1. Identification of the substance/mixture and of the company/undertaking

Product identifier

CAMPUS

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

Relevant identified uses: crop protection product, herbicide

Details of the supplier of the safety data sheet

Company:
BASF SE
67056 Ludwigshafen
GERMANY
Operating Division Crop Protection

Telephone: +49 621 60-27777
E-mail address: Produktinformation-Pflanzenschutz@basf.com

Emergency telephone number

International emergency number:
Telephone: +49 180 2273-112

2. Hazards Identification

Label elements

Globally Harmonized System, EU (GHS)

Pictogram:
Signal Word:
Danger

Hazard Statement:
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H360D May damage the unborn child.
EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary Statements (Prevention):
P201 Obtain special instructions before use.
P281 Use personal protective equipment as required.

Precautionary Statements (Response):
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P391 Collect spillage.

Precautionary Statements (Storage):
P405 Store locked up.

Precautionary Statements (Disposal):
P501 Dispose of contents/container to hazardous or special waste collection point.

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

Hazard determining component(s) for labelling: TOPRAMEZONE

According to Directive 67/548/EEC or 1999/45/EC

EEC Directives

Hazard symbol(s)
T Toxic.
N Dangerous for the environment.

R-phrase(s)
R61 May cause harm to the unborn child.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)
S1/2 Keep locked-up and out of reach of children.
S13 Keep away from food, drink and animal feeding stuffs.
S20/21 When using do not eat, drink or smoke.
S29/35 Do not empty into drains, this material and its container must be disposed of in a safe way.
S36/37 Wear suitable protective clothing and gloves.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S53 Avoid exposure - obtain special instructions before use.
S57 Use appropriate container to avoid environmental contamination.

Hazard determining component(s) for labelling: TOPRAMEZONE

**Classification of the substance or mixture**

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

Repr. 1B (unborn child)
Aquatic Acute 1
Aquatic Chronic 1

According to Directive 67/548/EEC or 1999/45/EC
Repr. Cat. 2

Possible Hazards:
May cause harm to the unborn child.
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

For the classifications not written out in full in this section the full text can be found in section 16.

**Other hazards**

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

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

### 3. Composition/Information on Ingredients

**Mixtures**

**Chemical nature**
crop protection product, herbicide, suspension concentrate (SC)

**Hazardous ingredients (GHS)**
according to Regulation (EC) No. 1272/2008
4. First-Aid Measures

**Description of first aid measures**

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:
Immediately wash thoroughly with soap and water, seek medical attention.

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:
Rinse mouth immediately and then drink plenty of water, induce vomiting, seek medical attention.

**Most important symptoms and effects, both acute and delayed**
Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11. Further important symptoms and effects are so far not known.

**Indication of any immediate medical attention and special treatment needed**
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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### 5. Fire-Fighting Measures

**Extinguishing media**
Suitable extinguishing media:
- water spray, foam, dry powder, carbon dioxide

Unsuitable extinguishing media for safety reasons:
- water jet

**Special hazards arising from the substance or mixture**
carbon monoxide, Carbon dioxide, nitrogen oxides, sulfur oxides
The substances/groups of substances mentioned can be released in case of fire.

**Advice for fire-fighters**
Special protective equipment:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:
In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

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### 6. Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures**
Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

**Environmental precautions**
Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.
Methods and material for containment and cleaning up
For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).
For large amounts: Dike spillage. Pump off product.
Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Cleaning operations should be carried out only while wearing breathing apparatus.

Reference to other sections
Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

7. Handling and Storage

Precautions for safe handling
No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Remove contaminated clothing and protective equipment before entering eating areas.

Protection against fire and explosion:
No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

Conditions for safe storage, including any incompatibilities
Segregate from foods and animal feeds. Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

Storage stability:
Storage duration: 60 Months

Protect from temperatures below: 0 °C
The product can crystallize below the limit temperature.
Protect from temperatures above: 40 °C
Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

Specific end use(s)
For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. Exposure Controls/Personal Protection

Control parameters

Components with workplace control parameters

| 57-55-6: Propane-1,2-diol

Exposure controls
Personal protective equipment

Respiratory protection:
Suitable respiratory protection for lower concentrations or short-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic, alkaline compounds and toxic particles (e.g. EN 14387 Type ABEK-P3)

Hand protection:
Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and other

Eye protection:
Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures
The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>liquid, suspension</td>
</tr>
<tr>
<td>Colour</td>
<td>beige</td>
</tr>
<tr>
<td>Odour</td>
<td>aromatic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>not determined</td>
</tr>
<tr>
<td>pH value</td>
<td>approx. 2 - 4</td>
</tr>
<tr>
<td>crystallization temperature</td>
<td>approx. -4.3 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>approx. 100 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>No flash point - Measurement made up to the boiling point.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>not applicable</td>
</tr>
<tr>
<td>Flammability</td>
<td>Study does not need to be conducted.</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>not determined</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>not determined</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>430 °C</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>approx. 23.3 hPa (20 °C)</td>
</tr>
</tbody>
</table>

Information applies to the solvent.
Density: approx. 1.13 g/cm³
(20 °C)
Relative vapour density (air): not determined
Solubility in water: dispersible
Partitioning coefficient n-octanol/water (log Kow): not applicable
Thermal decomposition: not determined
Viscosity, dynamic: approx. 65.7 mPa.s
(20 °C, 100 1/s)
Explosion hazard: not explosive
Fire promoting properties: not fire-propagating

Other information

Other Information:
The product has not been tested. The statement has been derived from products of a similar structure or composition.
If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and Reactivity

Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.

Chemical stability
The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions
No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid
See MSDS section 7 - Handling and storage.

Incompatible materials
Substances to avoid:
strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products
Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:
Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Experimental/calculated data:
LD50 rat (oral): > 2,000 mg/kg (OECD Guideline 423)
No mortality was observed.

LC50 rat (by inhalation): > 5.8 mg/l 4 h (OECD Guideline 403)
No mortality was observed. An aerosol was tested.

LD50 rat (dermal): > 4,000 mg/kg (OECD Guideline 402)

Irritation

Assessment of irritating effects:
Not irritating to the skin. Not irritating to the eyes. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Experimental/calculated data:
Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)
Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:
There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:
Mouse Local Lymph Node Assay (LLNA) mouse: Skin sensitizing effects were not observed in animal studies. (OECD Guideline 429)

Germ cell mutagenicity

Assessment of mutagenicity:
The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity

Assessment of carcinogenicity:
The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity:
The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:
The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: Topramezone*

**Assessment of teratogenicity:**
May cause harm to the unborn child.

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**Repeated dose toxicity and Specific target organ toxicity (repeated exposure)**

Assessment of repeated dose toxicity:
The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: Topramezone*

**Assessment of repeated dose toxicity:**
Adaptive effects were observed after repeated exposure in animal studies.

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**Other relevant toxicity information**

Misuse can be harmful to health.

12. Ecological Information

**Toxicity**

Assessment of aquatic toxicity:
Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Toxicity to fish:
LC50 (96 h) > 123 mg/l, Cyprinodon variegatus (OECD Guideline 203)

Aquatic invertebrates:
EC50 (96 h) 5.2 mg/l, Americamysis bahia

Aquatic plants:
EC50 (7 d) > 0.064 mg/l (growth rate), Lemna gibba (OECD guideline 221)
The product has not been tested. The statement has been derived from products of a similar structure or composition.

**Persistence and degradability**

Assessment biodegradation and elimination (H2O):
The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: Topramezone*

**Assessment biodegradation and elimination (H2O):**
Not readily biodegradable (by OECD criteria).

**Bioaccumulative potential**

Assessment bioaccumulation potential:
The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: Topramezone*

**Bioaccumulation potential:**
- Bioconcentration factor: 0.69 (42 d), *Lepomis macrochirus* (OPPTS 850.1730 (EPA Guideline))

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**Mobility in soil (and other compartments if available)**

Assessment transport between environmental compartments:
The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: Topramezone*

Assessment transport between environmental compartments:
- Following exposure to soil, the product trickles away and can - dependent on degradation - be transported to deeper soil areas with larger water loads.

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**Results of PBT and vPvB assessment**

The product does not contain a substance fullfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

**Other adverse effects**

The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

**Additional information**

Other ecotoxicological advice:
Do not discharge product into the environment without control.
### Hazard Information

<table>
<thead>
<tr>
<th>Inland waterway transport</th>
<th>Sea transport</th>
<th>Air transport</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ADN</strong></td>
<td><strong>IMDG</strong></td>
<td><strong>IATA/ICAO</strong></td>
</tr>
<tr>
<td>Hazard class: 9</td>
<td>Hazard class: 9</td>
<td>Hazard class: 9</td>
</tr>
<tr>
<td>Packing group: III</td>
<td>Packing group: UN 3082</td>
<td>Packing group: UN 3082</td>
</tr>
<tr>
<td>ID number: UN 3082</td>
<td>ID number: UN 3082</td>
<td>ID number: UN 3082</td>
</tr>
<tr>
<td>Hazard label: 9, EHSM</td>
<td>Hazard label: 9, EHSM</td>
<td>Hazard label: 9, EHSM</td>
</tr>
</tbody>
</table>

### 15. Regulatory Information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**
For the user of this plant-protective product applies: 'To avoid risks to man and the environment, comply with the instructions for use.' (Directive 1999/45/EC, Article 10, No. 1.2)

Chemical Safety Assessment

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

16. Other Information

For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

Full text of the classifications, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, if mentioned in section 2 or 3:

T  Toxic.

N  Dangerous for the environment.

61  May cause harm to the unborn child.

50/53  Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

52/53  Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Repr.  Reproductive toxicity
Aquatic Acute  Hazardous to the aquatic environment - acute
Aquatic Chronic  Hazardous to the aquatic environment - chronic
Repr. Cat. 2  Reprotoxic substances (fertility or development) Category 2: Substances which should be regarded as if they cause developmental toxicity to in humans or substances which should be regarded as if they impair fertility in humans.

H400  Very toxic to aquatic life.
H410  Very toxic to aquatic life with long lasting effects.
H360D  May damage the unborn child.
H412  Harmful to aquatic life with long lasting effects.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product’s properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left hand margin indicate an amendment from the previous version.