

METHYL NORMAL PROPYL
KETONE 104972

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone	1-800-ASHLAND (1-800-274-5263)

Product name	METHYL NORMAL PROPYL KETONE
Product code	104972
Product Use Description	No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid,, colourless

WARNING! FLAMMABLE LIQUID AND VAPOR. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY BE HARMFUL IF INHALED OR SWALLOWED. MAY CAUSE EYE IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY THE SKIN AND CAUSE IRRITATION AND BURNS.

Potential Health Effects

Routes of exposure

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact

May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Ingestion

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Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material:., Skin, lung (for example, asthma-like conditions), Liver, kidney

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:., stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness)

Target Organs

Exposure to this material (or a component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans., This material (or a component) shortens the time of onset or worsens the liver and kidney damage induced by other chemicals., This material (or a component) shortens the time of onset or worsens the neurotoxic effects induced by other chemicals., Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals:., mild, reversible liver effects, mild, reversible kidney effects

Carcinogenicity

There is no information available. The chance of this material causing cancer is unknown. This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard

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This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration
METHYL PROPYL KETONE	107-87-9	>=90-<=100%
METHYL ISOBUTYL KETONE	108-10-1	>=10-<15%

4. FIRST AID MEASURES**Eyes**

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting.

Treatment: No information available.

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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water spray, Carbon dioxide (CO₂), Foam, Dry chemical

Hazardous combustion products

May form:, carbon dioxide and carbon monoxide

Precautions for fire-fighting

Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Forms peroxides of unknown stability. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Water may be ineffective for extinguishment unless used under favorable conditions by experienced fire fighters.

Flammability Class for Flammable Liquids

Flammable Liquid Class IB

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal.

Environmental precautions

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

Methods for cleaning up

No data

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7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77.

Storage

Do not store exposed to direct light. Store in closed containers in a dry, well-ventilated area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

METHYL PROPYL KETONE		107-87-9
ACGIH	time weighted average	200 ppm
ACGIH	Short term exposure limit	150 ppm
NIOSH	Recommended exposure limit (REL):	150 ppm
NIOSH	Recommended exposure limit (REL):	530 mg/m3
OSHA Z1	Permissible exposure limit	200 ppm
OSHA Z1	Permissible exposure limit	700 mg/m3
METHYL ISOBUTYL KETONE		108-10-1
ACGIH	time weighted average	50 ppm
ACGIH	Short term exposure limit	75 ppm
NIOSH	Recommended exposure limit (REL):	50 ppm
NIOSH	Recommended exposure limit (REL):	205 mg/m3
NIOSH	Short term exposure limit	75 ppm
NIOSH	Short term exposure limit	300 mg/m3
OSHA Z1	Permissible exposure limit	100 ppm
OSHA Z1	Permissible exposure limit	410 mg/m3
ACGIH NIC	time weighted average	30 ppm
ACGIH NIC	Short term exposure limit	75 ppm

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General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Eye protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin and body protection

To prevent repeated or prolonged skin contact, wear impervious clothing and boots.
Wear resistant gloves such as:

Respiratory protection

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH-approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Form	No data
Colour	colourless
Odour	characteristic, acetone-like
Boiling point/boilingrange	101.70 °C / 215.1 °F
Melting point/range	-108 °F / -78 °C
pH	No data
Flash point	44.6 °F / 7.0 °C, Closed Cup
Evaporation rate	2.3 (N-Butyl Acetate)
Explosion limits	1.6 %(V) 8.2 %(V)

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Vapour pressure	4.71 kPa @ 77 °F / 25 °C
Vapour density	3 (AIR=1)
Density	0.81 g/cm ³ @ 68.00 °F / 20.00 °C 6.74 lb/gal @ 68 °F / 20 °C
Solubility	partly soluble in water
Partition coefficient: n-octanol/water	No data
Autoignition temperature	846 °F / 452 °C

10. STABILITY AND REACTIVITY

Stability

Stable, however, forms peroxides of unknown stability.

Conditions to avoid

Avoid contact with:

Incompatible products

Avoid contact with: strong bases, strong oxidizing agents, strong reducing agents

Hazardous decomposition products

May form: carbon dioxide and carbon monoxide

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

METHYL PROPYL KETONE LD 50 Rat: 1,600 mg/kg

METHYL ISOBUTYL KETONE LD 50 Rat: 2,080 mg/kg

Acute inhalation toxicity

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METHYL PROPYL KETONE LC Lo Rat: 2000 ppm, 4 h

METHYL ISOBUTYL KETONE LD 50 Rat: > 2000 ppm, 4 h

Acute dermal toxicity

METHYL PROPYL KETONE LD 50 Rabbit: 6,500 mg/kg

METHYL ISOBUTYL KETONE LD 50 Rabbit: > 3.0 g/kg

12. ECOLOGICAL INFORMATION

Aquatic toxicity

Acute and Prolonged Toxicity to Fish

No data

Acute Toxicity to Aquatic Invertebrates

No data

Environmental fate and pathways

No data

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

IMDG:

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UN1224, KETONES, LIQUID, N.O.S. (METHYL PROPYL KETONE, METHYL ISOBUTYL KETONE) 3, II

IATA_P:

UN1224, Ketones, liquid, n.o.s. (METHYL PROPYL KETONE, METHYL ISOBUTYL KETONE) 3, II

IATA_C:

UN1224, Ketones, liquid, n.o.s. (METHYL PROPYL KETONE, METHYL ISOBUTYL KETONE) 3, II

CFR_ROAD:

UN1224, Ketones, liquid, n.o.s. (METHYL PROPYL KETONE, METHYL ISOBUTYL KETONE) 3, II

CFR_RAIL:

UN1224, Ketones, liquid, n.o.s. (METHYL PROPYL KETONE, METHYL ISOBUTYL KETONE) 3, II

CFR_INWTR:

UN1224, Ketones, liquid, n.o.s. (METHYL PROPYL KETONE, METHYL ISOBUTYL KETONE) 3, II

Dangerous goods descriptions (if indicated above) may not reflect package size, quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

SARA 313 Component(s)

METHYL ISOBUTYL KETONE	108-10-1	10%
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	Health	Flammability	Reactivity	Other
HMIS	1*	3		
NFPA	2	3	0	

16. OTHER INFORMATION

ASHLAND
SAFETY DATA SHEET

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Page: 10
Revision Date: 01/24/2008
Print Date: 1/17/2009
MSDS Number: R0019987
Version: 1.2

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).