



MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

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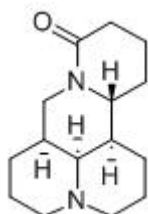
1. Chemical Product Identification

Common Name: Matrine 98% TC

Molecular Formula: $C_{15}H_{24}N_2O$

Molecular Weight: 248.36

Structural Formula:



Chemical Name: matridin-15-one

Form: Powder

Color: White

CAS No.: 519-02-8

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Matrine	519-02-8	98
Other ingredients	---	2

3. Hazards Identification

Hazard statements:

H302: Harmful if swallowed.



H319: Causes serious eye irritation.

Precautionary statements:

P270: Do not eat, drink or smoke when using this product.

P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301+P312: IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/ attention.

P501: Dispose of contents/ container in accordance with national regulations.

4. First Aid Measures

General information: Get medical advice/attention if you feel unwell.

Inhalation: Remove person to fresh air and keep comfortable for breathing. If breathing stops, provide artificial respiration. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if symptoms are severe or persist.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if symptoms are severe or persist.

Skin contact: Remove contaminated clothing. Rinse with water. Continue to rinse for at least 15 minutes. Wash contaminated clothing before reuse. Get medical attention if symptoms are severe or persist.

Eye contact: Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if symptoms are severe or persist.

5. Fire-Fighting Measures

Suitable extinguishing Media: Dry chemical, foam, water spray, carbon dioxide.

Precautions for firefighters: Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so.

Special protective: equipment for firefighters: When extinguishing fire, be sure to wear personal protective equipment.



6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Avoid dust formation. Avoid breathing vapors, mist or gas.

Environmental precautions: Do not let product enter drains.

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete.

7. Handling And Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

Storage: Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur.

8. Exposure Controls/Personal Protection

Engineering controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

Control parameters: Not set up.

Personal protective equipment:

Respiratory protection: Dust respirator. Follow local and national regulations.

Hand protection: Protective gloves.

Eye protection: Wear safety glasses and chemical goggles if splashing is possible.

Skin and body protection: Wear appropriate protective gloves and clothing to prevent skin exposure.

9. Physical and Chemical Properties

Appearance: White powder

Particle size: 80-100 mesh



Loss on drying: $\leq 1.0\%$

Residue on ignition: $\leq 1.0\%$

Melting point: 77°C

Boiling point: 86°C

Bulk density: 1.191 g/ml

10. Stability and Reactivity

Reactivity: Stable under recommended transport or storage conditions.

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, strong oxidants, heat.

Incompatibilities with Other Materials: Strong oxidising/reducing agents, strong acids/alkalis.

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, nitrogen.

Hazardous Polymerization: Has not been reported.

11. Toxicological Information

Acute oral LD50 for rats: >10000 a.i.mg/kg.

Acute dermal LD50 for rats: >2000 a.i.mg/kg.

Skin irritation: Slightly irritating to skin (rabbits)

Eye irritation: Slightly irritating to eyes (rabbits)

12. Ecological And Ecotoxicological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Special Remarks on the Products of Biodegradation: Not available.

13. Disposal Considerations

Waste Disposal Method: Dispose in accordance with local, state, and federal regulations.

14. Transport Information

Not applicable.

15. Regulatory Information



Not applicable.

16. Other Information

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.