

Safety data sheet

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BASF Safety data sheet according to Regulation (EC) No. 1907/2006

Date / Revised: 05.02.2013

Version: 4.0

Product: **CECECE**

(ID no. 30354874/SDS_CPA_EU/EN)

Date of print 07.02.2013

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

1.1. Product identifier

CECECE

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

Relevant identified uses: crop protection product, growth regulator

1.3. 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

1.4. Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

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

Met. Corr. 1

Acute Tox. 4 (oral)

Acute Tox. 4 (dermal)

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

Possible Hazards:
 Harmful by inhalation and in contact with skin.
 Harmful to aquatic organisms.

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

2.2. Label elements

Globally Harmonized System, EU (GHS)

Pictogram:



Signal Word:
 Warning

Hazard Statement:

| | |
|--------|---|
| H312 | Harmful in contact with skin. |
| H302 | Harmful if swallowed. |
| H290 | May be corrosive to metals. |
| EUH401 | To avoid risks to human health and the environment, comply with the instructions for use. |

Precautionary Statements (Prevention):

| | |
|-------|---|
| P280e | Wear protective gloves/clothing. |
| P270 | Do not eat, drink or smoke when using this product. |
| P264 | Wash with plenty of water and soap thoroughly after handling. |
| P234 | Keep only in original container. |

Precautionary Statements (Response):

| | |
|-------------|--|
| P301 + P312 | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P330 | Rinse mouth. |
| P361 | Remove/Take off immediately all contaminated clothing. |
| P363 | Wash contaminated clothing before reuse. |
| P390 | Absorb spillage to prevent material damage. |

Precautionary Statements (Storage):

| | |
|------|------------------|
| P405 | Store locked up. |
|------|------------------|

Precautionary Statements (Disposal):

| | |
|------|---|
| P501 | Dispose of contents/container to hazardous or special waste collection point. |
|------|---|

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

Hazard determining component(s) for labelling: CHLORMEQUAT CHLORIDE

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

EEC Directives

Hazard symbol(s)

Xn Harmful.



R-phrase(s)

R21/22

Harmful in contact with skin and if swallowed.

R52

Harmful to aquatic organisms.

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.

S36/37

Wear suitable protective clothing and gloves.

S46

If swallowed, seek medical advice immediately and show this container or label.

Hazard determining component(s) for labelling: CHLORMEQUAT CHLORIDE

2.3. Other hazardsAccording 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.

SECTION 3: Composition/Information on Ingredients**3.1. Substances**

Not applicable

3.2. MixturesChemical nature

crop protection product, growth regulator, Soluble concentrate (SL)

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

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chlormequat chloride (ISO); 2-chloroethyltrimethylammonium chloride

Content (W/W): 65.8 %

Acute Tox. 4 (oral)

CAS Number: 999-81-5

Acute Tox. 4 (dermal)

EC-Number: 213-666-4

H312, H302

INDEX-Number: 007-003-00-6

Hazardous ingredients

according to Directive 1999/45/EC

chlormequat chloride (ISO); 2-chloroethyltrimethylammonium chloride

Content (W/W): 65.8 %

CAS Number: 999-81-5

EC-Number: 213-666-4

INDEX-Number: 007-003-00-6

Hazard symbol(s): Xn

R-phrases: 21/22

For the classifications not written out in full in this section, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, the full text is listed in section 16.

SECTION 4: First-Aid Measures

4.1. 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.

4.2. 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.

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

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

water spray, foam, dry powder, carbon dioxide

5.2. Special hazards arising from the substance or mixture

carbon monoxide, Carbon dioxide, hydrogen chloride, organochloric compounds

The substances/groups of substances mentioned can be released in case of fire.

5.3. 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.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

6.2. Environmental precautions

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3. 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.

6.4. Reference to other sections

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

SECTION 7: Handling and Storage

7.1. 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:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

7.2. 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: -10 °C

Changes in the properties of the product may occur if substance/product is stored below indicated temperature for extended periods of time.

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.

7.3. 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.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

999-81-5: chlormequat chloride (ISO); 2-chloroethyltrimethylammonium chloride

8.2. Exposure controls

Personal protective equipment

Respiratory protection:

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

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.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

| | |
|------------------------------|--|
| Form: | liquid |
| Colour: | light yellow |
| Odour: | sweetish, moderate odour |
| Odour threshold: | Not determined since toxic by inhalation. |
| pH value: | approx. 3 - 5 (1 %(m), 20 °C) |
| crystallization temperature: | approx. -17 °C |
| Boiling point: | approx. 100 °C |
| Flash point: | (DIN EN 22719; ISO 2719) No flash point - Measurement made up to the boiling point. |
| Evaporation rate: | not applicable |
| Flammability: | not self-igniting |
| Lower explosion limit: | As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use. |
| Upper explosion limit: | As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use. |
| Ignition temperature: | approx. 355 °C |
| Vapour pressure: | approx. 23.3 hPa (20 °C) |
| Density: | Information applies to the solvent. approx. 1.14 g/cm ³ (20 °C) |

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Relative vapour density (air):

not determined

Solubility in water: miscible

*Information on: chlormequat chloride (ISO); 2-chloroethyltrimethylammonium chloride**Partitioning coefficient n-octanol/water (log Kow): -3.44 (calculated)*-----
Thermal decomposition: not determinedViscosity, dynamic: 17.5 mPa.s
(20 °C, 100 1/s)

Explosion hazard: not explosive

Fire promoting properties: not fire-propagating

9.2. Other information

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

SECTION 10: Stability and Reactivity

10.1. Reactivity

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

Corrosion to metals: Corrosive effect on: aluminum mild steel Corrosion rate > 6.25 mm/a
using 7075-T6 or AZ5GU-T6

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

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

10.4. Conditions to avoid

See MSDS section 7 - Handling and storage.

10.5. Incompatible materials

Substances to avoid:

strong bases, strong acids, strong oxidizing agents

10.6. Hazardous decomposition products

Hazardous decomposition products:

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

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

Of moderate toxicity after single ingestion. Of moderate toxicity after short-term skin contact. Virtually nontoxic by inhalation. The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: chlormequat chloride (ISO); 2-chloroethyltrimethylammonium chloride

Experimental/calculated data:

LD50 rat (oral): 520 mg/kg

Literature data.

Information on: chlormequat chloride (ISO); 2-chloroethyltrimethylammonium chloride

Experimental/calculated data:

LC50 rat (by inhalation): > 5.2 mg/l 4 h (BASF-Test)

Highest concentration available for testing. An aerosol was tested.

Information on: chlormequat chloride (ISO); 2-chloroethyltrimethylammonium chloride

Experimental/calculated data:

LD50 rabbit (dermal): 1,250 mg/kg

Literature data.

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 the properties of the individual components.

Information on: chlormequat chloride (ISO); 2-chloroethyltrimethylammonium chloride

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant

Literature data.

Information on: chlormequat chloride (ISO); 2-chloroethyltrimethylammonium chloride

Experimental/calculated data:

Serious eye damage/irritation rabbit: non-irritant

Literature data.

Respiratory/Skin sensitization

Assessment of sensitization:

There is no evidence of a skin-sensitizing potential. The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: chlormequat chloride (ISO); 2-chloroethyltrimethylammonium chloride

*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. No substance-specific organotoxicity was observed after repeated administration to animals.

Other relevant toxicity information

Misuse can be harmful to health.

SECTION 12: Ecological Information**12.1. Toxicity**

Assessment of aquatic toxicity:

Acutely harmful for aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: chlormequat chloride (ISO); 2-chloroethyltrimethylammonium chloride

Toxicity to fish:

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*LC50 (96 h) > 100 mg/l, Cyprinus carpio (OECD 203; ISO 7346; 84/449/EEC, C.1, static)
The details of the toxic effect relate to the nominal concentration.*

*Information on: chlormequat chloride (ISO); 2-chloroethyltrimethylammonium chloride
Aquatic invertebrates:
EC50 (48 h) 16.9 mg/l, Daphnia magna (DIN 38412 Part 11)
The details of the toxic effect relate to the nominal concentration.*

*Information on: chlormequat chloride (ISO); 2-chloroethyltrimethylammonium chloride
Aquatic plants:
EC50 (96 h) > 100 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)
The product has not been tested. The data have been deduced from values for a preparation or
mixture with a lower substance concentration.*

*EC50 (7 d) 28.0 mg/l (growth rate), Lemna gibba (static)
The product has not been tested. The data have been deduced from values for a preparation or
mixture with a lower substance concentration.*

12.2. 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: chlormequat chloride (ISO); 2-chloroethyltrimethylammonium chloride
Assessment biodegradation and elimination (H₂O):
Readily biodegradable (according to OECD criteria).*

12.3. 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: chlormequat chloride (ISO); 2-chloroethyltrimethylammonium chloride
Bioaccumulation potential:
Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to
be expected.*

12.4. 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: chlormequat chloride (ISO); 2-chloroethyltrimethylammonium chloride
Assessment transport between environmental compartments:*

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Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.

12.5. 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.

12.6. 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.

12.7. Additional information

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

SECTION 13: Disposal Considerations

13.1. 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.

SECTION 14: Transport Information

Land transport

ADR

| | |
|-------------------------------|---|
| UN number | UN1760 |
| UN proper shipping name: | CORROSIVE LIQUID, N.O.S. (contains CHLORMEQUAT CHLORIDE) CORROSIVE ON ALUMINIUM |
| Transport hazard class(es): | 8 |
| Packing group: | III |
| Environmental hazards: | no |
| Special precautions for user: | Tunnel code: E |

RID

| | |
|--------------------------|--|
| UN number | UN1760 |
| UN proper shipping name: | CORROSIVE LIQUID, N.O.S. (contains CHLORMEQUAT |

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CHLORIDE) CORROSIVE ON ALUMINIUM

Transport hazard class(es): 8
 Packing group: III
 Environmental hazards: no
 Special precautions for user: None known

Inland waterway transport

ADN

UN number: UN1760
 UN proper shipping name: CORROSIVE LIQUID, N.O.S. (contains CHLORMEQUAT CHLORIDE) CORROSIVE ON ALUMINIUM

Transport hazard class(es): 8
 Packing group: III
 Environmental hazards: no
 Special precautions for user: None known

Transport in inland waterway vessel: Not evaluated

Sea transport

IMDG

UN number: UN 1760
 UN proper shipping name: CORROSIVE LIQUID, N.O.S. (contains CHLORMEQUAT CHLORIDE) CORROSIVE ON ALUMINIUM

Transport hazard class(es): 8
 Packing group: III
 Environmental hazards: no
 Marine pollutant: NO

Special precautions for user: None known

Air transport

IATA/ICAO

UN number: UN 1760
 UN proper shipping name: CORROSIVE LIQUID, N.O.S. (contains CHLORMEQUAT CHLORIDE) CORROSIVE ON ALUMINIUM

Transport hazard class(es): 8
 Packing group: III
 Environmental hazards: No Mark as dangerous for the environment is needed

Special precautions for user: None known

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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 |

SECTION 15: Regulatory Information**15.1. 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)

15.2. Chemical Safety Assessment

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

SECTION 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. |
| 21/22 | Harmful in contact with skin and if swallowed. |
| Met. Corr. | Substance or mixture corrosive to metals |
| Acute Tox. | Acute toxicity |
| H312 | Harmful in contact with skin. |
| H302 | Harmful if swallowed. |

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.