

Common Name: **METHYL PROPYL KETONE**

Synonyms: Ethyl Acetone; MPK

CAS No: 107-87-9

 Molecular Formula: C₅H₁₀O

RTK Substance No: 1292

Description: Clear, colorless, liquid with a strong fruity odor

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
2 - Health 3 - Fire 0 - Reactivity DOT#: UN 1249 ERG Guide #: 127 Hazard Class: 3 (Flammable)	Use dry chemical, CO ₂ , alcohol-resistant foam or other foaming agent as extinguishing agents, as water may not be effective in fighting fires. POISONOUS GASES ARE PRODUCED IN FIRE. CONTAINERS MAY EXPLODE IN FIRE. Use water spray to keep fire-exposed containers cool. Vapors may travel to a source of ignition and flash back. Vapor is heavier than air and may travel a distance to cause a fire or explosion far from the source.	Methyl Propyl Ketone reacts explosively with BROMINE TRIFLUORIDE and OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE). Methyl Propyl Ketone is not compatible with STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE); REDUCING AGENTS (such as LITHIUM, SODIUM, ALUMINUM and their HYDRIDES); AMINES; ISOCYANATES; HYDROGEN PEROXIDE; ALDEHYDES; NITRIC ACID; and PERCHLORIC ACID.

SPILL/LEAKS
Isolation Distance:

Small Spills: 60 meters (200 feet)

Large Spills: 270 meters (900 feet)

Fire: 800 meters (1/2 mile)

Absorb liquids in vermiculite, dry sand, earth, or a similar material and deposit in sealed containers.

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

DO NOT wash into sewer.

Slowly biodegrades in water and soil.

PHYSICAL PROPERTIES

Odor Threshold:	11 ppm
Flash Point:	45°F (7°C)
LEL:	1.5%
UEL:	8.2%
Auto Ignition:	846°F (452°C)
Vapor Density:	3 (air = 1)
Vapor Pressure:	27 mm Hg at 68°F (20°C)
Specific Gravity:	0.8 (water = 1)
Water Solubility:	Slightly soluble
Boiling Point:	216°F (102°C)
Ionization Potential:	9.39 eV
Molecular Weight:	86.2

EXPOSURE LIMITS
OSHA: 200 ppm, 8-hr TWA

NIOSH: 150 ppm, 10-hr TWA

ACGIH: 150 ppm, STEL

IDLH: 1,500 ppm

PROTECTIVE EQUIPMENT

Gloves:	Butyl (<5-hr breakthrough) or Silver Shield®/4H® (>8-hr breakthrough)
Coveralls:	DuPont Tychem® CPF 4, BR, LV, Responder®, TK; Kappler® Zytron® 300; and Saint-Gobain ONESuit® TEC (>8-hr breakthrough for <i>Acetone</i>)
Respirator:	>150 ppm - Full facepiece APR with Organic vapor cartridge >1,000 ppm - Supplied air

HEALTH EFFECTS

Eyes:	Irritation
Skin:	Irritation, rash, dryness and redness
Inhalation:	Nose, throat and lung irritation with coughing, wheezing and shortness of breath Headache, dizziness, lightheadedness and passing out

FIRST AID AND DECONTAMINATION

Remove the person from exposure.
Immediately flush with large amounts of water for at least 15 minutes, lifting upper and lower lids. Remove contact lenses, if worn, while rinsing.
Quickly remove contaminated clothing. Immediately wash contaminated skin with large amounts of soap and water.
Begin artificial respiration if breathing has stopped and CPR if necessary.
Transfer to a medical facility.