



## SAFETY DATA SHEET

### ACETONE

#### 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: ACETONE  
Recommended use: Chemical for industrial  
Manufacturer/Supplier: **MODERN CHEMICAL CO.,LTD.**  
82/80 Soi Ekamai 22 (Nuannoi), Sukhumvit 63,  
Klong Tan Nuea, Watthana, Bangkok 10110  
Telephone No: 0-2715-0897-9, 0-2392-3410-3  
Fax No: 0-2715-0908-9, 0-2391-1571-2  
Emergency Telephone No: 0-2715-0897-9, 0-2392-3410-3

#### 2. HAZARDS IDENTIFICATION

##### Label elements

Pictogram



Signal word

Danger

##### Hazard statement(s):

- 1.) Highly flammable liquid and vapour.
- 2.) Causes eye irritation.
- 3.) May cause drowsiness or dizziness.
- 4.) May be fatal if swallowed and enters airways.

##### Precautionary statement(s):

- 1.) Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- 2.) Keep container tightly closed.
- 3.) Ground/bond container and receiving equipment.
- 4.) Use explosion-proof electrical ventilating, and lighting equipment.
- 5.) Use only non-sparking tools.



- 6.) Take precautionary measures against static discharge.
- 7.) Avoid breathing dust/fume/gas/mist/vapours/spray.
- 8.) Wash hand thoroughly after handling.
- 9.) Use only outdoors or in a well-ventilated area.
- 10.) Wear protective gloves/protective clothing/eye protection/face protection.
- 11.) IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- 12.) Do NOT induce vomiting.
- 13.) IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- 14.) In case of fire: Use appropriate media for extinction.
- 15.) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- 16.) If eye irritation persists. Get medical advice/ attention.
- 17.) IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- 18.) Call a POISON CENTER or doctor/physician if you feel unwell.
- 19.) Store in a well-ventilated place. Keep container tightly closed.
- 20.) Keep cool.
- 21.) Store locked up.
- 22.) Dispose of contents and container in accordance with local regulatory/national/international regulations

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Synonym:** 2-Propanone, Dimethyl Ketone,  $\beta$ -keto-propane, pyroacetic ether, Acetone, Prapan-2-one.

Ingredients	% (w/w)	CAS NO.
ACETONE	100	67-64-1

### 4. FIRST AID MEASURES

**General advice:**

No data available.

**Inhalation:**

Remove victim to fresh air. If cough or other respiratory symptoms develop, get medical attention. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**Skin contact:**

Wash material off the skin with copious amounts of soap and water. If irritation develops, get medical attention. Wash contaminated clothing and decontaminate footwear before reuse.



**Eye contact:** If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. Obtain medical attention.

**Ingestion:** If swallowed, do not induce vomiting; transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility : fever greater than 101 °F (38.3 °C), shortness of breath, chest congestion or continued coughing or wheezing. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Give nothing by mouth. Do not induce vomiting.

## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media:

Alcohol-resistant foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not discharge extinguishing waters into the aquatic environment.

### Unsuitable Extinguishing Media:

Do not use water in a jet.

### Specific hazards arising from Chemicals:

Containers exposed to intense heat from fires should be cooled with large quantities of water. The vapour is heavier than air, spreads along the ground and distant ignition is possible along the ground and distant ignition is possible.

### Special protective equipment for fire-fighters :

Wear full protective clothing and self-contained breathing apparatus.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions:

Isolate hazard area and deny entry to unnecessary or unprotected personnel. Stay upwind and keep out of low areas.

### Environmental precautions:

Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment (of product and fire fighting water) to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding ( earthing ) all equipment.



## Methods and Material for Containment and Clean Up:

For small liquid spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

## 7. HANDING AND STORAGE

### Precautions for Safe Handling & Product Transfer:

Avoid inhaling vapour and/or mists. Avoid contact with skin, eyes and clothing. Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge. Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations.

Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Keep containers closed when not in use. Do not use compressed air for filling, discharging or handling.

### Conditions for Safe Storage & Unsuitable Materials:

Must be stored in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Keep away from aerosols, flammable, oxidizing agents, corrosives and from other flammable products which are not harmful or toxic to man or to the environment.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational Exposure Limits:** TWA 500 - 750 ppm, STEL 750 - 1000 ppm.

**Appropriate Engineering Controls:** Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits. Eye washes and showers for emergency use.

### Individual Protection Measures

**Respiratory protection:** Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for organic gases and vapours. Where air-filtering respirators are unsuitable (e.g. airborne concentrations are high, risk of



oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.

**Hand protection:** Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739, AS/NZS:2161) made from the following materials may provide suitable chemical protection: Longer term protection: Nitrile rubber gloves. Incidental contact/Splash protection: PVC or neoprene rubber gloves.

**Eye protection:** Chemical splash goggles (chemical monogoggles).

**Skin and body Protection:** Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.

**Hygiene measure:** No data available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Form:</b> Color and Odor: liquid, colorless, Ketonic odor	<b>Evaporation rate :</b> 5.6 (nBuAc =1)
<b>Melting Point:</b> -94 °C	<b>Specific gravity :</b> 0.791 - 0.794 g/cm <sup>3</sup> at 20 °C
<b>pH:</b> N/A	<b>Solubility in water :</b> Soluble
<b>Boiling point :</b> 56.0 – 56.1 °C	<b>Viscosity :</b> N/A
<b>Vapour pressure:</b> 24.7 kPa at 20 °C	<b>Vapour density:</b> 2 g/l at 20 °C
<b>Lower explosion limits:</b> 2.1 – 2.6 %Vol	<b>Upper explosive limit:</b> 12.8 – 13.0 %Vol
<b>Auto-ignition temperature:</b> 540 - 560 °C	<b>Flash point:</b> (-18) - 18 °C
<b>Odour threshold:</b> N/A	<b>Flammability (solid, gas):</b> N/A
<b>Decomposition temperature:</b> N/A	<b>Solubility in other solvents:</b> N/A
<b>n-octanol/water partition coefficient (log P<sub>ow</sub>):</b> 0.20	

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable under recommended storage conditions.

**Reactions:** No data available.

**Possibility of Hazardous Reactions:** Polymerization will not occur.

**Conditions to avoid:** Avoid any source of ignition. Avoid contact with heat, sparks, open flame, and static discharge.

**Materials to be avoided:** Strong oxidizers, peroxides, strong acids, amines.



**Hazardous Decomposition Products:** Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** LD50 (Oral, rat): >5000 mg/kg

LD50 (Dermal, rabbit): >5000 mg/kg

**Sensitization:** Inhalation of vapours or mists may cause irritation to the respiratory system.

Causes mild skin irritation. Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis. Essentially non-irritating to eyes. Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

**Chronic toxicity:** Not carcinogenic. May cause drowsiness or dizziness.

**Further toxicological information:** Exposure may enhance the toxicity of other materials.

## 12. ECOLOGICAL INFORMATION

### Toxicity

Toxicity to fish: LC50 - Blugil sunfish: 8300 ppm - 96h

Toxicity to daphnia and other aquatic invertebrates:

LC50 - Daphnia magna: 10 ppm - 48h

Toxicity to algae: Practically non toxic: LL/EL/IL50 >100 mg/l

Toxicity to bacteria: Practically non toxic: LL/EL/IL50 >100 mg/l

Biodegradability remark: Readily biodegradable.

Bioaccumulative potential: Not expected to bioaccumulate significantly.

Mobility: If product enters soil, one or more constituents will be mobile and may contaminate groundwater. Dissolves in water.

Affected in any other way: No data available.



### 13. DISPOSAL CONSIDERATIONS

**Material Disposal:**

Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses. Waste product should not be allowed to contaminate soil or water.

**Container Disposal:**

Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not, puncture, cut, or weld uncleaned drums. Send to drum recoverer or metal reclaimer.

### 14. TRANSPORT INFORMATION

**ADR/RID**

UN-No: 1090

Class: 3

Packing group: II

Proper shipping name: ACETONE

**IMDG**

UN-No: 1090

Class: 3

Packing group: II

Ems: F-E S-D

Marine pollutant: No

Proper shipping name: ACETONE

**IATA**

UN-No: 1090

Class: 3

Packing group: II

Proper shipping name: ACETONE

### 15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

AICS	: y	
DSL	: y	
INV (CN)	: y	
ENCS(JP)	: y	(2)-542
TSCA	: y	
EINECS	: y	200-662-2
KECI (KR)	: y	KE-29367
PICCS (PH)	: y	



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OSHA Status:

This Product is hazardous under the criteria of federal OSHA Hazard Communication standard 29 CFR 1910. 1200.

TCCA Status:

This product is listed on the TSCA Inventory.

## 16. OTHER INFORMATION

Modern Chemical Co., Ltd. provides the information contained herein in good faith but makes no representation as to its comprehensive or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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