pictograms:



Hazard statements

H319

Causes serious eye irritation.

Bromlösung etwa 0,05 mol Br₂/l etwa 0,1 N Lösung mit 135 g/l KBr in Wasser

Revision date: 01.06.2022

Product code: 28327

Page 2 of 12

H331 Toxic if inhaled.
H400 Very toxic to aquatic life.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves and eye/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixtures in aqueous solution

Hazardous components

| CAS No | Chemical name | | | Quantity |
|-----------|--|--------------|------------------|-------------|
| | EC No | Index No | REACH No | |
| | Classification (Regulation (EC) No 1272/2008) | | | |
| 7758-02-3 | potassium bromide | | | 10 - < 15 % |
| | 231-830-3 | | 01-2119962195-33 | |
| | Eye Irrit. 2; H319 | | | |
| 7726-95-6 | bromine | | | < 1 % |
| | 231-778-1 | 035-001-00-5 | 01-2119461714-37 | |
| | Acute Tox. 1, Skin Corr. 1A, Aquatic Acute 1; H330 H314 H400 | | | |

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

Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | Chemical name | Quantity |
|-----------|--|-------------------|-------------|
| | Specific Conc. Limits, M-factors and ATE | | |
| 7758-02-3 | 231-830-3 | potassium bromide | 10 - < 15 % |
| | dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg | | |
| 7726-95-6 | 231-778-1 | bromine | < 1 % |
| | inhalation: ATE = 0,05 mg/l (vapours); inhalation: ATE = 0,005 mg/l (dusts or mists) M acute; H400: M=100 | | |

Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection!
Call a physician immediately.

After inhalation

Provide fresh air.
If breathing is irregular or stopped, administer artificial respiration.
Call a physician immediately.

Bromlösung etwa 0,05 mol Br₂/l etwa 0,1 N Lösung mit 135 g/l KBr in Wasser

Revision date: 01.06.2022

Product code: 28327

Page 3 of 12

After contact with skin

Wash immediately with: Water
Take off immediately all contaminated clothing and wash it before reuse.
Call a physician immediately.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
Remove contact lenses, if present and easy to do. Continue rinsing.
Protect uninjured eye.

After ingestion

Rinse mouth immediately and drink plenty of water.
Call a physician immediately.

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

No information available.

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

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

no restriction

5.2. Special hazards arising from the substance or mixture

Non-combustible liquids
Hazardous combustion products

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.
In case of fire and/or explosion do not breathe fumes.
Avoid contact with skin, eyes and clothes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Move undamaged containers from immediate hazard area if it can be done safely.
Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Provide adequate ventilation.
Use personal protection equipment.
Avoid contact with skin, eyes and clothes.
Remove persons to safety.
Emergency procedures
Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Bromlösung etwa 0,05 mol Br₂/l etwa 0,1 N Lösung mit 135 g/l KBr in Wasser

Revision date: 01.06.2022

Product code: 28327

Page 4 of 12

For containment

- Cover drains.
- Prevent spread over a wide area (e.g. by containment or oil barriers).
- Collect in closed and suitable containers for disposal.
- Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up

- Clean contaminated articles and floor according to the environmental legislation.

Other information

- Provide adequate ventilation.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.4. Reference to other sections

- Safe handling: see section 7
- Personal protection equipment: see section 8
- Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

- Read label before use. Handle and open container with care.
- When using do not eat, drink, smoke, sniff. Use personal protection equipment.
- Provide adequate ventilation. Avoid contact with skin, eyes and clothes.
- Do not breathe vapour/aerosol. Use extractor hood (laboratory).

Advice on protection against fire and explosion

- No special fire protection measures are necessary.

Advice on general occupational hygiene

- Keep away from food, drink and animal feedingstuffs. Remove contaminated, saturated clothing immediately.
- Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. Avoid: aerosol or mist formation Do not breathe vapour/aerosol.

Further information on handling

- Draw up and observe skin protection programme.
- Wash hands and face before breaks and after work and take a shower if necessary.
- Take off immediately all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

- Store in a place accessible by authorized persons only.
- Store in a well-ventilated place. Keep container tightly closed.

Further information on storage conditions

- Store in a dry place.

7.3. Specific end use(s)

- Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

| CAS No | Substance | ppm | mg/m ³ | fib/cm ³ | Category | Origin |
|-----------|-----------|-----|-------------------|---------------------|-----------|--------|
| 7726-95-6 | Bromine | 0.1 | 0.7 | | TWA (8 h) | |

Bromlösung etwa 0,05 mol Br₂/l etwa 0,1 N Lösung mit 135 g/l KBr in Wasser

Revision date: 01.06.2022

Product code: 28327

Page 5 of 12

DNEL/DMEL values

| CAS No | Substance | Exposure route | Effect | Value |
|--------------------------|-------------------|----------------|----------|------------------------|
| 7758-02-3 | potassium bromide | | | |
| Worker DNEL, long-term | | inhalation | systemic | 4,75 mg/m ³ |
| Worker DNEL, long-term | | dermal | systemic | 95 mg/kg bw/day |
| Worker DNEL, acute | | dermal | systemic | 95 mg/kg bw/day |
| Consumer DNEL, long-term | | inhalation | systemic | 1,66 mg/m ³ |
| Consumer DNEL, long-term | | dermal | systemic | 95 mg/kg bw/day |
| Consumer DNEL, acute | | dermal | systemic | 95 mg/kg bw/day |
| Consumer DNEL, long-term | | oral | systemic | 0,475 mg/kg bw/day |
| Consumer DNEL, acute | | oral | systemic | 50 mg/kg bw/day |
| 7726-95-6 | bromine | | | |
| Worker DNEL, long-term | | inhalation | systemic | 0,7 mg/m ³ |
| Worker DNEL, acute | | inhalation | systemic | 0,7 mg/m ³ |
| Worker DNEL, long-term | | inhalation | local | 0,7 mg/m ³ |
| Worker DNEL, acute | | inhalation | local | 0,7 mg/m ³ |

PNEC values

| CAS No | Substance | Value |
|--|-------------------|------------|
| 7758-02-3 | potassium bromide | |
| Environmental compartment | | |
| Freshwater | | 0,52 mg/l |
| Freshwater (intermittent releases) | | 109 mg/l |
| Marine water | | 41 mg/l |
| Micro-organisms in sewage treatment plants (STP) | | 100 mg/l |
| Soil | | 3,2 mg/kg |
| 7726-95-6 | bromine | |
| Freshwater | | 0,001 mg/l |
| Marine water | | 0,001 mg/l |

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Individual protection measures, such as personal protective equipment

Eye/face protection

goggles
Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Bromlösung etwa 0,05 mol Br₂/l etwa 0,1 N Lösung mit 135 g/l KBr in Wasser

Revision date: 01.06.2022

Product code: 28327

Page 6 of 12

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact

Trade name/designation: KCL 890 Vitoject®
Recommended material: FKM (fluoro rubber) 0,7 mm
Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation: KCL 890 Vitoject®
Recommended material: FKM (fluoro rubber) 0,7 mm
Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing.
Wash hands before breaks and after work.

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|------------------|-------------------|
| Physical state: | Liquid |
| Colour: | colourless |
| Odour: | odourless |
| Odour threshold: | No data available |

Changes in the physical state

| | |
|---|-------------------|
| Melting point/freezing point: | No data available |
| Boiling point or initial boiling point and boiling range: | No data available |
| Sublimation point: | No data available |
| Softening point: | No data available |
| Pour point: | No data available |
| No data available: | |
| Flash point: | No data available |

Flammability

| | |
|---------------|----------------|
| Solid/liquid: | not applicable |
| Gas: | not applicable |

Explosive properties

No data available

| | |
|-------------------------|-------------------|
| Lower explosion limits: | No data available |
| Upper explosion limits: | No data available |

Bromlösung etwa 0,05 mol Br₂/l etwa 0,1 N Lösung mit 135 g/l KBr in Wasser

Revision date: 01.06.2022

Product code: 28327

Page 7 of 12

| | |
|--|---------------------------|
| Auto-ignition temperature: | No data available |
| Self-ignition temperature | |
| Solid: | not applicable |
| Gas: | not applicable |
| Decomposition temperature: | No data available |
| pH-Value: | acidic |
| Viscosity / dynamic: | No data available |
| Viscosity / kinematic: | No data available |
| Flow time: | No data available |
| Solubility in other solvents | |
| not determined | |
| Dissolution rate: | No data available |
| Partition coefficient n-octanol/water: | No data available |
| Dispersion stability: | No data available |
| Vapour pressure: | No data available |
| Vapour pressure: | No data available |
| Density: | 1,10000 g/cm ³ |
| Bulk density: | No data available |
| Relative vapour density: | No data available |
| Particle characteristics: | No data available |

9.2. Other information

Information with regard to physical hazard classes

| | |
|------------------------|-------------------|
| Sustaining combustion: | No data available |
| Oxidizing properties | |
| Not oxidising. | |

Other safety characteristics

| | |
|--------------------------|-------------------|
| Solvent separation test: | No data available |
| Solvent content: | 0 |
| Solid content: | 0 |
| Evaporation rate: | No data available |

Further Information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

No data available

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

No data available

10.5. Incompatible materials

No information available.

Bromlösung etwa 0,05 mol Br₂/l etwa 0,1 N Lösung mit 135 g/l KBr in Wasser

Revision date: 01.06.2022

Product code: 28327

Page 8 of 12

10.6. Hazardous decomposition products

Bromine

Further information

No data available

SECTION 11: Toxicological information

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

Toxicokinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

Acute toxicity

Toxic if inhaled.

ATEmix calculated

ATE (inhalation vapour) 6,94 mg/l; ATE (inhalation dust/mist) 0,694 mg/l

| CAS No | Chemical name | | | | |
|-----------|----------------------|-------------------|---------|---------------------|-----------------------|
| | Exposure route | Dose | Species | Source | Method |
| 7758-02-3 | potassium bromide | | | | |
| | oral | LD50 > 5000 mg/kg | Rat | Study report (1992) | EPA OPP 81-1 |
| | dermal | LD50 > 2000 mg/kg | Rabbit | Study report (1988) | other: EPA FIFRA 81-6 |
| 7726-95-6 | bromine | | | | |
| | inhalation vapour | ATE 0,05 mg/l | | | |
| | inhalation dust/mist | ATE 0,005 mg/l | | | |

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Following ingestion Gastric perforation

Irritating to respiratory system.

Pulmonary oedema

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

Specific effects in experiment on an animal

There are no data available on the preparation/mixture itself.

Additional information on tests

There are no data available on the preparation/mixture itself.

Practical experience

There are no data available on the preparation/mixture itself.

11.2. Information on other hazards

Bromlösung etwa 0,05 mol Br₂/l etwa 0,1 N Lösung mit 135 g/l KBr in Wasser

Revision date: 01.06.2022

Product code: 28327

Page 9 of 12

Other information

There are no data available on the preparation/mixture itself.

Further information

There are no data available on the preparation/mixture itself.

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the preparation/mixture itself.

| CAS No | Chemical name | | | | | |
|-----------|--------------------------|--------------------|-----------|---|--|--|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 7758-02-3 | potassium bromide | | | | | |
| | Acute fish toxicity | LC50 > 440 mg/l | 96 h | Scophthalmus maximus | Study report (2000) | OECD Guideline 203 |
| | Acute algae toxicity | ErC50 > 440 mg/l | 72 h | Skeletonema costatum | Study report (2000) | OECD Guideline 201 |
| | Acute crustacea toxicity | EC50 > 100 mg/l | 48 h | Daphnia magna | Study report (1996) | OECD Guideline 202 |
| | Fish toxicity | NOEC 10 mg/l | 124 d | Poecilia reticulata | Fd. Chem. Toxic. Vol. 21, No. 4, 369-378 | Dutch Standardisation Organisation |
| | Crustacea toxicity | NOEC 7,5 mg/l | 21 d | Daphnia magna | Ecotoxicology and Environmental Safety, | other: OECD |
| | Acute bacteria toxicity | (EC50 > 1000 mg/l) | 3 h | activated sludge of a predominantly domestic sewage | Study report (2007) | OECD Guideline 209 |
| 7726-95-6 | bromine | | | | | |
| | Acute crustacea toxicity | EC50 ca. 1 mg/l | 48 h | Daphnia magna | Bull. Environ. Contam. Toxicol., Vol. 24 | The study authors employed standard acut |

12.2. Persistence and degradability

There are no data available on the preparation/mixture itself.

12.3. Bioaccumulative potential

There are no data available on the preparation/mixture itself.

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|-----------|---------------|---------|
| 7726-95-6 | bromine | -1,49 |

BCF

| CAS No | Chemical name | BCF | Species | Source |
|-----------|-------------------|------|----------------|--------------------------|
| 7758-02-3 | potassium bromide | 0,23 | Artemia salina | Environmental Toxicology |

12.4. Mobility in soil

There are no data available on the preparation/mixture itself.

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.

There are no data available on the preparation/mixture itself.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

Bromlösung etwa 0,05 mol Br₂/l etwa 0,1 N Lösung mit 135 g/l KBr in Wasser

Revision date: 01.06.2022

Product code: 28327

Page 10 of 12

12.7. Other adverse effects

Discharge into the environment must be avoided.

Further information

Do not empty into drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.
Send to a physico-chemical treatment facility under observation of official regulations.
Do not empty into drains.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.
Dispose of waste according to "Kreislaufwirtschafts- und Abfallgesetz (KrW-/AbfG)".

SECTION 14: Transport information

Land transport (ADR/RID)

| | |
|--|------------------------------------|
| 14.1. UN number or ID number: | UN 1760 |
| 14.2. UN proper shipping name: | CORROSIVE LIQUID, N.O.S. (bromine) |
| 14.3. Transport hazard class(es): | 8 |
| 14.4. Packing group: | III |
| Hazard label: | 8 |
| Classification code: | C9 |
| Special Provisions: | 274 |
| Limited quantity: | 5 L |
| Excepted quantity: | E1 |
| Transport category: | 3 |
| Hazard No: | 80 |
| Tunnel restriction code: | E |

Inland waterways transport (ADN)

| | |
|--|------------------------------------|
| 14.1. UN number or ID number: | UN 1760 |
| 14.2. UN proper shipping name: | CORROSIVE LIQUID, N.O.S. (bromine) |
| 14.3. Transport hazard class(es): | 8 |
| 14.4. Packing group: | III |
| Hazard label: | 8 |
| Classification code: | C9 |
| Special Provisions: | 274 |
| Limited quantity: | 5 L |
| Excepted quantity: | E1 |

Marine transport (IMDG)

| | |
|--|------------------------------------|
| 14.1. UN number or ID number: | UN 1760 |
| 14.2. UN proper shipping name: | CORROSIVE LIQUID, N.O.S. (bromine) |
| 14.3. Transport hazard class(es): | 8 |
| 14.4. Packing group: | III |
| Hazard label: | 8 |
| Special Provisions: | 223, 274 |
| Limited quantity: | 5 L |
| Excepted quantity: | E1 |
| EmS: | F-A, S-B |

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Bromlösung etwa 0,05 mol Br₂/l etwa 0,1 N Lösung mit 135 g/l KBr in Wasser

Revision date: 01.06.2022

Product code: 28327

Page 11 of 12

Air transport (ICAO-TI/IATA-DGR)

| | | |
|--|------------------------------------|------|
| 14.1. UN number or ID number: | UN 1760 | |
| 14.2. UN proper shipping name: | CORROSIVE LIQUID, N.O.S. (bromine) | |
| 14.3. Transport hazard class(es): | 8 | |
| 14.4. Packing group: | III | |
| Hazard label: | 8 | |
| Special Provisions: | A3 A803 | |
| Limited quantity Passenger: | 1 L | |
| Passenger LQ: | Y841 | |
| Excepted quantity: | E1 | |
| IATA-packing instructions - Passenger: | | 852 |
| IATA-max. quantity - Passenger: | | 5 L |
| IATA-packing instructions - Cargo: | | 856 |
| IATA-max. quantity - Cargo: | | 60 L |

14.5. Environmental hazards

| | |
|-----------------------------|---------|
| ENVIRONMENTALLY HAZARDOUS: | Yes |
| Danger releasing substance: | bromine |

14.6. Special precautions for user

Warning: strongly corrosive.

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Information according to 2012/18/EU (SEVESO III): H2 ACUTE TOXIC

Additional information: E1

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Bromlösung etwa 0,05 mol Br₂/l etwa 0,1 N Lösung mit 135 g/l KBr in Wasser

Revision date: 01.06.2022

Product code: 28327

Page 12 of 12

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

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

| Classification | Classification procedure |
|-----------------------|--------------------------|
| Acute Tox. 3; H331 | Calculation method |
| Eye Irrit. 2; H319 | Calculation method |
| Aquatic Acute 1; H400 | Calculation method |

Relevant H and EUH statements (number and full text)

| | |
|------|--|
| H314 | Causes severe skin burns and eye damage. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H331 | Toxic if inhaled. |
| H400 | Very toxic to aquatic life. |

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)