**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 :** 2-Propanone, Dimethyl ketone, DMK, Dimethyl formaldehyde, Pyroacetic acid

**Molecular Formula :** C₆H₁₂O  
**CAS number :** 67-64-1  
**EINECS/ELINCS number :** 200-852-2

**Package :** 160 kg / 200 L steel drum, bulk

**Sales Specification**

- **Appearance :** Clear liquid  
- **Purity, wt% :** 99.7 Max.
- **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.

**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 high acrylates that are used in polymers and coatings. In addition to its solvent applications, ACETONE is used in many other various applications.

**Handling And Storage**

**Precautions for safe handling :**
- Handle only at a well-ventilated place.
- Do not handle until all safety precautions have been read and understood.
- Operators should wear antistatic footwear and clothing.
- Avoid prolonged or repeated inhaling of the gas.
- Avoid contact with heat, sparks, flame or other ignition sources.

**Conditions for safe storage :**
- Store in a cool, dry and well-ventilated place.
- Follow applicable laws and regulations.
- Avoid direct sunlight.
- Keep away from open fire.
- Prevent static electricity.
- Keep away from combustible materials or heat sources.
- Carry in sealed containers.

**Hazards Information**

**Hazard classification information :**
- Serious eye damage / irritation : Category 2
- Flammable liquids : Category 2
- Generative toxicoid : Category 2
- Breath hazard : Category 2
- NFPA : Health : 1, Flammability : 3, Reactivity : 0

**Human health hazards :**
- Irritating to eyes

**Environmental hazards :**
- Toxic to fish, aquatic invertebrates and algae

**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 °C, cP :** 0.503

**Explosive limits by vol.%**

<table>
<thead>
<tr>
<th>Lower</th>
<th>Upper</th>
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<tr>
<td>2.2%</td>
<td>13.0%</td>
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**Specific gravity (H₂O = 1) :** 0.7899

**Solubility in water**
- Very good

**Solubility in other solvents**
- Almost good