1. Substance/preparation and manufacturer/supplier identification

**CYCOCEL® 750 A**

Use: crop protection product, growth regulator

Manufacturer/supplier:
BASF Australia Limited (ABN 62 008 437 867)
Level 12, 28 Freshwater Place Southbank
Victoria 3006, AUSTRALIA
Telephone: +61 3 8855-6600
Telefax number: +61 3 8855-6511

Emergency information:
BASF Emergency Advice Number: 1800 803 440 (24h) [within Australia]
BASF Emergency Advice Number: + 61 3 8855 6666 [outside Australia]

2. Hazard identification

Classification of the substance and mixture:
- Corrosive to metals: Cat. 1
- Acute toxicity: Cat. 4 (oral)
- Acute toxicity: Cat. 4 (dermal)
- Hazardous to the aquatic environment - acute: Cat. 3
- Hazardous to the aquatic environment - chronic: Cat. 3

Label elements and precautionary statement:

Pictogram:
Signal Word:
- Warning

Hazard Statement:
- May be corrosive to metals. Harmful in contact with skin. Harmful if swallowed. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):
- Wear protective gloves/clothing. Do not eat, drink or smoke when using this product. Wash contaminated body parts thoroughly after handling. Keep only in original packaging.

Precautionary Statements (Response):
- Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN (or hair): Wash with plenty of soap and water. Take off immediately all contaminated clothing and wash it before reuse. Rinse mouth. Absorb spillage to prevent material damage.

Precautionary Statements (Storage):
- Store in a corrosion-resistant/… container with a resistant inner liner.

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

Other hazards which do not result in classification:
- 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

**Chemical nature**

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

**Hazardous ingredients**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Content (W/W)</th>
<th>Acute Tox.:</th>
<th>Aquatic Acute:</th>
<th>Aquatic Chronic:</th>
</tr>
</thead>
<tbody>
<tr>
<td>chlormequat chloride</td>
<td>65.8 %</td>
<td>Cat. 3 (oral)</td>
<td>Cat. 4 (dermal)</td>
<td>Cat. 3</td>
</tr>
<tr>
<td>cholin chloride</td>
<td>&lt; 5 %</td>
<td>Cat. 5 (oral)</td>
<td>Cat. 5 (dermal)</td>
<td></td>
</tr>
</tbody>
</table>

4. First-Aid Measures

**General advice:**
- 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.

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

5. Fire-Fighting Measures

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

Specific hazards:
- carbon monoxide, carbon dioxide, hydrogen chloride, organochloric compounds
The substances/groups of substances mentioned can be released in case of fire.

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:
- 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 for cleaning up or taking 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.

7. Handling and Storage

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.

Storage
Segregate from foods and animal feeds.
Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

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.

8. Exposure controls and personal protection

Components with occupational exposure limits
No occupational exposure limits known.

Personal protective equipment
Respiratory protection:
Respiratory protection not required.

Hand protection:
Hand protection not required.

Eye protection:
Eye protection not required.

Body protection:
Standard work clothes and shoes.
General safety and hygiene measures:
Avoid contact with the skin, eyes and clothing. Wash contaminated clothing and shoes before reuse. Before eating, drinking, or smoking, wash face and hands with soap and water.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>colourless to yellow</td>
</tr>
<tr>
<td>Odour</td>
<td>sweetish, moderate odour</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>approx. 3 - 5 (1 %%(m), 20 °C)</td>
</tr>
<tr>
<td>Crystallization temperature</td>
<td>approx. -17 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>approx. 100 °C (DIN EN 22719; ISO 2719)</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 (solid/gas)</td>
<td>not self-igniting</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>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.</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>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.</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>approx. 355 °C</td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>No decomposition if stored and handled as prescribed/indicated.</td>
</tr>
<tr>
<td>Explosion hazard</td>
<td>not explosive</td>
</tr>
<tr>
<td>Fire promoting properties</td>
<td>not fire-propagating</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>approx. 23.3 hPa (20 °C)</td>
</tr>
<tr>
<td>Density</td>
<td>approx. 1.14 g/cm³ (20 °C)</td>
</tr>
</tbody>
</table>

Information applies to the solvent.
approx. 1.13 g/cm³  
(40 °C)  
approx. 1.12 g/cm³  
(55 °C)  
Relative vapour density (air): not applicable  
Solubility in water: miscible  
Information on: chlormequat chloride  
Partitioning coefficient n-octanol/water (log Pow): -3.44 (calculated)  
Viscosity, dynamic: 17.5 mPa.s  
(20 °C, 100 1/s)  
Other Information:  
If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and Reactivity

Conditions to avoid:  
See MSDS section 7 - Handling and storage.  
Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.  
Substances to avoid: strong bases, strong acids, strong oxidizing agents  
Corrosion to metals: Corrosive effect on:  
Aluminium  
mild steel  
Corrosion rate > 6.25 mm/a using 7075-T6 or AZ5GU-T6  
Hazardous reactions:  
No hazardous reactions if stored and handled as prescribed/indicated.  
Hazardous decomposition products:  
No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Acute toxicity

Assessment of acute toxicity:  
Of high toxicity after single ingestion. Of moderate toxicity after short-term skin contact. Virtually nontoxic by inhalation.  
Experimental/calculated data:  
LD50 human (oral): 50 - 200 mg/kg  
Literature data. The data on toxicology refer to the active ingredient.
LD50 rat (oral): 520 mg/kg
(by inhalation): > 5.2 mg/l 4 h
The value meets the highest applied test concentration.

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
Experimental/calculated data:
Skin corrosion/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
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.

**Specific target organ toxicity (single exposure):**

Assessment of STOT single:
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

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

**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: chlormequat chloride |
| Assessment of repeated dose toxicity: |
| The substance may reversibly affect the nervous system, but there are no indications of permanent nerve cell damage. |

**Aspiration hazard**

No aspiration hazard expected.
The product has not been tested. The statement has been derived from the properties of the individual components.

**Other relevant toxicity information**

Misuse can be harmful to health.

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12. Ecological Information

**Ecotoxicity**

Assessment of aquatic toxicity:
Harmful to aquatic life with long lasting effects.
The product has not been tested. The statement has been derived from the properties of the individual components.

| Information on: chlormequat chloride |
| Toxicity to fish: |
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.

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Information on: chlormequat chloride
Aquatic invertebrates:
LC50 (96 h) 31.7 mg/l, Daphnia magna

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Information on: chlormequat chloride
Aquatic plants:
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.

EC10 (7 d) 0.6 mg/l, Lemna gibba

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Information on: chlormequat chloride
Chronic toxicity to fish:
No observed effect concentration (21 d) 43.1 mg/l, Oncorhynchus mykiss

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Information on: chlormequat chloride
Chronic toxicity to aquatic invertebrates:
No observed effect concentration (21 d), 2.44 mg/l, Daphnia magna

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**Mobility**

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

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**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

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**Bioaccumulation 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
Bioaccumulation potential:
Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Additional information

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

13. Disposal Considerations

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

Domestic transport:
Hazard class: 8
Packing group: III
ID number: UN 1760
Hazard label: 8
Proper shipping name: CORROSIVE LIQUID, N.O.S. (contains CHLORMEQUAT CHLORIDE) CORROSIVE ON ALUMINIUM

Further information
Hazchem Code:2X
IERG Number:37

Sea transport
IMDG
Hazard class: 8
Packing group: III
ID number: UN 1760
Hazard label: 8
Marine pollutant: NO
Proper shipping name: CORROSIVE LIQUID, N.O.S. (contains CHLORMEQUAT CHLORIDE) CORROSIVE ON ALUMINIUM

Air transport
IATA/ICAO
Hazard class: 8
15. Regulatory Information

Other regulations

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP): Schedule 6

APVMA Approval Number 45366

Registration status:

AICS, AU released / listed

16. Other Information

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

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. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.