

Material Safety Data Sheet

PRODUCT NAME

MC-8

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SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identity (Trade Name As Used On Label); MC-8

Recommended use of the chemical and restrictions on use; Cleaner(Industrial use only)

Manufacturer Name /Address;

NAMBANG CNA CO., LTD. / 204, ChupalSandan 1-gil, Paengseong-eup, Pyeongtaek-si, Gyeonggi-do
17998, Korea

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SECTION 2. HAZARD IDENTIFICATION

Hazard Class

Hazard Class	Hazard category
Flammable liquids	2
Acute toxicity (Oral)	4
Acute toxicity (Inhalation)	3
Carcinogenicity	1A
Hazardous to the aquatic environment-Long-term hazard	3

GHS label elements, including precautionary statements

Category		Indication
Symbol		
Signal word		Danger
Hazard statement		H225 Highly flammable liquid and vapour. H302 Harmful if swallowed. H331 Toxic if inhaled. H350 May cause cancer. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	Prevention	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P233 Keep container tightly closed. P240 Ground/Bond container and receiving equipment. P241 Use explosion-proof electrical/ventilating/lighting/.../equipment. P242 Use only non-sparking tools.

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		P243 Take precautionary measures against static discharge. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash ...thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection.
	Response	P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/.../if you feel unwell. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P308+P313 IF exposed or concerned: Get medical advice/attention. P311 Call a POISON CENTER/doctor... P321 Specific treatment (see ... on this label) P330 Rinse mouth. P370+P378 In case of fire: Use ... to extinguish. P391 Collect spillage.
	Storage	P403+P233 Store in a well-ventilated place. Keep container tightly closed. P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.
	Disposal	P501 Dispose of contents/container to..... in accordance with local/regional/national/international regulations (to be specified).

Other hazards which do not result in classification : No information found

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	OTHER NAME	CAS NUMBER	Content (%)
1,2-Dichloropropane	–	78-87-5	>95
Additive	–	Trade Secret	<5

SECTION 4. FIRST AID PROCEDURES

Eye contact; Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact; In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

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Inhalation; Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion; Call medical doctor or poison control center immediately. Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Indication of immediate medical attention and notes for physician; Consult a physician. Show this safety data sheet to the doctor in attendance.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media; Use water spray to keep fire exposed containers cool. If substance does ignite, use CO₂, dry chemical or foam.

Specific hazards arising from the chemical (e.g. nature of any hazardous combustion products); No information found

Special protective equipment and precautions for fire fighters; In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face-piece operated in the pressure demand or other positive pressure mode. Combustion by-products include phosgene and hydrogen chloride gases. Structural firefighters' clothing provides only limited protection to the combustion products of this material.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures; No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions and protective procedures; Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up; Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth,

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vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling; Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage (including any incompatibilities); Store in accordance with local regulations. Store in a segregated and approved area. Store in original container, protected from direct sunlight. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters (e.g. occupational exposure limit values, biological limit values);

1,2-Dichloropropane : TWA 10 ppm

Engineering controls; A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Personal protective equipment;

- **Eye / face protection;** Chemical goggles are recommended. Face-shield. Provide eyewash station and safety shower.
- **Skin protection;** Wear chemical protective equipment that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Wear protective gloves.
- **Respiratory protection;** Wear positive pressure self-contained breathing apparatus (SCBA). When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

SECTION 9. PHYSICAL / CHEMICAL CHARACTERISTICS

Appearance; Clear liquid

Odor; No information found

Odour threshold; No information found

pH; No information found

Melting point/freezing point; -100. °C

Initial boiling point and boiling range; > 96 °C

Flash point; 16 °C

Evaporation rate; No information found

Flammability (solid, gas); No information found

Upper/lower flammability or explosive limits; 1,2-Dichloropropane; 14.5 / 3.4 %

Vapour pressure; No information found

Vapour density; No information found

Specific Gravity (H₂O = 1); 1.16 ± 0.05

Relative density; No information found

Solubility(ies); Insoluble

Partition coefficient; n-octanol/water; 1,2-Dichloropropane; 1.99~2.28 (Log Kow)

Auto-ignition temperature; No information found

Decomposition temperature; No information found

Viscosity; No information found

Molecular Weight; No information found

SECTION 10. STABILITY AND REACTIVITY

Chemical stability and possibility of hazardous reactions; Stable under ordinary conditions of use and storage

Conditions to avoid (e.g. static discharge, shock or vibration, etc); Heat, flames and sparks. Incompatible materials.

Incompatibility (Materials to Avoid); Strong oxidizing agents.

Hazardous Decomposition Products; carbon oxide

SECTION 11. TOXICOLOGICAL INFORMATION

– 1,2–Dichloropropane –

Information on the likely routes of exposure; No information found

Acute toxicity

– Oral; LD50 1.19 ml/kg kg Species: Rat

– Dermal; LD50 10100 mg/kg Species: Guinea pig

– Inhalation; Vapour LC50 2000 ppm 4 hr Species: Rat

Skin corrosion/irritation; No information found

Serious eye damage/irritation; No information found.

Respiratory or skin sensitization; No information found

Germ cell mutagenicity; No information found

Carcinogenicity; IARC; 1, ACGIH; A4, EU CLP; 1B

Reproductive toxicity; No information found

Specific target organ toxicity (single exposure); No information found

Specific target organ toxicity (repeated exposure); May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard; No aspiration toxicity classification

SECTION 12. ECOLOGICAL INFORMATION

Aquatic and terrestrial ecotoxicity; No information found

Persistence and degradability; No information found

Bioaccumulative potential; No information found

Mobility in soil; No information found

Other adverse effects; No information found

SECTION 13. DISPOSAL CONSIDERATION

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Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14. TRANSPORT INFORMATION

Proper Shipping Name; 1,2-DICHLOROPROPANE (Chloroalkanes)

Hazard Class; 3

Marine pollution; yes

UN No; 1279

Packing Group : II

SECTION 15. REGULATORY INFORMATION

Follow all regulation in your country

SECTION 16. OTHER INFORMATION

Issuing date; 2021.09.28

Revision number and date;

Others; This information has been faithfully prepared on the basis of various knowledge and information and is not to guarantee the quality of this product. Also, this information can be changed without prior notice in accordance with introduction of new knowledge and test results, etc. For inquiries, please contact us or the place of product purchase.