

MATERIAL SAFETY DATA SHEET OF

DAZOMET 98% MG

1. IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Supplier: Shanghai Bosman Industrial Co., Ltd.

Street address: No. 1611, North Sichuan Road, Hongkou, Shanghai, R.P. China

FAX: +86 21 63065878

TEL: +86 21 63065878

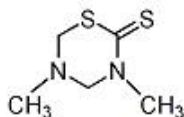
Product name: Dazomet 98% MG

2. COMPOSITION/INFORMATION ON INGREDIENTS

Formulation Type: Micro granule (MG)

Active Ingredients: Dazomet

Structural Formula:



Other ingredients determined not to be hazardous

INGREDIENT	CAS NO	PROPORTION
Dazomet	533 - 74 - 4	98%
Inerts	Not available	Up to 100%

3. HAZARDS IDENTIFICATION

Emergency overview:

Harmful if swallowed.

Irritating to eyes and skin.

May cause sensitisation by skin contact.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Likely routes of exposure:

Skin and eye contact, ingestion and inhalation.

Prolonged exposure may cause irritation to the eyes, skin and mucous membranes. Prolonged or repeated skin contact may result in sensitization in some individuals. Avoid contact with skin, eyes and clothing. Inhalation of dusts may cause irritation to the respiratory tract. Do not breathe dusts. Avoid inhalation of vapors. The gases released during the degradation of this product in soil are irritating to the skin, eyes, and mucous membranes.

4. FIRST AID MEASURES

General Advice: Avoid contact with the skin, eyes and clothing. Remove contaminated clothing. If difficulties occur; obtain medical attention. Show container, label and/or safety data sheet to doctor.

Inhalation: Keep patient calm, remove to fresh air, seek medical attention.

Skin contact: Wash thoroughly with soap and water. If irritation develops, seek medical attention.

Eye contact: Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

Ingestion: Rinse mouth immediately and then drink plenty of water, seek medical attention. Do not introduce vomiting unless told to by a poison control centre or doctor. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

Note to physician

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

5. FIRE FIGHTING MEASURES

Extinguishing agents:

Extinguish small fires with water, dry powder, or alcohol-resistant foam. Do not use Carbon dioxide (dust explosion hazard).

Hazardous decomposition products: Combustion may generate SO₂, carbon monoxide and nitrogen oxide.

Fire fighting:

Remove containers from fire area if possible. Contain fire control agents for later disposal. Use a recommended extinguishing agent. Water can be used to cool unaffected containers. Do not allow extinguishing water to reach sewerage or effluent systems. Avoid inhaling hazardous vapours. Keep upwind.

Personal protective equipment:

Firefighters should be equipped with self-contained breathing apparatus and turnout gear.

6. ACCIDENT RELEASE MEASURES

Avoid contact with spilled material. Isolate area and confine spill. KEEP DRY, wet material may release methylisothiocyanate.

Cover dry material to prevent dispersal. Place spilled material and damaged package in a labelled container.

Take care to avoid the contamination of watercourses and drains and inform the appropriate authority in case of accidental contamination of watercourses. Contain with dust binding material and dispose.

7. HANDLING AND STORAGE

Handling:

Protect against moisture. Avoid dust formation. Ensure thorough ventilation of stores and work areas.

Protection against fire and explosion: Avoid dust formation. Avoid deposition of dust. Dust can

form an explosive mixture with air. Prevent electrostatic charge; sources of ignition are kept clear; fire extinguishers should be kept handy.

Storage:

Segregate from foods and animal feeds. Protect against moisture. Keep away from heat. Protect from direct sunlight.

Storage stability:

Storage duration: 24 months

Protect from temperatures above 40 ° C. Change in the properties of the product may occur if substance/ product is stored above indicated temperature for extended periods of time

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection: Breathing protection if breathable aerosols/ dusts are formed. Wear respiratory protection if ventilation is inadequate. Particle filter EN 143 Type P2, medium efficiency (solid and liquid particles of harmful substances).

Hand protection: Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact e.g. nitrile rubber (0.4mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other.

Eye protection: Tightly fitting safety goggles (splash goggles) (EN 166)

Body protection: Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suits (according to DIN-EN 465).

General safety and hygiene measures: The statements on personal protective equipment are found in the instructions for use apply when handling crop-protection agents in final-consumer packing. . Wearing of closed work clothing is recommended. Avoid contact with the skin, eyes and clothing. Remove contaminated clothing. Store work clothing separately. Keep away from food, drink and animal feeding stuffs. No eating, drinking, smoking or tobacco use at the place of work. Hands and /or face should be washed before breaks and at the end of the shift.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Grey white granules

Odor: NA

pH: 6.0-8.0

Flammability: not flammable

Flash point: NA

10. STABILITY AND REACTIVITY

Stability: Unstable in contact with water. Avoid moisture and excessive temperatures. In contact with water it decomposes gradually and gives off methyl isocyanate

Conditions to avoid: Flammable dust/air mixtures can form @ 30 g/m³ air.

Chemical incompatibility: N/A

Hazardous Decomposition Products: CO, CO₂, NO_x, SO₂.

Hazardous Polymerization: Does not occur

Conditions to Avoid: Not applicable.

Corrosive to Metal: No

Oxidizer: No

11. TOXICOLOGICAL INFORMATION

For dazomet active ingredient

Acute toxicity:

Oral: LD₅₀ (rat): >519 mg/kg

Dermal: LD₅₀ (rat): >2,000 mg/kg

Inhalation: LC₅₀ (rat): 8.4 mg/L

Irritant properties:

Skin: (Rabbit) No irritation

Eye: (Rabbit) No irritating

Allergenic and sensitizing effects: Not considered to be a skin sensitizer (Guinea pig).

Chronic toxicity/Carcinogenicity: Animal studies did not detect any carcinogenic effects.

Genetic effects/Mutagenicity: Animal studies did not detect any mutagenic effects.

Teratogenicity: Animal studies did not detect any teratogenic effects.

12. ECOLOGICAL INFORMATION

For dazomet active ingredient

Ecotoxicity:

Birds LD₅₀ for bobwhite quail 415 mg/kg b.w. LC₅₀ for bobwhite quail 1850, mallard ducks >5000 mg/kg diet.

Fish LC₅₀ (96 h) for rainbow trout 0.16 mg/l.

Daphnia EC₅₀ (48 h) 0.3 mg/l.

Algae EC₅₀ (96 h) for *Scenedesmus subspicatus* 1.0 mg/l.

Other aquatic spp. EC₁₀ (17 h) for *Pseudomonas putida* 1.8 mg/l.

Bees Not toxic to bees when used as directed. LD₅₀ (oral) >10 µg/bee; (contact) >50 µg/bee.

Worms Toxic to worms (used as a soil sterilant).

Persistence and degradability Elimination information Evaluation:

Not easily biodegradable (by OECD criteria)

Chemical oxygen demand (COD) = 1.270 mg/g

Biological oxygen demand (BOD) = 85 mg/g (incubation period 5d)

13. DISPOSAL CONSIDERATION

Container disposal:

Empty package completely into application equipment. Empty package should be disposed of in an approved landfill or by incineration.

Product disposal:

Bury in a licensed facility. Do not discharge into waterways or sewer systems without proper authority. Consult local authorities for approved alternative procedures

14. TRANSPORT INFORMATION

UN NUMBER: 3077

ADR:

Shipping name: Environmentally hazardous substance, solid, n.o.s.(contains Dazomet)

Class: 9

Packaging group: III

IMDG:

Shipping name: Environmentally hazardous substance, solid, n.o.s. (contains Dazomet)

Class: 9 Marine pollutant

Packaging group: III

IATA:

Shipping name: Environmentally hazardous substance, solid, n.o.s.(contains Dazomet)

Class: 9

Packaging group: III

15. REGULATORY INFORMATION

Hazard symbols: Xn -Harmful; N -Dangerous for the environment.

Risk phrases:

R22 Harmful if swallowed.

R36/38 Irritating to the eyes and skin.

R43 May cause sensitization by skin contact

R50/R53 Very toxic to aquatic organisms; may cause adverse effects in the aquatic environment.

Safety phrases:

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.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S35 This material and its container must be disposed of in a safe way.



SHANGHAI BOSMAN INDUSTRIAL CO., LTD.

Add: Room1804, No.1611, North Sichuan Road, Hongkou District, Shanghai, P.R. China.

Tel: +86 21 63065878 | **Fax:** +86 21 63065878 | **E-mail:** info@bosmangroup.com

Website: www.bosmanagrochem.net

S36/37 Wear suitable protective clothing and gloves.

S42 During fumigation/spraying wear suitable respiratory equipment

S46 If swallowed, seek medical advice immediately and show this container or label.

S57 Use appropriate container to avoid environmental contamination.

16. OTHER INFORMATION

This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of the how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact this company.

-- END OF MSDS --