



Central Pollution Control Board

Ministry of Environment & Forests, Govt of India, Parivesh Bhawan, East Arjun Nagar, Delhi - 110032

MATERIAL SAFETY DATA SHEETS

391

Methyl mercuric dicyanamide

1. CHEMICAL IDENTITY

Chemical Name : Methyl mercuric dicyanamide

Chemical Classification: Toxic

Trade Name :

Synonyms: Agrosol, (Cyanoguanidino)methylmercury, Mema, Methylmercuric cyanoguanidine, Panogen Turf Fungicide

Formula : C₃H₆HgN₄

CAS No: 502-39-6

UN No: 2024

Regulated Identification

Shipping Name :

Hazchem Code : 2X

Codes / Label : Class 6.1, Toxic

Hazardous Waste ID No :

HAZARDOUS INGREDIENTS	C.A.S. No.	HAZARDOUS INGREDIENTS	C.A.S. No.
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1	Methyl mercuric dicyanamide	502-39-6	3
2			4

2. PHYSICAL / CHEMICAL DATA

Boiling Pt. °C:

Physical State: Solid

Appearance: Colourless crystals.

Melting Pt °C: 156

Vapour Pressure @ 35°C mmHg: 6.5X10⁻⁵ mm Hg @ 35 deg C

Odour:

Vapour Density(Air =1):

Solubility in water at 30°C g/100ml: 2.17X10⁺⁴ mg/l @ 20 deg C

Others: Soluble in acetone, ethanol, ethylene glycol but not in benzene.

Specific Gravity (Water =1):

pH :

3. FIRE / EXPLOSION HAZARD DATA

Flammability :

LEL:

Flash Point °C in OC:

TDG Flammability:

UEL:

Flash Point °C in CC:

Autoignition Temperature °C :

Explosion sensitivity to impact:

Explosion sensitivity to static Electricity:

Hazardous Combustion Products : When heated to decompose it emits toxic fumes of hg and nitrogen oxides.

Hazardous Polymerization :

Combustible Liquid:

Explosive Material:

Corrosive Material

Flammable Material:

Oxidiser :

Others:

Pyrophoric Material:

Organic Peroxide :

4. REACTIVITY DATA

Chemical Stability : Stable

Incompatibility with other material : Incompatible with strong oxidizing agents such as chlorine.

Reactivity :

Hazardous :

Reaction Products

5. HEALTH HAZARD DATA

Routes of entry: Inhalation, Ingestion, Skin and Eyes

Effects of Exposure / Symptoms:

Inhalation : Highly toxic, may be fatal if inhaled, swallowed or absorbed through skin. Effects of contact or inhalation may be delayed. **Ingestion** : **Skin** : Skin irritation is reported, as well as blistering, with prolonged exposure. **Eye** : Some mercuric compounds are corrosive to the eyes and throat.

Emergency Treatment :

Inhalation: Move patient to fresh air. Monitor for respiratory distress. Administer oxygen and assist ventilation as required. Treat bronchospasm with beta2 agonist and corticosteroid aerosols.

Skin: Remove contaminated clothing and wash exposed area extremely thoroughly with soap and water. A physician may need to examine the area if irritation or pain persists after washing.

Eyes: Irrigate exposed eyes with copious amounts of tepid water for at least 15 minutes. If irritation, pain, swelling, lacrimation, or photophobia persist, the patient should be seen in a health care facility.

Ingestion: Administer charcoal as a slurry (240 ml water/30 g charcoal). Usual dose: 25 to 100 g in adults/adolescents.

LD50 (oral-rat) mg/kg: 20 mg/kg (Mouse)

STEL: 0.03 mg/m³ (skin)

LC50 (rat) mg/kg:

Odour Threshold:

Permissible Exposure Limit:

TLV (ACGIH) : 0.01 mg/m³

NFPA Hazard	Health	Flammability	Reactivity	Special
Signals	4	1	0	

6. PREVENTIVE MEASURES

Personal Protective Equipment : Wear appropriate clothing to prevent any possibility of skin contact.

Wear eye protection to prevent any possibility of eye contact. Employees should wash immediately when skin is wet or contaminated. Work clothing should be changed daily if it is possible that clothing is contaminated. Remove non-impervious clothing immediately if wet or contaminated. Provide emergency showers and eyewash.

Handling : All chemicals should be considered hazardous. Avoid direct physical contact. Use appropriate, approved safety equipment. Untrained individuals should not handle this chemical or its container. Handling should occur in a chemical fume hood.

Storage : Keep in a cool, dry, dark location in a tightly sealed container or cylinder. Keep away from incompatible materials, ignition sources and untrained individuals. Secure and label area. Protect containers/cylinders from physical damage.

Precautions :

7. EMERGENCY / FIRST AID MEASURES

FIRE:

Fire Extinguishing Media :

Special Procedure : Fight fire from maximum distance. Dike fire control water for later disposal. Wear positive pressure breathing apparatus and special protective clothing

Unusual Hazards : This material may burn but does not ignite readily. Container may explode in heat of fire. Fire and runoff from fire control water may produce irritating or poisonous gases

EXPOSURE: First Aid Measures:

Inhalation: Move patient to fresh air. Monitor for respiratory distress. Administer oxygen and assist ventilation as required. Treat bronchospasm with beta2 agonist and corticosteroid aerosols.

Skin: Remove contaminated clothing and wash exposed area extremely thoroughly with soap and water. A physician may need to examine the area if irritation or pain persists after washing.

Eyes: Irrigate exposed eyes with copious amounts of tepid water for at least 15 minutes. If irritation, pain, swelling, lacrimation, or photophobia persist, the patient should be seen in a health care facility.

Ingestion: Administer charcoal as a slurry (240 ml water/30 g charcoal). Usual dose: 25 to 100 g in adults/adolescents.

Antidotes / Dosages:

SPILLS :

Steps To Be Taken : Do not touch spilled material. Use water to reduce vapors. In event of spill or leak: take up with absorbent material and place in containers with covers.

Waste Disposal Method:

8. ADDITIONAL INFORMATION / REFERENCES

9. MANUFACTURERS / SUPPLIERS DATA

NAME OF FIRM :

Contact person

MAILING ADDRESS :

in Emergency :

TELEPHONE / TELEX NOS :

Local Bodies involved :

TELEGRAPHIC ADDRESS :

Standard Packing :

OTHERS :

Trem Card Details / Ref :

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