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

Product identifier

ABATE

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

Relevant identified uses: crop protection product, insecticide

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: Warning

Hazard Statement:
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary Statements (Prevention):
P260a Do not breathe dust.

Precautionary Statements (Response):
P314 Get medical advice/attention if you feel unwell.
P391 Collect spillage.

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

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

EEC Directives

Hazard symbol(s)
N Dangerous for the environment.

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

S-phrase(s)
S2 Keep out of the 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.
S57 Use appropriate container to avoid environmental contamination.

Classification of the substance or mixture

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

| STOT RE 2 |
| Aquatic Acute 1 |
| Aquatic Chronic 1 |

According to Directive 67/548/EEC or 1999/45/EC
Possible Hazards:
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, insecticide, Granule (GR)

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

<table>
<thead>
<tr>
<th>Temephos</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Content (W/W): 1 %</td>
<td>Acute Tox. 4 (Inhalation - vapour)</td>
</tr>
<tr>
<td>CAS Number: 3383-96-8</td>
<td>STOT RE 1</td>
</tr>
<tr>
<td>EC-Number: 222-191-1</td>
<td>Aquatic Acute 1</td>
</tr>
<tr>
<td></td>
<td>Aquatic Chronic 1</td>
</tr>
<tr>
<td></td>
<td>H332, H372, H400, H410</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>methanol</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Content (W/W): &lt; 1 %</td>
<td>Flam. Liq. 2</td>
</tr>
<tr>
<td>CAS Number: 67-56-1</td>
<td>Acute Tox. 3 (Inhalation - vapour)</td>
</tr>
<tr>
<td>EC-Number: 200-659-6</td>
<td>Acute Tox. 3 (oral)</td>
</tr>
<tr>
<td>REACH registration number: 01-</td>
<td>Acute Tox. 3 (dermal)</td>
</tr>
<tr>
<td>2119433307-44</td>
<td>STOT SE (Central nervous system, Optic nerve)</td>
</tr>
<tr>
<td>INDEX-Number: 603-001-00-X</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>H311, H331, H301, H225, H370</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trimethylbenzene</th>
<th></th>
</tr>
</thead>
</table>
ABATE (ID no. 30562925/SDS_CPA_EU/EN)

---

**Calcium dodecylbenzenesulphonate**

- Content (W/W): < 1%
- CAS Number: 26264-06-2
- EC-Number: 247-557-8
- Skin Corr./Irrit. 2
- Eye Dam./Irrit. 1
- H318, H315

**Quartz (SiO2)**

- Content (W/W): < 100%
- CAS Number: 14808-60-7
- EC-Number: 238-878-4

**Kieselguhr**

- Content (W/W): < 5%
- CAS Number: 61790-53-2

---

### Hazardous ingredients according to Directive 1999/45/EC

**Temephos**

- Content (W/W): 1%
- CAS Number: 3383-96-8
- EC-Number: 222-191-1
- Hazard symbol(s): Xn, N
- R-phrase(s): 20, 48/21, 50/53

**methanol**

- Content (W/W): < 1%
- CAS Number: 67-56-1
- EC-Number: 200-659-6
- REACH registration number: 01-2119433307-44
- INDEX-Number: 603-001-00-X
- Hazard symbol(s): F, T
- R-phrase(s): 11, 23/24/25, 39/23/24/25

**Trimethylbenzene**

- Content (W/W): < 1%
- CAS Number: 25551-13-7
- EC-Number: 247-099-9
- Hazard symbol(s): Xn, N
- R-phrase(s): 10, 20, 36/37/38, 51/53
4. First-Aid Measures

**Description of first aid measures**
Remove contaminated clothing.

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

On skin contact:
Wash thoroughly with soap and water.

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

On ingestion:
Immediately rinse mouth and then drink 200-300 ml of water, 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.

5. Fire-Fighting Measures

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

Unsuitable extinguishing media for safety reasons:
carbon dioxide

**Special hazards arising from the substance or mixture**
- carbon monoxide, Carbon dioxide, sulfur oxides, phosphorus 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:
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. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

---

6. **Accidental Release Measures**

**Personal precautions, protective equipment and emergency procedures**
Avoid dust formation. 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: Contain with dust binding material and dispose of.
For large amounts: Sweep/shovel up.
Avoid raising dust. 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.

**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.

Protection against fire and explosion:
Avoid dust formation. Dust can form an explosive mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

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

**Storage stability:**
Storage duration: 24 Months

**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 occupational exposure limits**

- 67-56-1: methanol
  - TWA value 260 mg/m³ ; 200 ppm (OEL (EU)) indicative
  - Skin Designation (OEL (EU))
  - The substance can be absorbed through the skin.
- 3383-96-8: Temephos
- 14808-60-7: Quartz (SiO₂)
- 61790-53-2: Kieselguhr

**Exposure controls**

**Personal protective equipment**

**Respiratory protection:**
Suitable respiratory protection for higher concentrations or long-term effect: Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

**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>granules</td>
</tr>
<tr>
<td>Colour</td>
<td>brown</td>
</tr>
<tr>
<td>Odour</td>
<td>of mercaptans</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not determined due to potential health hazard by inhalation.</td>
</tr>
<tr>
<td>pH value</td>
<td>The product has not been tested.</td>
</tr>
<tr>
<td>Melting point</td>
<td>The product has not been tested.</td>
</tr>
<tr>
<td>Boiling point</td>
<td>The product has not been tested.</td>
</tr>
<tr>
<td>Flash point</td>
<td>not applicable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>not applicable</td>
</tr>
<tr>
<td>Flammability</td>
<td>not flammable</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>Vapour pressure</td>
<td>The product has not been tested.</td>
</tr>
<tr>
<td>Relative vapour density (air)</td>
<td>not determined</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>not soluble</td>
</tr>
</tbody>
</table>

Information on: Temephos

Partitioning coefficient n-octanol/water (log Kow): 4.9

Self ignition: Based on its structural properties the product is not classified as self-igniting.

Thermal decomposition: not determined
Viscosity, dynamic: not applicable
Explosion hazard: not explosive
Fire promoting properties: not fire-propagating

Other information
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 after a single skin contact. Virtually nontoxic by inhalation.

Experimental/calculated data:
LD50 rat (oral): > 2,000 mg/kg (OECD Guideline 401)
No mortality was observed.

(by inhalation): The product has not been tested. The statement has been derived from the properties of the individual components.

LD50 rat (dermal): > 2,000 mg/kg (OECD Guideline 402)
No mortality was observed.

Information on: Temephos
Experimental/calculated data:
LC50 rat (by inhalation): > 4.79 mg/l 4 h (OECD Guideline 403)
An aerosol was tested.

Irritation
Assessment of irritating effects:
Not irritating to the skin. Not irritating to the eyes.

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:
Guinea pig maximization test guinea pig: Non-sensitizing. (OECD Guideline 406)

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. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

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: Temephos  
Assessment of repeated dose toxicity:  
Causes mortality and signs of neurotoxicity through prolonged or repeated exposure. |

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.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Toxicity to fish:
LC50 (96 h) 5.4 mg/l, Cyprinodon variegatus (Flow through.)

Aquatic invertebrates:
EC50 (96 h) 0.014 mg/l, other (Flow through.)

Aquatic plants:
not determined

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: Temephos  
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: Temephos  
Bioaccumulation potential: |
Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is possible.

---

**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: Temephos**
Assessment transport between environmental compartments:
Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

---

**Results of PBT and vPvB assessment**

The product does not contain a substance fulfilling 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.

---

**13. Disposal Considerations**

**Waste treatment methods**

Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:
Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

---

**14. Transport Information**

**Land transport**

ADR
UN number: UN3077  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains TEMEPHOS 1%)

**Transport hazard class(es):** 9, EHSM  
**Packing group:** III  
**Environmental hazards:** yes  
**Special precautions for user:** Tunnel code: E

### RID

UN number: UN3077  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains TEMEPHOS 1%)

**Transport hazard class(es):** 9, EHSM  
**Packing group:** III  
**Environmental hazards:** yes  
**Special precautions for user:** None known

### Inland waterway transport

**ADN**

UN number: UN3077  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains TEMEPHOS 1%)

**Transport hazard class(es):** 9, EHSM  
**Packing group:** III  
**Environmental hazards:** yes  
**Special precautions for user:** None known  
**Transport in inland waterway vessel:** Not evaluated

### Sea transport

**IMDG**

UN number: UN 3077  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains TEMEPHOS 1%)

**Transport hazard class(es):** 9, EHSM  
**Packing group:** III  
**Environmental hazards:** yes  
**Special precautions for user:** None known  
**Marine pollutant:** YES

### Air transport
IATA/ICAO

UN number: UN 3077
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains TEMEPHOS 1%)
Transport hazard class(es): 9, EHSM
Packing group: III
Environmental hazards: yes
Special precautions for user: None known

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

Regulation: Not evaluated
Shipment approved: Not evaluated
Pollution name: Not evaluated
Pollution category: Not evaluated
Ship Type: Not evaluated

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:

Xn Harmful.
N Dangerous for the environment.
F Highly flammable.
T Toxic.
Xi Irritant.
20 Harmful by inhalation.
48/21 Harmful: danger of serious damage to health by prolonged exposure in contact with skin.
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
11 Highly flammable.
23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
10 Flammable.
36/37/38 Irritating to eyes, respiratory system and skin.
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
38 Irritating to skin.
41 Risk of serious damage to eyes.
STOT RE Specific target organ toxicity — repeated exposure
Aquatic Acute Hazardous to the aquatic environment - acute
Aquatic Chronic Hazardous to the aquatic environment - chronic
Acute Tox. Acute toxicity
Flam. Liq. Flammable liquid
STOT SE Specific target organ toxicity — single exposure
Skin Corr./Irrit. Skin corrosion/irritation
Eye Dam./Irrit. Serious eye damage/eye irritation
H332 Harmful if inhaled.
H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H311 Toxic in contact with skin.
H331 Toxic if inhaled.
H301 Toxic if swallowed.
H225 Highly flammable liquid and vapour.
H370 Causes damage to organs (central nervous system, optic nerve).
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H411 Toxic to aquatic life with long lasting effects.
H226 Flammable liquid and vapour.
H335 May cause respiratory irritation.
H318 Causes serious eye damage.

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.