

**SAFETY DATA SHEET**  
**EU Regulation No. 1907/2006,**  
**Annex II**

Page : 1

Revised edition no : 3

Date : 23 / 4 / 2013

Supersedes : 20 / 12 / 2010

**Mulan 20 SP**

**R-20469**

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

**1.1. Product identifier**

Trade name : Mulan 20 SP  
Chemical formula : Acetamiprid : C10H11ClN4

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

Relevant identified uses : Insecticide  
Uses advised against : None under normal conditions.

**1.3. Details of the supplier of the safety data sheet**

ADAMA SOUTH AFRICA (PTY) LTD  
21 Viben Street  
Brackenfell 7560  
Email : msds@mcw.co.il

**1.4. Emergency telephone number**

: +27 82 331 6463  
+27 21 982 1460

**SECTION 2. Hazards identification**

**2.1. Classification of the substance or mixture**

Hazard classification

**Classification 67/548/EEC (DSD) - 1999/45/EC (DPD)**

: Xn; R22  
N; R51-53

**2.2. Label elements**

**Labelling 1999/45/EC (DPD)**

Symbol(s)



: Xn : Harmful.  
N : Dangerous for the environment.

R Phrase(s)

: R22 - Harmful if swallowed.  
R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S Phrase(s)

: S02 - Keep out of the reach of children.  
S13 - Keep away from food, drink and animal feedingstuffs.  
S20/21 - When using, do not eat, drink or smoke.  
S36/37 - Wear suitable protective clothing and gloves.  
S60 - This material and its container must be disposed of as hazardous waste.  
S61 - Avoid release to the environment. Refer to special instructions/Safety data sheets.

**2.3. Other hazards**

Other hazards : None under normal conditions.

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**SECTION 3. Composition/information on ingredients**

**Components** : This product is considered to be hazardous and contains hazardous components.

| Substance name | Concentration % w/w | CAS No      | EC No | Index No     | REACH Reg. | Classification  |
|----------------|---------------------|-------------|-------|--------------|------------|---|
| Acetamidrid    | 20 %                | 135410-20-7 | ----- | 608-032-00-2 | ----       | Xn; R22<br>R52-53<br>-----<br>Acute Tox. 4 - H302<br>Aquatic Chronic 3 - H412 |

Text of R/H-Phrases - Sec. 16

**SECTION 4. First aid measures**

**4.1. Description of first aid measures**

**First aid measures**

- Inhalation** : Remove victim to fresh air. Keep victim warm and at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediately get medical attention.
- Skin contact** : Remove affected clothing and wash all exposed skin area with soap and water, followed by warm water rinse. Immediately get medical attention.
- Eye contact** : In case of eye contact, immediately rinse with clean water for 10-15 minutes. Immediately consult an eye specialist.
- Ingestion** : Do not induce vomiting. Wash out mouth with plenty of water. Never give anything by mouth to an unconscious person. Immediately get medical attention.

**4.2. Most important symptoms and effects, both acute and delayed**

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

- Note to physician** : No specific antidote known. Treat symptomatically and give supportive therapy. If ingested perform gastric lavage and administer activated charcoal.

**SECTION 5. Fire-fighting measures**

**5.1. Extinguishing media**

- Suitable extinguishing media** : foam , dry chemical , carbon dioxide . foam .
- Unsuitable extinguishing media** : Avoid use of water jet.

**5.2. Special hazards arising from the substance or mixture**

- Specific hazards** : Thermal decomposition may generate : carbon monoxide , carbon dioxide , hydrogen chloride , nitrogen oxides .

**5.3. Advice for fire-fighters**

- Protection against fire** : Wear suitable protective clothing. Self-contained breathing apparatus.
- Special procedures** : Move containers away from fire without risk . Fight fires from a protected location . Dike fire control water for later disposal.

**SECTION 6. Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

- For emergency responders** : Use appropriate protection (see section 8).

**6.2. Environmental precautions**

- Environmental precautions** : Dispose of this material and its container at hazardous or special waste collection point. If the product has contaminated surface water, inform the appropriate authorities.

**6.3. Methods and material for containment and cleaning up**

- Clean up methods** : Avoid generation of dust . Collect spilled material with shovel,place into a clean container and cover container loosely . During cleaning activity, shut off ignition sources .

**6.4. Reference to other sections**

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**SECTION 7. Handling and storage**

**7.1. Precautions for safe handling**

**Handling** : Avoid generation of dust . Do not breathe dust. Avoid contact with skin and eyes. Avoid vigorous shaking of the bag when emptying the content .

**7.2. Conditions for safe storage, including any incompatibilities**

**Packing** : Woven polypropylene big bags .  
Low density polyethylene open mouth bags .  
Low density polyethylene valve bags .

**Storage** : Keep locked up . Keep container tightly closed. Keep only in the original container in a cool, well ventilated place. Keep container dry . Avoid : moisture , strong bases & acids , alkali , oxidizing substances .

**7.3. Specific end use(s)**

**SECTION 8. Exposure controls/personal protection**

**8.1. Control parameters**

**8.2. Exposure controls**

Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower . Wash clothing before re-using. Wash hands thoroughly after handling.

- **Respiratory protection** : During spraying wear suitable respiratory equipment.
- **Hand protection** : Wear suitable gloves.
- **Skin protection** : Wear suitable protective clothing and chemical resistant boots .
- **Eye protection** : Chemical goggles or safety glasses.

**SECTION 9. Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

**Appearance** : Solid - Powder  
**Colour** : white  
**Odour** : Odourless  
**Odour threshold** : Not available  
**pH** : Not available  
**Melting point / Freezing point**  
**Melting point [°C]** : Acetamiprid : 98.9  
**Initial boiling point - boiling range** : Not available  
**Flash point** : Not applicable  
**Evaporation rate** : Not available  
**Flammability** : Not flammable  
**Explosion limits (lower - upper)** : Not available  
**Vapour pressure** : Not available  
**Vapour density** : Not available  
**Relative density** : 0.625 - 0.721 g/cm<sup>3</sup>  
**Solubility** : Not applicable  
**Partition coefficient : n-octanol / water** : Acetamiprid : KOW=0.80 (25 °C )  
**Auto-ignition temperature** : Not available  
**Decomposition temperature** : Not available  
**Viscosity** : Not available  
**Explosive Properties** : Not explosive  
**Oxidising properties** : Not available

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**SECTION 9. Physical and chemical properties (continued)**

**9.2. Other information**

Molecular weight : Acetamidrid : 222.7

**SECTION 10. Stability and reactivity**

**10.1. Reactivity**

**10.2. Chemical stability**

Chemical stability : Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

Hazardous polymerization : Will not occur.

**10.4. Conditions to avoid**

Conditions to avoid : Protect from sunlight , sources of heat , open flame ,

**10.5. Incompatible materials**

Materials to avoid : oxidizing agents , strong acids , strong bases .

**10.6. Hazardous decomposition products**

Hazardous decomposition products : Thermal decomposition may generate : carbon dioxide , carbon monoxide , hydrogen chloride , nitrogen oxides .

**SECTION 11. Toxicological information**

**11.1. Information on toxicological effects**

- Acute toxicity
  - Oral, Rat LD50 (mg/kg) : 500
  - Dermal, Rat LD50 [mg/kg] : > 2000
  - Inhalation, Rat LC50 [mg/l/4h] : > 3.5 ( Maximum concentration attainable Not adequate for classification. )
- Skin corrosion/irritation : Not irritant
- Serious eye damage/irritation : Not irritating
- Respiratory or skin sensitisation : Non sensitizer
- Germ cell mutagenicity : Not available
- Carcinogenicity : Not available
- Reproductive toxicity : Not available
- STOT-single exposure : Not available
- STOT-repeated exposure : Not available
- Aspiration hazard : Not available

**SECTION 12. Ecological information**

**12.1. Toxicity**

**Acute toxicity**

96 H-LC50 - Carp [mg/l] : 263.9  
48 H-EC50 - Daphnia magna [mg/l] : >100  
72 H-EC50 - Algae [mg/l] : 123.73  
LD50 Birds [mg/kg] : 154 -170 ( quail )

**Long-term exposure**

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**SECTION 12. Ecological information (continued)**

72 H-NOEC - Algae [mg/l] : 10

**12.2. Persistence - degradability**

**12.3. Bioaccumulative potential**

**12.4. Mobility in soil**

**12.5. Results of PBT and vPvB assessment**

: Not available

**12.6. Other adverse effects**

: None known.

**SECTION 13. Disposal considerations**

**13.1. Waste treatment methods**

**General** : Avoid release to the environment.  
Dispose in a safe manner in accordance with local/national regulations.

**Disposal method** : Burn in a chemical incinerator equipped with an afterburner and a scrubber.

**SECTION 14. Transport information**

**14.1. UN number**

UN N° : 3077

Hazard Label(s)



**14.2. UN proper shipping name**

• Land transport - ADR/RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(20% Acetamiprid)

**Proper shipping name** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(20% Acetamiprid)

- H.I. no : 90

• Sea transport - IMO-IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(20% Acetamiprid)

• Air transport - ICAO/IATA : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(20% Acetamiprid)

**14.3. Transport hazard class(es)**

• Land transport - ADR/RID : 9

• Sea transport - IMO-IMDG : 9

- IMO-IMDG - class or division : 9

• Air transport - ICAO/IATA : 9

**14.4. Packing group**

• Land transport - ADR/RID : III

- Packing group : III

• Sea transport - IMO-IMDG : III

• Air transport - ICAO/IATA : III

**14.5. Environmental hazards**

- IMDG-Marine pollution : Marine pollutant - Polluant marin

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**SECTION 14. Transport information (continued)**

**14.6. Special precautions for user**

: See transport documents.

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

: Not applicable.

**SECTION 15. Regulatory information**

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

: Ensure all national/local regulations are observed.

**15.2. Chemical Safety Assessment**

: Not applicable

**SECTION 16. Other information**

*List of relevant R phrases (heading 3)* : R22 - Harmful if swallowed.  
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

*List of relevant H phrases (Section 3)* : H302 - Harmful if swallowed.  
H412 - Harmful to aquatic life with long lasting effects.

**Print date** : 21 / 5 / 2014

**Recommended uses and restrictions** : None.

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