บริษัท โมเดอนเคมีเคิล จำกัด (สำนักงานใหญ่) (MODERN CHEMICAL CO.,LTD. (Head Office))
82/80 ซอยเอกมัย 22(นวลน้อย) ถ.สุขุมวิท 63 แขวงคลองตันเหนือ เขตวัฒนา กรุงเทพมหานคร 10110 โทร0-2715-0897-9 แฟกซ์.0-2392-3410-3
82/80 Soi Eakmai 22(nuan-noi) 63 Sukhumvit Rd, North Klong Ton, Wattana, Bangkok 10110 E-mail : service@modernchemical.co.th

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.**
	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 Warning

Hazard statement(s):

1.) Causes serious eye irritation.

2.) Flammable liquid 3.

3.) Causes respiratory tract irritation STOT SE 3

Precautionary statement(s):

1.) Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

2.) Use explosion-proof electrical/ventilating/lighting/equipment.

3.) IF ON SKIN Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

5.) Store locked up.

6.) Dispose of contents/container in accordance with local/regional/national/international regulations.

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:

For small fire use dry chemical powder, Carbon dioxide, alcohol-resistant foam water fog, sand. For large fire use alcohol-resistant form or water fog.

Unsuitable Extinguishing Media:

No data available

Specific hazards arising from Chemicals:

No further relevant information available.

Special protective equipment for fire-fighters:

Wear self-contained breathing apparatus for fire fighting if necessary. Use water spray to cool unopened containers.

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: Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

Methods and Material for Containment and Clean Up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). 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.

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 away from incompatible materials. Store away from moisture.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National occupational exposure limits: Not required.

Appropriate Engineering Controls: No data available.

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: Protective gloves. The glove material has to be impermeable and resistant to the product / the substance / the preparation.

Eye protection: Tightly sealed goggles.

Skin and body protection: Complete suit protecting against chemicals. Flame antistatic protective clothing. The type of protective equipment must be selected according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures: Immediately remove all soiled and contaminated clothing. Wash hands before breaks and after at the end of work. Avoid contact with skin and eyes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form, Color and Odor :liquid, colorless, Pleasant	**Evaporation rate :** 0.15 (Butyl Acetate = 1)
Melting Point : -47 °C	**Specific gravity :** 0.938 - 0.941 g/cm^3 at 20 °C
pH : N/D	**Solubility in water :** > 1000 mg/l
Boiling point : 150-172 °C	**Viscosity :** 2.9 mPa/s
Vapour pressure : 1.1 hPa at 20 °C	**Vapour density :** 4 (air=1)
Lower explosive limits : 1.4 % Vol	**Upper explosive limits :** 8.1 % Vol
Auto-ignition temperature : 620 °C	**Flash Point :** 58 °C
Odour threshold : 0.28 ppm	**Flammability (solid, gas) :** N/A
Decomposition temperature : N/D	**Solubility in other solvents :** N/A
n-octanol/water partition coefficient (log P_{ow}) : 1.9	

10. STABILITY AND REACTIVITY

Chemical stability: Under storage at normal ambient temperatures (minus 40°C to + 40°C), the product is stable. No hazardous reaction when handled and stored according to provisions.

Reactions: No dangerous reactions known.

Possibility of Hazardous Reactions: No known hazardous reactions.

Conditions to avoid: Heat, flames and sparks.

Materials to avoid: Strong oxidizing agents, Strong bases.

Hazardous decomposition products: Carbon oxides**.**

11. TOXICOLOGICAL INFORMATION

Acute toxicity: LD50 (Oral, rat): 4000 mg/kg

LD50 (Dermal, rat): 13630 mg/kg

Sensitization: May cause skin minimally irritating (rabbit). May be harmful if absorbed through skin. Causes eye severe eye irritation 24h (rabbit). If single exposure is inhalation, may cause respiratory irritation and lunge.

Chronic toxicity: No component of this product present ay levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Further toxicological information: No data available

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish: LC50 - Lepomis macrochirus: 420 mg/l -96h

Toxicity to daphnia and other aquatic invertebrates: LC50 - Daphnia magna: 9000 mg/l -24h

Toxicity to algae: No data available.

Toxicity to bacteria: No data available.

Biodegradability Remarks: Biodegradation readily biodegradable; 98.51% in 28d.

Bioaccumulative potential: Not expected to bioaccumulate.

Mobility: No further relevant information available.

Affected in any other way: No further relevant information available.

13. DISPOSAL CONSIDERATIONS

Material Disposal: 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.

Container Disposal: Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

ADR/RID

UN-Number: 1148 Class: 3 Packing group: III

Proper shipping name: DIACETONE ALCOHOL

IMDG

UN-Number: 1148 Class: 3 Packing group: III

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

Proper shipping name: DIACETONE ALCOHOL

IATA

UN-Number: 1148 Class: 3 Packing group: III

Proper shipping name: Diacetone alcohol

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of COMMISSION REGULATION (EU) No.453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006

Hazard pictograms Please refer section 2

Signal word Warning

Labeling according to EU guidelines:

Code letter and hazard designation of product: Please refer section 2

Risk phrases: Please refer section 2

15.2 Chemical safety assessment A Chemical Safety Assessment has not been carried out and will be applicable at the time of REACH Registration.

Substance of very high concern (SVHC) according to REACH, Article 57 The substance is not listed as SVHC.

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

MODERN CHEMICAL CO., LTD. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MODERN CHEMICAL CO.,LTD. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.