

MATERIAL SAFETY DATA SHEET



DATE PREPARED: 08/16/2005

MSDS No: DA

DIACETONE ALCOHOL

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: DIACETONE ALCOHOL**PRODUCT CODE:** DA**ALTERNATE TRADE NAME(S):** 4-Hydroxy-4-methylpentanone-2**MANUFACTURER**

Distributed by Tarr, LLC

P.O. Box 12570

Portland, OR 97212

Customer Service: 503-288-5294**24 HR. EMERGENCY TELEPHONE NUMBERS****CHEMTREC (US Transportation) :**(800) 424 - 9300**CANUTEC (Canadian Transportation) :**(613) 996 - 6666

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Wt. %</u>	<u>CAS#</u>
Diacetone alcohol	> 99	123-42-2

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200):

<u>Chemical Name</u>	<u>EXPOSURE LIMITS</u>					
	<u>OSHA PEL</u>		<u>ACGIH TLV</u>		<u>Supplier</u>	
	<u>ppm</u>	<u>mg/m³</u>	<u>ppm</u>	<u>mg/m³</u>	<u>ppm</u>	<u>mg/m³</u>
Diacetone alcohol	TWA 50		50			

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS**EYES:** Moderately irritating to the eyes.**SKIN:** Substance may cause slight skin irritation.**INGESTION:** Chronic exposure may cause liver and kidney damages.**INHALATION:** Not expected to present a significant inhalation hazard under anticipated conditions of normal use. Symptoms of overexposure to vapors include anesthetic effects, irritation of the respiratory tract and the mucous membranes.**SUBCHRONIC/CHRONIC TOXICITY****CHRONIC:** Liver and kidney damage in experimental animals.**CARCINOGENICITY:** Not listed as a carcinogen by the NTP, IARC, or OSHA.**MEDICAL CONDITIONS AGGRAVATED:** Pre-existing dermatitis may be aggravated. Individuals suffering from cardiovascular and/or pulmonary insufficiency may be at added risk upon overexposure due to the potential of red blood cell hemolysis and accompanying anemia.**HEALTH HAZARDS:** Other data: Diacetone alcohol has caused liver damage and destruction of red blood cells after a single administration at high dosage levels (2 ML/KG) to laboratory animals.

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention.

SKIN: Remove contaminated clothing/shoes. Flush skin with water. Follow by washing with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned.

INGESTION: Never induce vomiting and never administer anything by mouth to an unconscious person. Give 500 ml water to drink and induce vomiting if victim is completely conscious/alert. Seek medical advice.

INHALATION: Remove from exposure to fresh air. If not breathing, give artificial respiration or if breathing is difficult, oxygen should be administered by qualified personnel. Get medical aid if cough or other symptoms appear.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: 54.4°C (126°F) to (133°F)

FLAMMABLE LIMITS: 0 to 0

AUTOIGNITION TEMPERATURE: 643°C

EXTINGUISHING MEDIA: Foam, carbon dioxide, dry chemical. To prevent frothing, do not use a water jet.

FIRE FIGHTING PROCEDURES: WARNING! Flammable Liquid. Clear fire area of unprotected personnel. Do not enter confined fire space without full bunker gear, including a positive pressure NIOSH approved SCBA. Cool fire exposed containers with water.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Remove all sources of ignition and provide ventilation. Wear protective clothing as given in section 8. Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material with adsorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal.

RELEASE NOTES: Reacts vigorously with strong oxidizers and acids.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Avoid breathing of or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see Section 8 of this Material Safety Data Sheet. Use the information in this data sheet as input to risk assessment of local circumstances to help determine appropriate controls for safe handling storage and disposal of this material.

COMMENTS: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue and can be dangerous. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

PERSONAL PROTECTION

EYES AND FACE: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

SKIN: Wear chemical resistant gloves such as: Neoprene or consult your safety equipment supplier. Depending on the conditions of use, protective gloves, apron, boots, head and face protection should be worn. The equipment must be cleaned thoroughly after each use.

RESPIRATORY: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. If use conditions generate vapors or mists, wear a NIOSH-approved respirator appropriate for those emission levels. Appropriate respirators may be a full facepiece air-purifying cartridge respirator equipped for organic vapors/mists., a self-contained breathing apparatus in the pressure demand mode, or a supplied-air respirator.

WORK HYGIENIC PRACTICES: Use good personal hygiene when handling this product. Wash hands after use, before eating, drinking, smoking, or using the toilet.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Mild odor.

APPEARANCE: Colorless (material may turn yellow in time)

VAPOR PRESSURE: 1 at 20.°C

VAPOR DENSITY: 4 (Air=1)

BOILING POINT: (336°F) to (336°F)

MELTING POINT: (-45.°F)

SOLUBILITY IN WATER: Soluble

EVAPORATION RATE: < 1 (n-Butyl Acetate=1)

SPECIFIC GRAVITY: 0.94

(VOC): 99

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Do not store near oxidizing agents or acidic material.

STABILITY: Stable under normal conditions. Material may turn yellow in time.

HAZARDOUS DECOMPOSITION: Carbon monoxide and unidentified organic compounds may be formed during combustion.

INCOMPATIBLE MATERIALS: Do not store near oxidizing agents or acidic material.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: 13630 mg/kg (rabbit)

ORAL LD₅₀: 4000 mg/kg (rat)

REPRODUCTIVE TOXIN: No appropriate human or animal health effects data are known to exist per our supplier.

MUTAGENICITY: No appropriate human or animal health effects data are known to exist per our supplier.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Easily biodegradable under aerobic conditions.

ECOTOXICOLOGICAL INFORMATION: Slightly toxic to aquatic organisms.

GENERAL COMMENTS: Bio-accumulative potential: Slight. material is soluble in water. Risk of infiltration in the soil.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: The preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

EMPTY CONTAINER: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue and can be dangerous. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition.

RCRA/EPA WASTE INFORMATION: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.

US EPA guidelines for the classification determination are listed in 40 CFR.

Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: DiAcetone Alcohol
PRIMARY HAZARD CLASS/DIVISION: 3
UN/NA NUMBER: UN 1148
PACKING GROUP: III
LABEL: Flammable liquid
NAERG: 129

VESSEL (IMO/IMDG)

EUROPEAN TRANSPORTATION:
ADR/RID HAZARD CLASSIFICATION: 3
ADR/RID ITEM NUMBER: 31° c

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: YES **PRESSURE GENERATING:** NO **REACTIVITY:** NO **ACUTE:** YES **CHRONIC:** YES

311/312 HAZARD CATEGORIES: This product should be reported as an immediate (acute) health hazard, delayed (chronic) health hazard, and a fire hazard.

313 REPORTABLE INGREDIENTS: To the best of our knowledge, this product is not listed as a toxic chemical.

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: To the best of our knowledge, this product is not listed as an extremely hazardous substance.

16. OTHER INFORMATION

APPROVAL DATE: 08/16/2005

PREPARED BY: P. Rodabaugh

REVISION SUMMARY New MSDS

NFPA CODES

FIRE: 2 **HEALTH:** 1 **REACTIVITY:** 0

HMIS CODES

FLAMMABILITY: 2 **HEALTH:** 1 **PHYSICAL HAZARD:** 0 **PERSONAL PROTECTION:** G

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