

SAFETY DATA SHEET (GHS)

N-Methylmorpholine (NMM) | CAS 109-02-4

Section 1: Identification

Product Name	N-Methylmorpholine (NMM)
CAS Number	109-02-4
Recommended Use	Pharmaceutical synthesis, Peptide coupling, Solvent
Supplier	PharmaCloud — Green Vision Technical Services, Plot No. 6, Survey No. 599/2, Airport Road, Janori, Tal: Dindori, Dist: Nashik 422206, Maharashtra, India
Emergency Contact	+91 75070 06931 (Mon–Sat 9:00–18:00 IST)

Section 2: Hazard Identification

GHS Classification	Flammable
Signal Word	Danger
Precautionary Overview	Handle in accordance with good industrial hygiene and safety practice. See Sections 7 and 8.

Section 3: Composition / Information on Ingredients

Substance	N-Methylmorpholine (NMM)
CAS	109-02-4
Formula	C ₄ H ₉ NO
Concentration / Grade	Technical/99%/LR

Section 4: First-Aid Measures

Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If irritation persists, get medical attention.
Skin Contact	Wash with plenty of soap and water. Remove contaminated clothing. If irritation occurs, get medical advice.
Inhalation	Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, get medical attention.
Ingestion	Rinse mouth. Do NOT induce vomiting unless directed by medical personnel. Get medical attention if you feel unwell.

Section 5: Fire-Fighting Measures

Use dry chemical, CO₂, alcohol-resistant foam or water spray. Do not use direct water jet. Vapours may travel to ignition source and flash back. Firefighters must wear SCBA.

Section 6: Accidental Release Measures

Evacuate unnecessary personnel. Wear recommended PPE. Contain spillage, absorb with inert material and collect in suitable closed containers for disposal. Prevent entry to drains and watercourses.

Section 7: Handling and Storage

Store in a cool, dry, well-ventilated area. Keep away from heat, sparks, open flames and other ignition sources. Ground and bond containers during transfer.

Section 8: Exposure Controls / Personal Protection

Safety goggles, chemical-resistant gloves and protective clothing. Use adequate ventilation; use respiratory protection if exposure limits may be exceeded.

Section 9: Physical and Chemical Properties

Molecular Formula	C ₄ H ₉ NO
Molecular Weight	101.15
Appearance	Refer to TDS
Density	924 kg/m ³
Boiling Point	116°C
Melting Point	-66°C
Flash Point	15°C
Solubility	Miscible

Section 10: Stability and Reactivity

Stable under recommended storage conditions. Highly flammable — avoid heat, sparks and ignition sources. Vapours may form explosive mixtures with air.

Section 11: Toxicological Information

No data available for this grade. Handle as per Sections 7 and 8.

Section 12: Ecological Information

No data available. Prevent release to the environment.

Section 13: Disposal Considerations

Dispose of contents and container in accordance with local, state and national regulations through an authorised waste disposal contractor.

Section 14: Transport Information

UN Number	Not regulated / not assigned
Transport Hazard Class	Not regulated based on available data

Section 15: Regulatory Information

HSN Code (India): 2933.49. Comply with all applicable national and local regulations.

Section 16: Other Information

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