



SAFETY DATA SHEET

The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Mulan 20 SP

Revision date 10-Aug-2022

Version 2 Supersedes Date: 01-May-2022

Product Code(s) INS00161-27

Print Date 10-Aug-2022

ADM.00150.I.1.A 9512199

1. Identification

Product identifier

Mulan 20 SP

Other means of identification

| | |
|------------------------|--------------------|
| Synonyms | Acetamiprid 200 SP |
| Formulation type | SP |
| Registration Number(s) | L9167 |
| Pure substance/mixture | Mixture |

Recommended use of the chemical and restrictions on use

| | |
|----------------------|--------------------------|
| Recommended use | Insecticide |
| Uses advised against | No information available |

Detailed information about the manufacturer, supplier, and/or importer

| | |
|----------|--|
| Supplier | ADAMA SOUTH AFRICA (PTY) LTD Ground Floor, Simeka House The Vineyards Office Estate 99 Jip de Jager Drive Bellville 7530 |
|----------|--|

Emergency telephone number

| | |
|---------------------|--|
| Emergency Telephone | +27 82 446 8946 (Griffon Poison Centre) +27 86 155 5777 (Tygerberg Poison Information Centre) +27 86 100 6366 and +27 83 253 6618 (SPILL TECH) |
|---------------------|--|

| | |
|----------------|---------------|
| E-mail address | SDS@ADAMA.COM |
|----------------|---------------|

2. Hazard(s) identification

Classification of the substance or mixture

| | |
|-----------------------|---------------------|
| Acute toxicity - Oral | Category 4 - (H302) |
|-----------------------|---------------------|

Label elements

| | |
|-------------|---------|
| Signal word | Warning |
|-------------|---------|

Hazard pictograms**Hazard statements**

H302 - Harmful if swallowed

Precautionary statements

P102 - Keep out of reach of children
 P264 - Wash face, hands and any exposed skin thoroughly after handling
 P270 - Do not eat, drink or smoke when using this product
 P301+317 - IF SWALLOWED: Get medical help
 P330 - Rinse mouth
 P501 - Dispose of contents/ container to an approved waste disposal plant

Additional information

This product is classified as hazardous according to the criteria in South Africa - GHS classification and labelling of chemicals – SANS10234 and the Regulations for Hazardous Chemical Agents - 2021.

Other hazards

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

3. Composition/information on ingredients

Substance

Not applicable

Mixture**Synonyms**

Acetamiprid 200 SP

| Chemical name | CAS No | Weight-% | EC No | INTERNATIONAL GHS CLASSIFICATION | M-Factor |
|--|-------------|----------|-----------|---|----------|
| Acetamiprid | 135410-20-7 | 18-22 | 603-921-1 | Acute Tox. 4 (H302) Aquatic Chronic 3 (H412) | |
| Alkyl naphthalenesulfonic acid, polymer with formaldehyde, sodium salt | 68425-94-5 | 2-5 | 614-476-8 | Eye Irrit. 2 (H319) Aquatic Chronic 3 (H412) | |
| Reaction product of naphthalene, propan-2-ol, sulfonated and neutralized by caustic soda | - | < 2 | 939-368-0 | Acute Tox. 4 (H302) Acute Tox. 4 (H332) Eye Dam. 1 (H318) STOT SE 3 (H335) | |

Full text of H- and EUH-phrases: see section 16

Additional information

Note: The other ingredients do not cause or contribute towards the correct GHS classification of Acetamiprid 200 SP and are therefore, in terms of the South African Regulations for Hazardous Chemical Agents - 2021. Regulation 14(b), not listed in the table above.

4. First-aid measures

Description of necessary first aid measures

| | |
|-----------------------|---|
| General advice | In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). First aider: Pay attention to self-protection. |
| Inhalation | Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician. |
| Skin contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary. |
| Eye contact | Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician. |
| Ingestion | Rinse mouth. Drink plenty of water. Get medical attention immediately if symptoms occur. |

For emergency responders

Self-protection of the first aider Use personal protective equipment as required.

Most important symptoms/effects, acute and delayed

Symptoms None known.

Indication of immediate medical attention and special treatment needed, if necessary

Note to physicians Treat symptomatically.

5. Fire-fighting measures**Suitable Extinguishing Media**

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical

Specific hazards arising from the chemical No information available.

Explosive properties Not an explosive.

Specific/special fire-fighting measures

Specific/special fire-fighting measures No information available.

Special protective equipment and precautions for fire-fighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Personal precautions Ensure adequate ventilation.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage**Preventive measures for safe handling**

Advice on safe handling Avoid generation of dust. Handle in accordance with good industrial hygiene and safety practice.

Precautions for safe handling

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

8. Exposure controls/personal protection**Control parameters**

Exposure guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection Suitable chemical resistant gloves (EN 374) also with prolonged, direct contact (recommendation: protection index 6, corresponding > 480 minutes Permeability time (permeation) according to EN 374): e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm).

Eye/face protection Tight sealing safety goggles.

Skin and body protection Use suitable protective clothing and equipment if required, such as safety goggles certified to EN 166, gloves certified to EN 374, protective boots certified to EN 13832, and/or a water repellent woven coverall with 65% polyester and 35 % cotton.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained.

9. Physical and chemical properties

Information on basic physical and chemical properties

| <u>Property</u> | <u>Values</u> | <u>Method</u> | <u>Remarks</u> |
|--|---------------------|---------------|--|
| Appearance | | | |
| Physical state | : Solid | | |
| Color | : white | | |
| Odor | : Odorless | | |
| Odor threshold | : No data available | | |
| pH | : ---- | | No data available |
| Melting point / freezing point °C | : - | | Not applicable |
| Boiling point / boiling range °C | : No data available | | |
| Flash point °C | : No data available | | |
| Evaporation rate | : No data available | | |
| Flammability (solid, gas) | : Not flammable | | |
| Upper/lower flammability or explosive limits | : No data available | | |
| Vapor pressure kPa | : - | | Not applicable |
| Vapor density | : No data available | | |
| Relative density | : No data available | | |
| Solubility(ies) mg/l | : - | | Not applicable |
| Partition coefficient Log Pow | : | | See Section 12 for additional Ecological Information |
| Autoignition temperature °C | : No data available | | |
| Decomposition temperature °C | : No data available | | |
| Kinematic viscosity mm ² /s 40 °C | : Not applicable | | |
| Explosive properties | : Not an explosive | | |
| Oxidizing properties | : Not oxidizing | | |
| Surface tension | : No data available | | |
| Particle Size | : Not applicable | | |
| Other information | | | |
| Bulk density g/ml | : 0.625-0.721 | | |

10. Stability and reactivity

Reactivity

Reactivity No information available.

Chemical stability

Stability Stable under normal conditions.

Explosion data

 Sensitivity to mechanical impact None.

 Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid None known based on information supplied.

Incompatible materials

Incompatible materials None known based on information supplied.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

11. Toxicological information**Information on toxicological effects****Acute toxicity**

| | <u>Values</u> | <u>Species</u> | <u>Method</u> | <u>Remarks</u> |
|--|------------------------------|----------------|---------------|----------------------------------|
| Oral LD50 mg/kg | : 500 | Rat | OECD 423 | Maximum attainable concentration |
| Dermal LD50 mg/kg | : > 2000 | Rat | OECD 402 | |
| Inhalation LC50 LC50 | : > 3.5 | Rat | OECD 403 | |
| Skin corrosion/irritation | : Non-irritating to the skin | Rabbit | OECD 404 | |
| Serious eye damage/eye irritation | : Not irritating to eyes | Rabbit | OECD 405 | |
| Sensitization | : Not a skin sensitizer | Guinea pig | OECD 406 | |

Chronic toxicity**Germ cell mutagenicity****Chemical name**

Acetamiprid : Not classified

Carcinogenicity**Chemical name**

Acetamiprid : Not Carcinogenic

Reproductive toxicity**Chemical name**

Acetamiprid : Not toxic for the reproductive system

STOT - Single Exposure**Chemical name**

Acetamiprid : No data available

STOT - Repeated Exposure**Chemical name**

Acetamiprid : No data available

Aspiration hazard**Chemical name**

Acetamiprid : No data available

12. Ecological information**Ecotoxicity**

Aquatic toxicity

| Acute toxicity | <u>Values</u> | <u>Species</u> | <u>Method</u> | <u>Remarks</u> |
|-----------------------------|---------------------|----------------|---------------|----------------|
| Fish 96-hour LC50 mg/l | : 263.9 | D. rerio | OECD 203 | |
| Crustacea 48-hour EC50 mg/l | : >100 | Daphnia magna | OECD 202 | |
| Algae 72-hour EC50 mg/l | : 123.73 | P. subcapitata | OECD 201 | |
| Other plants EC50 mg/l | : No data available | | | |

Chronic aquatic toxicity

| | <u>Values</u> | <u>Species</u> | <u>Method</u> | <u>Remarks</u> |
|------------------------|---------------------|----------------|---------------|----------------|
| Fish NOEC mg/l | : No data available | | | |
| Crustacea NOEC mg/l | : No data available | | | |
| Algae NOEC mg/l | : No data available | | | |
| Other plants NOEC mg/l | : No data available | | | |

Terrestrial Toxicity**Birds Oral LD50 mg/kg**

| | | | | |
|---------------|------|--------------|--|--|
| Chemical name | | | | |
| Acetamiprid | : 98 | Mallard duck | | |

Bees Oral LD50 µg/bee

| | | | | |
|---------------|---------|--|--|------|
| Chemical name | | | | |
| Acetamiprid | : 14.53 | | | Oral |

Abiotic Degradation**Water DT50 days**

| | | | | |
|---------------|-------------|--|--|--|
| Chemical name | | | | |
| Acetamiprid | : 3.6 - 5.8 | | | |

Soil DT50 days

| | | | | |
|---------------|-------|--|--|-------|
| Chemical name | | | | |
| Acetamiprid | : 2.9 | | | Field |

Biodegradation

| | | | | |
|---------------|---------------------|--|--|--|
| Chemical name | | | | |
| Acetamiprid | : No data available | | | |

Log Pow

| Chemical name | <u>Values</u> | <u>Method</u> | <u>Remarks</u> |
|----------------------|---------------|---------------|----------------|
| Acetamiprid | : 0.80 | OECD 117 | |

Bioconcentration factor (BCF)

| | | | | |
|---------------|-------|--|--|------------------------------|
| Chemical name | | | | |
| Acetamiprid | : --- | | | No bioaccumulation potential |

Adsorption/Desorption

| Chemical name | <u>Values</u> | <u>Method</u> | <u>Remarks</u> |
|----------------------|----------------|---------------|----------------|
| Acetamiprid | : 71.1 - 138.4 | | KOC |

13. Disposal considerations**Disposal methods****Waste from residues/unused products**

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Improper disposal or reuse of this container may be dangerous and illegal.

14. Transport information

ADR

| | |
|--|---------------|
| 14.1 UN number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazard | Not regulated |
| 14.6 Special Precautions for Users Special Provisions | None |

RID

| | |
|--|---------------|
| 14.1 UN number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazard | Not regulated |
| 14.6 Special Precautions for Users Special Provisions | None |

IMDG

| | |
|--|---------------------------------|
| 14.1 UN number | Not regulated |
| 14.2 | |
| 14.3 Hazard Class | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Marine pollutant Environmental hazard | Not applicable Not regulated |
| 14.6 Special Precautions for Users Special Provisions | None |
| 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code | No information available |

IATA

| | |
|--|---------------|
| 14.1 UN number | Not regulated |
| 14.2 | |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazard | Not regulated |
| 14.6 Special Precautions for Users Special Provisions | None |

15. Regulatory information

Safety, health and environmental regulations specific for the product in question

Registration Requirements: Fertilizer, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act 36 of 1947). Pesticide Handling, Storage and Disposal Safety: SANS10206: 2020. Safety Data Sheet and Occupational Exposure Limit Requirements: Regulations for Hazardous Chemical Agents – 2021 – SA Occupational Health and Safety Act. SANS11014:2010. Control of and handling of poisonous/hazardous and non-poisonous/non-hazardous substances/chemicals in workplaces: Hazardous Substances Act, 1973 (Act No.15 of 1973). Occupational Health and Safety Act No. 85 of 1993.

16. Other information

Full text of H-Statements referred to under section 3

H302 - Harmful if swallowed
 H318 - Causes serious eye damage
 H319 - Causes serious eye irritation
 H332 - Harmful if inhaled
 H335 - May cause respiratory irritation
 H412 - Harmful to aquatic life with long lasting effects

Date of preparation of the SDS No data available

Revision date 10-Aug-2022

Revision Note Changes made to the last version are labeled with this sign ***.

Key or legend to abbreviations and acronyms used in the safety data sheet

IMDG International Maritime Dangerous Goods (IMDG)
 IATA International Air Transport Association (IATA)
 ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |

Abbreviations and acronyms

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
 ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 CAS Number - Chemical Abstracts Service number
 EC Number - EINECS and ELINCS Number
 EINECS - European Inventory of Existing Commercial Substances
 ELINCS - European List of notified Chemical Substances
 IATA - International Air Transport Association
 ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
 IMDG - International Maritime Dangerous Goods
 LC50 - Lethal Concentration to 50 % of a test population
 LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
 OECD - Organization for Economic Co-operation and Development
 PBT - Persistent, Bioaccumulative and Toxic substance
 RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
 STOT - Specific Target Organ Toxicity
 vPvB - Very Persistent and Very Bioaccumulative

The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Classification of the mixture

H302 - Harmful if swallowed

Classification procedure

Classification based on test data

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet