

Common Name: METHYL n-BUTYL KETONE

Synonyms: Butyl Methyl Ketone; MBK; Propylacetone

CAS No: 591-78-6

 Molecular Formula: C₆H₁₂O

RTK Substance No: 1280

Description: Colorless liquid with an Acetone-like odor

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
2 - Health	FLAMMABLE LIQUID	Methyl n-Butyl Ketone reacts with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE).
3 - Fire	Use dry chemical, CO ₂ , water spray or alcohol-resistant foam as extinguishing agents.	Methyl n-Butyl Ketone is not compatible with STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE) and REDUCING AGENTS (such as LITHIUM, SODIUM, ALUMINUM and their HYDRIDES).
0 - Reactivity	Water may not be effective in fighting fires and solid streams of water may spread fire.	
DOT#: UN 1224	POISONOUS GASES ARE PRODUCED IN FIRE.	
ERG Guide #: 127	CONTAINERS MAY EXPLODE IN FIRE.	
Hazard Class: 3 (Flammable)	Use water spray to keep fire-exposed containers cool. Methyl n-Butyl Ketone may form an ignitable vapor/air mixture in closed tanks or containers.	

SPILL/LEAKS
Isolation Distance:

Spill: 50 meters (150 feet)

Fire: 800 meters (1/2 mile)

Absorb liquids in vermiculite, dry sand, earth, or a similar material and place into sealed containers for disposal.

Use only non-sparking tools and equipment, especially when opening and closing containers of **Methyl n-Butyl Ketone**.

Keep **Methyl n-Butyl Ketone** out of confined spaces, such as sewers, because of the possibility of an explosion.

DO NOT wash into sewer.

PHYSICAL PROPERTIES

Odor Threshold:	0.076 to 3 ppm
Flash Point:	77°F (25°C)
LEL:	1.2%
UEL:	8%
Auto Ignition Temp:	795°F (423°C)
Vapor Density:	3.5 (air = 1)
Vapor Pressure:	3.8 mm Hg at 77°F (25°C)
Specific Gravity:	0.8 (water = 1)
Water Solubility:	Slightly soluble
Boiling Point:	262°F (128°C)
Freezing Point:	-70.4 (-56.9°C)
Ionization Potential:	9.34 eV
Molecular Weight:	100.18

EXPOSURE LIMITS
NIOSH: 1 ppm, 10-hr TWA

ACGIH: 5 ppm, 8-hr TWA; 10 ppm, STEL

IDLH: 1,600 ppm

The Protective Action Criteria values are:

PAC-1 = 10 ppm PAC-2 = 1,500 ppm PAC-3 = 1,600 ppm

PROTECTIVE EQUIPMENT

Gloves:	Butyl, Polyvinyl Alcohol, Silver Shield®/4H®, and Barrier® (>8-hr breakthrough for Ketones)
Coveralls:	Tychem® F, BR, Responder®, and TK; Trellchem® HPS and VPS (>8-hr breakthrough for Ketones)
Respirator:	SCBA

HEALTH EFFECTS
Eyes: Irritation

Skin: Irritation

Inhalation: Nose and throat irritation with coughing and wheezing

Headache, dizziness, lightheadedness, and passing out

FIRST AID AND DECONTAMINATION
Remove the person from exposure.

Flush eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn.

Quickly remove contaminated clothing and wash contaminated skin with large amounts of soap and water.

Begin artificial respiration if breathing has stopped and CPR if necessary.

Transfer promptly to a medical facility.