

Section 1. Product and Company Identification

**Product Name** Diacetone Alcohol  
**CAS Number** 123-42-2

**Parchem - fine & specialty chemicals**  
**415 Huguenot Street**  
**New Rochelle, NY 10801**  
☎ (914) 654-6800 ☎ (914) 654-6899  
🌐 [parchem.com](http://parchem.com) ✉ [info@parchem.com](mailto:info@parchem.com)

EMERGENCY RESPONSE NUMBER  
CHEMTEL  
Toll Free US & Canada: 1 (800) 255-3924  
All other Origins: 1 (813) 248-0585  
Collect Calls Accepted

Section 2. Hazards Identification

**Classification of the substance or mixture**  
**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**  
Flammable liquids (Category 3), H226  
Eye irritation (Category 2A), H319

**GHS Label Elements**  
**Pictograms:**



**Signal word:** WARNING

**Hazard and precautionary statements**  
**Hazard Statements**

H226 Flammable liquid and vapor.  
H319 Causes serious eye irritation.

**Precautionary Statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/eye protection/face protection.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.



P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.  
P403 + P235 Store in a well-ventilated place. Keep cool.  
P501 Dispose of contents/container to an approved waste disposal plant.

**Hazards not otherwise classified (HNOC) or not covered by GHS:** None

Section 3. Composition / Information on Ingredients

**Common Name** Diacetone Alcohol  
**Synonym(s)** 4-Hydroxy-4-Methyl-2-Pentanone  
**Formula** C<sub>6</sub>H<sub>12</sub>O<sub>2</sub>  
**CAS Number** 123-42-2

COMPONENT	CAS NUMBER	CONCENTRATION
Diacetone Alcohol	123-42-2	<= 100%

Section 4. First Aid Measures

**Description of first-aid measures**

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**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. 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.

**Most important symptoms and effects, both acute and delayed:** The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

**Indication of any immediate medical attention and special treatment needed:** No data available

Section 5. Firefighting Measures

**Extinguishing media**

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

**Special hazards arising from the substance or mixture:** Carbon oxides

**Advice for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.



**Further information:** Use water spray to cool unopened containers.

Section 6. Accidental Release Measures

**Personal precautions, protective equipment, and emergency procedures:** Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

For personal protection see section 8.

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

**Methods and materials for containment and cleaning 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).

**Reference to other sections:** For disposal see section 13.

Section 7. Handling and Storage

**Precautions for safe handling:** Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge. For precautions see section 2.

**Conditions for safe storage, including any incompatibilities:** 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.

Storage class (TRGS 510): Flammable liquids

Section 8. Exposure Controls / Personal Protection

**Control parameters**

**Components with workplace control parameters**

Component	CAS-No.	Value	Control parameters	Basis
4-Hydroxy-4-methylpentan-2-one	123-42-2	TWA	50.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Upper Respiratory Tract irritation Eye irritation		
		TWA	50.000000 ppm 240.000000 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
		TWA	50.000000 ppm	USA. Occupational Exposure



			240.000000 mg/m <sup>3</sup>	Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		The value in mg/m <sup>3</sup> is approximate.		
		TWA	50 ppm 240 mg/m <sup>3</sup>	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000

### Exposure controls

**Appropriate engineering controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### Personal protective equipment

**Eye/face protection:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection:** Impervious clothing. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose 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).

**Control of environmental exposure:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## Section 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

**Appearance:** Clear, liquid

**Color:** Light yellow

**Odor:** No data available

**Odor Threshold:** No data available

**pH:** No data available

**Melting point/freezing point:** No data available

**Initial boiling point and boiling range:** 166°C (331°F) - lit.

**Flash point (Closed Cup):** 58°C (136°F)

**Evaporation rate:** No data available

**Flammability (solid, gas):** No data available



**Upper/lower flammability or explosive limits**

**Upper explosion limit:** 6.9% (V)

**Lower explosion limit:** 1.8% (V)

**Vapor pressure:** No data available

**Vapor density:** 4.01 - (Air = 1.0)

**Relative density:** 0.931 g/cm<sup>3</sup> at 25°C (77°F)

**Water solubility:** No data available

**Partition coefficient (n-Octanol/water):** No data available

**Auto-ignition temperature:** No data available

**Decomposition temperature:** No data available

**Viscosity:** No data available

**Explosive properties:** No data available

**Oxidizing properties:** No data available

**Other safety information**

**Relative vapor density:** 4.01 - (Air = 1.0)

Section 10. Stability and Reactivity

**Reactivity:** No data available

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

**Possibility of hazardous reactions:** No data available

**Conditions to avoid:** Heat, flames, and sparks.

**Incompatible materials:** Oxidizing agents, Strong bases

**Hazardous decomposition products**

**Other decomposition products:** No data available

In the event of fire: see section 5

Section 11. Toxicological Information

**Information on toxicological effects**

**Acute toxicity**

LD50 Oral - Rat: 2,520 mg/kg

Remarks

Behavioral: Tremor. Convulsions or effect on seizure threshold.

Liver: Other changes.

LC50 Inhalation - Rat: > 10 mg/l (4h)

LD50 Dermal - Rabbit: 13,500 mg/kg

**Skin corrosion/irritation:** No data available



**Serious eye damage/eye irritation**

Eyes - Rabbit

Result: Severe eye irritation - 24h

**Respiratory or skin sensitization:** No data available

**Germ cell mutagenicity:** No data available

**Carcinogenicity**

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

**ACGIH:** No component of this product, present at levels greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by ACGIH.

**NTP:** No component of this product, present at levels greater than or equal to 0.1%, is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product, present at levels greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** No data available

**Specific target organ toxicity - single exposure:** No data available

**Specific target organ toxicity - repeated exposure:** No data available

**Aspiration hazard:** No data available

**Additional Information**

**RTECS:** SA9100000

Central nervous system depression, Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness., Blood disorders, Dermatitis, Blurred vision, Effects due to ingestion may include:, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence

Section 12. Ecological Information

**Toxicity**

**Toxicity to fish**

LC50 - Lepomis macrochirus (Bluegill): 420 mg/l (96 h)

**Toxicity to daphnia and other aquatic invertebrates**

EC50 - Daphnia magna (Water flea): 9,000 mg/l (24 h)

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**Results of PBT and vPvB assessment:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other adverse effects:** No data available



Section 13. Disposal Considerations

**Waste Treatment Methods:** Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

**DOT (US)**

**UN number:** 1148

**Class:** 3

**Packing group:** III

**Proper shipping name:** Diacetone Alcohol

**Reportable Quantity (RQ):** N/A

**Poison Inhalation Hazard:** No

**IMDG**

**UN number:** 1148

**Class:** 3

**Packing group:** III

**EMS-No:** F-E, S-D

**Proper shipping name:** Diacetone Alcohol

**IATA**

**UN number:** 1148

**Class:** 3

**Packing group:** III

**Proper shipping name:** Diacetone Alcohol

Section 15. Regulatory Information

**SARA 302 Components:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right to Know Components**

4-Hydroxy-4-methylpentan-2-one (CAS-No. 123-42-2)

Revision Date: 1993-04-24

**Pennsylvania Right to Know Components**

4-Hydroxy-4-methylpentan-2-one (CAS-No. 123-42-2)

Revision Date: 1993-04-24



**New Jersey Right to Know Components**

4-Hydroxy-4-methylpentan-2-one (CAS-No. 123-42-2)

Revision Date: 1993-04-24

**California Prop. 65 Components:** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**HMIS Rating**

**Health:** 2\*

**Flammability:** 2

**Reactivity:** 0

**NFPA Rating**

**Health:** 2

**Flammability:** 2

**Reactivity:** 0

Section 16. Other Information

**Disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

REVISION DATE: 3/2/2016

