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

1.1. Product identifier

CEMflex VB coated steel plate waterstop

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

Use of the substance/mixture

- Adhesives, sealants

Uses advised against

- none/none

1.3. Details of the supplier of the safety data sheet

Company name: BPA – GmbH Beratung Planung Ausführung
Street: Behringstr. 12
Place: D-71083 Herrenberg-Gültstein
Telephone: +49 (0) 7032 89 399 - 0
Fax: +49 (0) 7032 89 399 - 29
Contact person: Adrian Pfieger
Telephone: +49 (0) 7032 89 399 - 0
E-mail: adrian.pfieger@dichte-bauwerke.de

Responsible Department: Dr. Timo Gans-Eichler
Chemieberatung
Raesfeldstr. 22, D-48149 Münster
Telephone: +49 (0)251/924520-60
Fax: +49 (0)251/924520-70
Website: www.tge-consult.de

1.4. Emergency telephone number:

+49 (0) 7032 89 399 - 0 (Mo-Fr 9:00 - 17:00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Indications of danger: Xn - Harmful, Xi - Irritant
R phrases:
- Harmful if swallowed.
- Irritating to respiratory system and skin.
- Risk of serious damage to eyes.

GHS classification

- Hazard categories:
  - Acute toxicity: Acute Tox. 4
  - Skin corrosion/irritation: Skin Irrit. 2
  - Serious eye damage/eye irritation: Eye Dam. 1
  - Specific target organ toxicity - single exposure: STOT SE 3

- Hazard Statements:
  - Harmful if swallowed.
  - May cause respiratory irritation.
  - Causes serious eye damage.
  - Causes skin irritation.

2.2. Label elements

- Hazardous components which must be listed on the label
  - Portland cement
  - Isotridecanol, ethoxylated

- Signal word: Danger

- Pictograms: GHS05-GHS07
Hazard statements

H302   Harmful if swallowed.
H335   May cause respiratory irritation.
H318   Causes serious eye damage.
H315   Causes skin irritation.

Precautionary statements

P280   Wear protective gloves/protective clothing/eye protection/face protection.
P332+P313   If skin irritation occurs: Get medical advice/attention.
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.
P310   Immediately call a POISON CENTER/doctor.
P501   Dispose of contents/container to disposal according to official regulations.

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>EC No</th>
<th>Chemical name</th>
<th>CAS No</th>
<th>Classification</th>
<th>REACH No</th>
<th>GHS classification</th>
<th>STOT SE, Skin Irrit. 2, Eye Dam. 1; H335 H315 H318</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>266-043-4</td>
<td>Portland cement</td>
<td>266-043-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>&lt; 50 %</td>
</tr>
<tr>
<td>65997-15-1</td>
<td>Xi - Irritant R37/38-41</td>
<td>65997</td>
<td></td>
<td></td>
<td>Xi - Irritant R37/38-41</td>
<td>STOT SE 3, Skin Irrit. 2, Eye Dam. 1; H335 H315 H318</td>
<td>&lt; 50 %</td>
</tr>
<tr>
<td>500-027-2</td>
<td>Isotridecanol, ethoxylated</td>
<td>500-027-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>&lt; 25 %</td>
</tr>
<tr>
<td>9043-30-5</td>
<td>Xn - Harmful, Xi - Irritant R22-41</td>
<td>9043-30-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Full text of R and H phrases: see Section 16.

Further Information

Product does not contain listed SVHC substances.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or if you feel unwell, seek medical advice immediately (show safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of irritation of the respiratory tract seek medical advice.

After contact with skin

After contact with skin, wash immediately with: Water and soap. In case of skin irritation, seek medical advice.
treatment.

After contact with eyes
In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion
Do not induce vomiting. Rinse mouth thoroughly with water. Let water be swallowed in little sips (dilution effect). In all cases of doubt, or when symptoms persist, seek medical advice.

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
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
Extinguishing materials should be selected according to the surrounding area.

Unsuitable extinguishing media
High power water jet.

5.2. Special hazards arising from the substance or mixture
Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO2).

5.3. Advice for firefighters
In case of fire and/or explosion do not breathe fumes. Wear a self-contained breathing apparatus and chemical resistant suit.

Additional information
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Extinguishing materials should be selected according to the surrounding area.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.
Provide adequate ventilation.
Do not breathe dust.

6.2. Environmental precautions
Do not allow uncontrolled leakage of product into the environment.

6.3. Methods and material for containment and cleaning up
Collect mechanically.
Treat the assimilated material according to the section on waste disposal.
Clean contaminated objects and areas thoroughly observing environmental regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling
Wear suitable protective clothing. (Refer to chapter 8.)
Do not breathe dust.

Advice on protection against fire and explosion
Usual measures for fire prevention.

Further information on handling
Avoid contact with skin, eye and clothing.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep container tightly closed in a cool, well-ventilated place. Keep container dry. Storage temperature:
> 5°C
Unsuitable materials for Container: Light metal.

Advice on storage compatibility
Do not store together with: Explosives. Food and fodder. Combustible substance.

Further information on storage conditions
Protect against: UV-radiation/sunlight. Heat. (>100°C) frost.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>fibres/ml</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>65997-15-1</td>
<td>Portland cement, respirable dust</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
</tbody>
</table>

Additional advice on limit values
Air limit values: (Dust, general) 10 mg/ m³; Inhalable Dust fraction
Air limit values: (Dust, general) 3 mg/ m³; Respirable Dust fraction

8.2. Exposure controls

Appropriate engineering controls
Avoid generation of dust. No special technical protective measures are necessary.

Protective and hygiene measures
Always close containers tightly after the removal of product. Do not eat, drink, smoke or sneeze at the workplace. Wash hands before breaks and at the end of work. Remove contaminated clothing immediately and dispose off safely.

Eye/face protection
Wear safety glasses; chemical goggles (if splashing is possible). In the case of high dust generation: Dust protection goggles.

Hand protection
Pull-over gloves of rubber. DIN EN 374
Suitable material:
(penetration time (maximum wearing period): >= 8h)
CR (polychloroprenes, Chloroprene rubber). (>0,8 mm)
NR (Natural rubber (Caoutchouc), Natural latex). (>1,0 mm)
PVC (Polyvinyl chloride).
Before using check leak tightness / impermeability. In case of reutilization, clean gloves before taking off and store in well-aired place.
Protect skin by using skin protective cream.

Skin protection
Suitable protection of the body: Lab apron.

Respiratory protection
Respiratory protection required in case of:
exceeding critical value
Generation/formation of dust
Safety Data Sheet

according to Regulation (EC) No 1907/2006

CEMflex VB coated steel plate waterstop

Suitable respiratory protective equipment:
particulates filter device (DIN EN 143).
Type: P1/2/3

Environmental exposure controls
Do not empty into drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour:</td>
<td>black</td>
</tr>
<tr>
<td>Odour:</td>
<td>characteristic</td>
</tr>
</tbody>
</table>

Test method

<table>
<thead>
<tr>
<th>Description</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH-Value:</td>
<td>not determined</td>
</tr>
<tr>
<td>Changes in the physical state</td>
<td></td>
</tr>
<tr>
<td>Melting point:</td>
<td>not determined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>not determined</td>
</tr>
<tr>
<td>Flash point:</td>
<td>not determined</td>
</tr>
</tbody>
</table>

Explosive properties
none/none

Lower explosion limits: not determined
Upper explosion limits: not determined
Ignition temperature: not determined

Oxidizing properties
none/none

Vapour pressure: not determined
Density: ~1.9 g/cm³
Solvent content: 0% - Data concerning the Directive 1999/13/EC on the limitation of emissions of volatile organic compounds (VOC-RL)

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal storage and handling conditions.

10.2. Chemical stability
Stable under normal storage and handling conditions.

10.3. Possibility of hazardous reactions
No information available.

10.4. Conditions to avoid
No information available.

10.5. Incompatible materials
Materials to avoid: Fluorine. Hydrofluoric acid. Oxidizing agents, strong. Strong acid

10.6. Hazardous decomposition products
Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO2).

Further information
No information available.
SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution
No information available.

Acute toxicity
Harmful if swallowed.

Acute toxicity

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Exposure routes</th>
<th>Method</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>9043-30-5</td>
<td>Isotridecanol, ethoxylated</td>
<td>oral</td>
<td>LD50</td>
<td>(1940)</td>
<td>Rat.</td>
<td>MSDS extern</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt;2000</td>
<td>Rat.</td>
<td>MSDS extern</td>
</tr>
</tbody>
</table>

Irritation and corrosivity
Causes serious eye damage.
Causes skin irritation.

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

STOT-single exposure
May cause respiratory irritation. (Portland cement)

Severe effects after repeated or prolonged exposure
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.

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

Specific effects in experiment on an animal
No information available.

Additional information on tests
No information available.

SECTION 12: Ecological information

12.1. Toxicity

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Aquatic toxicity</th>
<th>Method</th>
<th>Dose</th>
<th>[h]</th>
<th>[d]</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>9043-30-5</td>
<td>Isotridecanol, ethoxylated</td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>5.8 mg/l</td>
<td>96</td>
<td></td>
<td>Danio rerio</td>
<td>MSDS extern</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50</td>
<td>8.2 mg/l</td>
<td>72</td>
<td></td>
<td>Desmodesmus subspicatus</td>
<td>MSDS extern</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>2.5 mg/l</td>
<td>48</td>
<td></td>
<td>Daphnia magna</td>
<td>MSDS extern</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
CEMflex VB coated steel plate waterstop

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Print date: 11.03.2014

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CAS No | Chemical name | Method | Value | d | Source
---|---|---|---|---|---
9043-30-5 | Isotridecanol, ethoxylated | OECD 301B / ISO 9439 / EEC 92/69 annex V, C.4-C | >60 | 28 | MSDS extern

Evaluation: Easily biodegradable (concerning to the criteria of the OECD)

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>9043-30-5</td>
<td>Isotridecanol, ethoxylated</td>
<td>3.94 (calc.)</td>
</tr>
</tbody>
</table>

BCF

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>BCF</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>9043-30-5</td>
<td>Isotridecanol, ethoxylated</td>
<td>220(C12AE8)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Consult the local waste disposal expert about waste disposal. Cleaned containers may be recycled.

Waste disposal number of waste from residues/unused products

160303 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; inorganic wastes containing dangerous substances

Classified as hazardous waste.

Waste disposal number of used product

160303 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; inorganic wastes containing dangerous substances

Classified as hazardous waste.

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances

Classified as hazardous waste.

Contaminated packaging

Handle contaminated packaging in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: Not restricted

Inland waterways transport (ADN)

14.1. UN number: Not restricted

Marine transport (IMDG)
## 14.1. UN number

**Air transport (ICAO)**

| 14.1. UN number: | Not restricted |

## 14.5. Environmental hazards

**ENVIRONMENTALLY HAZARDOUS:** no

## 14.6. Special precautions for user

No information available.

## 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information available.

### SECTION 15: Regulatory information

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

**EU regulatory information**

- 1999/13/EC (VOC): 0% ; VOC Directive 2004/42/EC: 0g/L

**Additional information**

Not subject to regulation 96/82/EC.

#### National regulatory information

- Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.
- Water contaminating class (D): 2 - water contaminating

#### 15.2. Chemical safety assessment

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

### SECTION 16: Other information

**Changes**

Rev 1,00 Initial release 26.02.14

**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)
- 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)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- NOAEL: No observed adverse effect level

**Full text of R phrases referred to under Sections 2 and 3**

- **22** Harmful if swallowed.
- **37/38** Irritating to respiratory system and skin.
- **41** Risk of serious damage to eyes.
Full text of H statements referred to under Sections 2 and 3

H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

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.

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