

ACETONE

PRODUCT INFORMATION



General

ACETONE is a clear, colorless, volatile and highly flammable liquid with a sweetish odor. It is also completely soluble in water. ACETONE is used mostly for solvent applications as well as an ingredient of chemical reactions. Kumho's Acetone is produced by the oxidation of cumene.

IUPAC name : Propanone

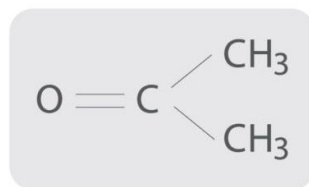
Synonyms : β-ketopropane, Dimethyl ketone, DMK
Dimethyl formaldehyde, Pyroacetic acid

Molecular formula : C₃H₆O

CAS number : 67-64-1

EINECS/ELINCS number : 200-662-2

Package : 160 kg / 200 l steel drum, bulk



Sales Specification

Appearance	Clear liquid
Purity, wt.%	99.7 Min.
Color, Pt/Co	5 Max.
Water content, wt%	0.3 Max.
Specific gravity 20/20 °C	0.790 ~ 0.793
Water miscibility	Complete
Distillation range, °C	1.0 Max. incl. 56.1 °C
Acidity as acetic acid, wt%	0.002 Max.
Permanganate time, minutes	150 Min.
Non-volatile matter, g/100ml	0.001 Max.



Typical Properties

Molecular Weight	58.08
Appearance	Clear liquid
Odor	Mild
Boiling point, °C	56
Melting point, °C	-95
Flash point, °C	-20
Autoignition temperature, °C	465
Vapour pressure @ 20°C, mmHg	180
Vapour density (air = 1)	2
Viscosity @ 25, cP	0.303



Uses

ACETONE is used for the production of methyl methacrylate, methyl isobutyl ketone(MIBK) and bisphenol-A, which is an ingredient of polycarbonate and epoxy resins. Quantities of ACETONE are also needed for the manufacturing methacrylic acid and higher acrylates that are used in polymers and coatings. In addition to its solvent applications, ACETONE is used in many other various applications.

Explosive limits by vol.%	(Lower) 2.2%
	(Upper) 13.0%
Specific gravity (H ₂ O = 1)	0.7899
Solubility in water	very good
in other solvents	almost good



Handling And Storage

Precautions for safe handling

- Avoid contact with incompatible materials.
- Refer to Engineering controls and personal protective equipment.
- Dealing only with a well-ventilated place.
- Do not handle until all safety precautions have been and understood.
- Do not inhale the steam prolonged or repeated.
- Avoid contact with heat, sparks, flame or other ignition sources.

Conditions for safe storage, including any incompatibilities

- Check regularly for leaks.
- Do not use damaged containers.
- Do not apply any physical shock to container.
- No open fire.
- Prevent static electricity and keep away from combustible materials or heat sources.
- Collected them in sealed containers.



Hazards Information

Hazards classification information

- Flammable liquids : Category2
- Serious eye damage/irritation : Category2A
- Specific target organ toxicity(Single exposure) : Category3(Narcotic effects)
- Aspiration hazard : Category2
- NFPA : Health : 1, Flammability : 3, Reactivity : 0 grade (0 ~ 4 level)

Human health hazards

- To man
- May be harmful if swallowed and enters airways
 - Causes serious eye irritation
 - May cause drowsiness and dizziness.

Environmental hazards

- To the environment
- toxic to fish, aquatic invertebrates and algae

