

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 3 - Fire 0 - Reactivity DOT#: UN 1224 ERG Guide #: 127 Hazard Class: 3 (Flammable)	FLAMMABLE LIQUID Use dry chemical, CO ₂ , water spray or alcohol-resistant foam as extinguishing agents. Water may not be effective in fighting fires and solid streams of water may spread fire. POISONOUS GASES ARE PRODUCED IN FIRE. CONTAINERS MAY EXPLODE IN FIRE. 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.	Methyl n-Butyl Ketone reacts with OXIDIZING AGENTS (such as PERCHLORATES , PEROXIDES , PERMANGANATES , CHLORATES , NITRATES , CHLORINE , BROMINE and FLUORINE). 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).

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 <i>Ketones</i>)
Coveralls:	Tychem® F, BR, Responder®, and TK; Trelchem® HPS and VPS (>8-hr breakthrough for <i>Ketones</i>)
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.