

METHYL NORMAL AMYL  
KETONE 20663

**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 number	1-800-ASHLAND (1-800-274-5263)

Product name	METHYL NORMAL AMYL KETONE
Product code	20663
Product Use Description	No data

**2. HAZARDS IDENTIFICATION**

**Emergency Overview**

Appearance: liquid, pungent

WARNING! Combustible Liquid, Moderate skin irritant, Moderate eye irritant.

**Potential Health Effects**

**Routes of exposure**

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

**Eye contact**

May cause mild eye irritation. Symptoms include stinging, tearing, and redness.

**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**

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

**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.).

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**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)

**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**

No data

**Carcinogenicity**

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.**

There are no data available for assessing risk to the fetus from maternal exposure to this material.

**Other information**

No data

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Components</b>	<b>CAS-No.</b>	<b>Concentration</b>
METHYL NORMAL AMYL KETONE	110-43-0	<=100%

**4. FIRST AID MEASURES**

**Eyes**

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

**Skin**

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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:** No information available.

**Treatment:** No information available.

## **5. FIRE-FIGHTING MEASURES**

### **Suitable extinguishing media**

water spray, carbon dioxide (CO<sub>2</sub>), foam, dry chemical

### **Hazardous combustion products**

May form:., carbon dioxide and carbon monoxide

### **Precautions for fire-fighting**

If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

### **Flammability Class for Flammable Liquids**

Combustible Liquid Class II Combustible Liquid Class II

## **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

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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

**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. Emergency eyewash fountains and safety showers should be available in the immediate vicinity of potential exposure. 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**

Store in a cool, dry, ventilated area, away from incompatible substances. Do not store near extreme heat, open flame, or sources of ignition. Keep containers closed when not in use.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Guidelines**

<b>METHYL NORMAL AMYL KETONE 110-43-0</b>		
ACGIH	time weighted average	50 ppm
NIOSH	Recommended exposure limit (REL):	100 ppm
NIOSH	Recommended exposure limit (REL):	465 mg/m3
OSHA Z1	Permissible exposure limit	100 ppm

METHYL NORMAL AMYL  
KETONE 20663OSHA Z1                      Permissible exposure limit                      465 mg/m<sup>3</sup>**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**

Wear resistant gloves (consult your safety equipment supplier).  
To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

**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**

<b>Physical state</b>	liquid
<b>Form</b>	No data
<b>Colour</b>	No data
<b>Odour</b>	pungent, sweet, fruity
<b>Boiling point/range</b>	No data
<b>Melting point/range</b>	-31.9 °F / -35.5 °C
<b>pH</b>	No data
<b>Flash point</b>	101.98 °F / 38.88 °C Open Cup
<b>Evaporation rate</b>	0.4 N-Butyl Acetate
<b>Explosion limits</b>	1.1 %(V) 7.9 %(V)

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<b>Vapour pressure</b>	0.213312 kPa @ 77 °F / 25 °C
<b>Vapour density</b>	3.9
<b>Density</b>	+/- 0.01 0.8125 g/cm <sup>3</sup> @ 77.00 °F / 25.00 °C 6.8 lb/gal @ 68 °F / 20 °C
<b>Solubility</b>	slightly soluble in water
<b>Partition coefficient (n-octanol/water)</b>	No data
<b>Autoignition temperature</b>	740 °F / 393 °C

## 10. STABILITY AND REACTIVITY

### Stability

Stable.

### Conditions to avoid

None known.

### Incompatible products

Avoid contact with:, strong oxidizing 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 NORMAL AMYL KETONE LD 50 Rat: 1,670 mg/kg

### Acute inhalation toxicity

METHYL NORMAL AMYL KETONE LC Lo Rat: 4000 ppm, 4 h

### Acute dermal toxicity

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METHYL NORMAL AMYL KETONE LD 50 Rabbit: 12,600 mg/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 Company, IC&S Environmental Services Group at 800-637-7922.

## 14. TRANSPORT INFORMATION

### IMDG:

UN1993, FLAMMABLE LIQUID, N.O.S. (METHYL NORMAL AMYL KETONE, ) 3, III

### IATA\_P:

UN1993, Flammable liquid, n.o.s. (METHYL NORMAL AMYL KETONE, ) 3, III

### IATA\_C:

UN1993, Flammable liquid, n.o.s. (METHYL NORMAL AMYL KETONE, ) 3, III

### CFR\_ROAD:

UN1993, Flammable liquids, n.o.s. (METHYL NORMAL AMYL KETONE, ) 3, III

### CFR\_RAIL:

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UN1993, Flammable liquids, n.o.s. (METHYL NORMAL AMYL KETONE, ) 3,  
III

**CFR\_INWTR:**

UN1993, Flammable liquids, n.o.s. (METHYL NORMAL AMYL KETONE, ) 3,  
III

**IMDG\_INWTR:**

UN1993, FLAMMABLE LIQUID, N.O.S. (METHYL NORMAL AMYL KETONE,  
) 3, III

**IMDG\_ROAD:**

UN1993, FLAMMABLE LIQUID, N.O.S. (METHYL NORMAL AMYL KETONE,  
) 3, III

**IMDG\_RAIL:**

UN1993, FLAMMABLE LIQUID, N.O.S. (METHYL NORMAL AMYL KETONE,  
) 3, III

Dangerous goods descriptions may not reflect package size, quantity, end-use or region-specific exceptions that can be applied to shipments. Consult shipping documents for material-specific descriptions.

**15. REGULATORY INFORMATION**

**California Prop. 65**

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

**Additional regulations**

US. OSHA Hazard Communication Standard: On One of the Floor Lists of the OSHA HCS (29 CFR 1910.1200).

US. High Production Volume Chemicals

OECD. Program to investigate the potential hazards of high production volume further work.

**SARA 313 Component(s)**

**OSHA Hazards**

Combustible Liquid  
Moderate skin irritant  
Moderate eye irritant

	<b>Health</b>	<b>Flammability</b>	<b>Reactivity</b>	<b>Other</b>
<b>HMIS</b>	1	2	0	

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NFPA                    1                    2                    0

**16. OTHER INFORMATION**

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).