



# SAFETY DATA SHEET

## DIACETONE ALCOHOL

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

Product name: DIACETONE ALCOHOL

Recommended use: Chemical for industry.

Manufacturer/Supplier: **MODERN CHEMICAL CO.,LTD.**  
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### 2. HAZARDS IDENTIFICATION

#### Label elements

Pictogram



Signal word

Danger

#### Hazard statement(s)

- 1.) Highly flammable liquid and vapour.
- 2.) Causes skin irritation.
- 3.) May be fatal if swallowed and enters airways.
- 4.) May cause drowsiness or dizziness.
- 5.) Toxic to aquatic life with long lasting effects.
- 6.) May damage the unborn child. Suspected of damaging fertility.

#### Precautionary statement(s)

- 1.) Keep away from heat/sparks/open flames/hot surfaces. - No smoking.



- 2.) Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
- 3.) Avoid release to the environment.
- 4.) IF SWALLOWED: call a doctor/physician. Do NOT induce vomiting.
- 5.) IF IN EYES: Rinse cautiously with water for 15 minutes.
- 6.) IF ON SKIN Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Synonym:** 4-Hydroxy-4-methyl-2-pentanone, 2-Methyl-2-pentanol-4-one, DAA, tyranton

Ingredients	% (w/w)	CAS NO.
DIACETONE ALCOHOL	100	123-42-2

### 4. FIRST AID MEASURES

- General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance.
- Inhalation:** If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.
- Skin contact:** Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
- Eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- Ingestion:** **Do NOT induce vomiting.** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable Extinguishing Media:**

No data available

**Specific hazards arising from Chemicals:**

No data available

**Special protective equipment for fire-fighters:**

Wear self contained breathing apparatus for fire fighting if necessary.



## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### Methods and Material for Containment and Clean Up:

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling & Product Transfer:

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

### Conditions for Safe Storage & Unsuitable Materials:

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**National occupational exposure limits:** TWA 400 ppm

**Appropriate Engineering Controls:** The product should only be used in ventilation hoods and fans.

### Personal protective equipment

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).



- Hand protection:** The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.  
Handle with gloves.
- Eye protection:** Safety glasses with side-shields conforming to EN166
- Skin and body protection:** Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Hygiene measures:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Form, Color and Odor:</b> liquid, colourless, characteristic	<b>Evaporation rate:</b> 14 (n-Bu Acetate = 100)
<b>Melting Point:</b> -54 °C	<b>Specific gravity:</b> 0.9310-0.9410 g/cm <sup>3</sup> at 27 °C
<b>pH:</b> N/A	<b>Solubility in water:</b> Soluble
<b>Boiling point:</b> 135-175 °C	<b>Viscosity:</b> N/A
<b>Vapour pressure:</b> 1.1 hPa at 20 °C	<b>Vapour density:</b> 5.17 g/l
<b>Lower explosive limits:</b> 1.8 %Vol	<b>Upper explosive limits:</b> 6.9 %Vol
<b>Auto-ignition temperature:</b> 603 °C	<b>Flash Point:</b> 52°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> N/A	

## 10. STABILITY AND REACTIVITY

- Chemical stability:** Stable under recommended storage conditions.
- Reactions:** No data available
- Possibility of Hazardous Reactions:** No data available
- Conditions to avoid:** Heat, flames and sparks.
- Materials to avoid:** Oxidizing agents, Strong bases
- Hazardous decomposition products:** Carbon oxides



## 11. TOXICOLOGICAL INFORMATION

<b>Acute toxicity:</b>	LD50 Oral - rat - 400 mg/kg
<b>Sensitization:</b>	Toxic if inhaled. May cause respiratory tract irritation. May be harmful if swallowed. May be harmful if absorbed through skin. May cause skin irritation. Causes eye burns.
<b>Chronic toxicity:</b>	No data available
<b>Further toxicological information:</b>	No data available

## 12. ECOLOGICAL INFORMATION

### Toxicity

Toxicity to fish:	LC50 - Lepomis macrochirus (Bluegill) - 420 mg/l - 96 h
Toxicity to algae	No data available
Toxicity to bacteria	No data available
Toxicity to daphnia and other aquatic invertebrates:	EC50 - Daphnia magna (Water flea) - 9.000 mg/l - 24 h
<b>Biodegradability Remarks:</b>	No data available
<b>Bioaccumulative potential:</b>	No data available
<b>Mobility:</b>	No data available
<b>Affected in any other way:</b>	No data available

## 13. DISPOSAL CONSIDERATIONS

<b>Material Disposal:</b>	Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.
<b>Container Disposal:</b>	Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### ADR/RID

UN-No: 1148	Class: 3	Packing group: III
Proper shipping name: DIACETONE ALCOHOL		



### IMDG

UN-No: 1148 Class: 3 Packing group: III

EMS-No: F-E S-D Marine pollutant: No

Proper shipping name: DIACETONE ALCOHOL

### IATA

UN-No: 1148 Class: 3 Packing group: III

Proper shipping name: Diacetone alcohol

## 15. REGULATORY INFORMATION

### GHS - Labelling:

#### Hazard statement(s)

H226 Flammable liquid and vapour.

H318 Causes serious eye damage.

H331 Toxic if inhaled.

#### Precautionary statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/eye protection/face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### Hazard symbol(s)

Xi Irritant

#### R-phrases(s)

R36 Irritating to eyes.

#### S-phrases(s)

S24/25 Avoid contact with skin and eyes.

## 16. OTHER INFORMATION

Modern Chemical Co.,Ltd. provides the information contained herein in good faith but makes no representation as to its comprehensiveness 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



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receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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