

MATERIAL SAFETY DATA SHEET

Methyl Acetoacetate

1. CHEMICAL PRODUCT and COMPANY IDENTIFICATION

PRODUCT NAME : Methyl Acetoacetate

COUNTRY/COUNTRIES: China

COMPANY IDENTIFICATION: Nantong acetic acid chemical Co.Ltd

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2. HAZARDS SUMMARIZING

Caution! Causes eye irritation. May cause skin irritation. May cause respiratory and digestive tract irritation. **Combustible liquid and vapor.**

TARGET ORGANS: None

POTENTIAL HEALTH EFFECTS

EYE: Causes eye irritation.

SKIN: May cause skin irritation.

INGESTION: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

INHALATION: May cause respiratory tract irritation.

CHRONIC: Not available.

PHYSICAL HAZARDS: Combustible liquid and vapor.

3. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS No.	%
Methyl Acetoacetate	105-45-3	100

4. FIRST-AID MEASURES

EYES: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

SKIN: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

INGESTION: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

INHALATION: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

NOTES TO PHYSICIAN: Treat symptomatically and supportively.

5. FIRE-FIGHTING MEASURES

GENERAL INFORMATION: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water

spray to keep fire-exposed containers cool.

FLAMMABLE PROPERTIES: Moderate fire hazard. Combustible liquid and vapor. Containers may explode when heated. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas. Vapor/air mixtures are explosive above flash point.

EXTINGUISHING MEDIA: Use water spray to cool fire-exposed containers. Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide.

FLASH POINT: 67 °C

AUTOIGNITION TEMPERATURE: 280°C

EXPLOSION LIMITS, LOWER:3.1 vol %

UPPER: 16 vol%

6. ACCIDENTAL RELEASE MEASURES

GENERAL INFORMATION: Use proper personal protective equipment as indicated in Section 8.

SPILLS/LEAKS: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Provide ventilation.

7. HANDLING and STORAGE

HANDLING: Wash thoroughly after handling. Use only in a well-ventilated area. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

STORAGE: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

OSHA VACATED PELs: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

EYES: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

SKIN: Wear appropriate protective gloves to prevent skin exposure.

CLOTHING: Wear appropriate protective clothing to prevent skin exposure.

RESPIRATORS: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

DO NOT SMOKE IN WORK AREA!

9. PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid	APPEARANCE: clear, colorless
ODOR: Pleasant odor.	pH: Not available.
VAPOR PRESSURE: 1.7 mmHg @ 20°C	VAPOR DENSITY(air = 1): 4.0
EVAPORATION RATE: Not available.	VISCOSITY: Not available.
BOILING POINT: 169 ~ 170 °C @ 760.00mm Hg	FREEZING/MELTING POINT: -28 °C
DECOMPOSITION TEMPERATURE: Not available.	SOLUBILITY: Miscible.
SPECIFIC GRAVITY/DENSITY: 1.0760~1.080g/cm ³	
MOLECULAR FORMULA: C ₅ H ₈ O ₃	MOLECULAR WEIGHT: 116.12

10. STABILITY and REACTIVITY

CHEMICAL STABILITY: Stable under normal temperatures and pressures.

CONDITIONS TO AVOID: Incompatible materials, ignition sources, excess heat. Containers may rupture or explode if exposed to heat. Keep out of water supplies and sewers.

INCOMPATIBILITIES WITH OTHER MATERIALS: Oxidizing agents, bases.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

LD50/LC50:

Draize test, rabbit, eye: 2 mg Severe;

Draize test, rabbit, skin: 500 mg/24H Mild;

Oral, rat: LD50 = 3228 mg/kg;

CARCINOGENICITY:

Not listed by ACGIH, IARC, NTP, or CA Prop 65.

EPIDEMIOLOGY: No data available.

TERATOGENICITY: No data available.

REPRODUCTIVE EFFECTS: No data available.

MUTAGENICITY: No data available.

NEUROTOXICITY: No data available.

12. ECOLOGICAL INFORMATION

Component Analysis - Aquatic Toxicity

INVERTEBRATE: 48 Hr EC50 Daphnia magna: 400 mg/L

13. DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

14. TRANSPORT INFORMATION (not meant to be all inclusive)

	US DOT	Canada TDG
Shipping Name:	Not regulated as a hazardous material	No information available.

US DOT INFORMATION

SHIPPING NAME: Combustible liquid, n.o.s. (Contains: METHYL ACETOACETATE)

HAZARD CLASS: Combustible liquid

UN/NA #: NA1993

PACKING GROUP: III

REQUIRED LABEL(S): None

ADR INFORMATION: No Classification assigned.

RID INFORMATION: No Classification assigned.

IATA INFORMATION: No Classification assigned.

ICAO INFORMATION: No Classification assigned.

IMDG INFORMATION: No Classification assigned.

15. REGULATORY INFORMATION (not meant to be all inclusive)

US FEDERAL

TSCA : CAS# 105-45-3 is listed on the TSCA inventory.

Health & Safety Reporting List: None of the chemicals are on the Health & Safety Reporting List.

TSCA Significant New Use Rule: None of the chemicals in this material have a SNUR under TSCA.

SARA Section 302 Extremely Hazardous Substances: None of the chemicals in this product have a TPQ.

SARA Codes: CAS # 105-45-3: immediate, fire.

OSHA: None of the chemicals in this product are considered highly hazardous by OSHA.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI

Risk Phrases: R 36 Irritating to eyes.

Safety Phrases: S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

WGK (Water Danger/Protection) : 1

Canada - DSL/NDSL: CAS# 105-45-3 is listed on Canada's DSL List.

Canada – WHMIS

WHMIS: Not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 105-45-3 is listed on the Canadian Ingredient Disclosure List.

16. OTHER INFORMATION

MSDS STATUS: Written January 25, 2010

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