



Product Information (203) 740-3471 / Emergency Assistance CHEMTREC 1-800-424-9300 or 202-483-7616

MATERIAL SAFETY DATA SHEETS

Part Number/Trade Name: Diacetone Alcohol
This MSDS is valid for all grades and catalog numbers

Chemical Name: 2-Pentanone, 4-Hydroxy-4-methyl-
Chemical Family: Keto-alcohol

General Information

Company's Name: PHARMCO PRODUCTS, INC.
Company's Street: 58 VALE RD.
Company's City: BROOKFIELD
Company's State: CT
Company's Zip Code: 06804
Company's Emerg Ph #: (203) 740-3471
Company's Info Ph #: (203) 740-3471

Date MSDS Revised: 5/11/00
Safety Data Review Date: 5/11/00
Preparer's Company: PHARMCO PRODUCTS, INC.
Preparer's St Or P. O. Box: 58 VALE RD.
Preparer's City: BROOKFIELD
Preparer's State: CT
Preparer's Zip Code: 06804

Ingredients/Identity Information

Ingredient: Diacetone Alcohol
Ingredient Sequence Number: 01
Percent: 100
NIOSH (RTECS) Number: SA9100000

CAS Number: 123-42-2
OSHA PEL: 50 ppm, 240 mg/cum
ACGIH TLV: 50 ppm, 328 mg/cum
Other Recommended Limit: 50ppm

Physical/Chemical Characteristics

Appearance and Odor: Colorless, Mobile Liquid. Faint, pleasant odor.
Boiling Point: 342°F
Melting Point: -47°F
Vapor Pressure (MM Hg/70 F): 0.85 @ 68°F
Vapor Density (Air=1): 4
Evaporation Rate And Ref: (N-BU AC = 1): 0.12
Specific Gravity (H₂O = 1): 0.94
Solubility in Water: Complete
VOC: 100% @ 7.79 lb/gal

Fire and Explosion Hazard Data

Flash Point: 133°F

Flash Point Method: TCC

Lower Explosive Limit: 1.8%

Upper Explosive Limit: 6.9%

Extinguishing Media: Dry chemical, CO₂, water fog, "alcohol" foam.

Special Fire Fighting Procedure: Caution, Combustible. Don't enter confined fire space without full gear: helmet with face shield, bunker coats, gloves and rubber boots, including a positive pressure NIOSH approved self

contained breathing apparatus. Cool fire exposed containers with water.

Unusual Fire and Explosion Hazards:

Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure build

up which could result in container rupture.

Container areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent weakening of container structure.

Reactivity Data

Stability: Stable

Hazardous Polymerization: Will not occur

Conditions To Avoid (Stability): Avoid heat, flame and contact with strong oxidizing agents.

Materials to Avoid: Air, water, acids, bases, oxidizing agents (chlorine dioxide), aluminum.

Hazardous Decomposition Products: Carbon monoxide and unidentified organic compounds may be formed during combustion.

Health Hazard Data

Route Of Entry - Eyes: Liquid is moderately irritating to the eyes. High vapor concentrations may also be irritating.

Route Of Entry - Inhalation: High vapor concentrations may cause CNS depression. Lower concentrations may irritate nose, throat, and respiratory tract.

Route Of Entry - Skin: Liquid is minimally irritating to the skin. Prolonged or repeated liquid contact can result in de-fatting and drying of the skin which may result in skin irritation and dermatitis.

Route Of Entry - Ingestion: Liquid is moderately toxic and may be harmful if swallowed. May produce CNS depression.

Signs/Symptoms Of Overexposure: Irritation as noted above. Early to moderate CNS (Central Nervous System) depression may be evidenced by giddiness, headache, dizziness and nausea. In extreme cases, unconsciousness and death may occur.

Medical Conditions Aggravated by Exposure: Pre-existing eye, skin and respiratory disorders may be aggravated by exposure to this product.

Emergency/First Aid Procedure:

Eyes: Flush w/water for at least 15 minutes while holding eyelids open. Get medical attention.

Skin: Wash contaminated skin w/mild soap and water. Obtain medical attention in all cases.

Inhalation: Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.

Ingestion: Do not give liquids if victim is unconscious or very drowsy, and guard against aspiration into lungs by having individual turn on left side.. Otherwise, give no more than 2 glasses of water and induce

vomiting by giving 30cc (2 tablespoons) syrup of ipecac*. If ipecac is unavailable, give 2 glasses of water and induce vomiting by touching finger to back of victim's throat. Keep victim's head below hips while vomiting. Get medical attention.

***Note to Physician:** If victim is a child, give no more than 1 glass of water and 15cc (1 tablespoon) syrup of ipecac. If symptoms such as loss of gag reflex, convulsions or unconsciousness occur before emesis, gastric lavage should be considered following intubation with a cuffed endotracheal tube.

Supplemental Health Information: Laboratory animals exposed by inhalation to bvapor concentrations up to 950ppm for 6 hr/day, 5 days/wk for 6 weeks showed evidence of kidney and liver damage. Similar effects were seen in animals exposed to 40 mg/kg/day for 30 days in drinking water.

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Precautions for Safe Handling and Use
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Steps if Material Released/Spill: Caution. Combustible. ***Large Spills*** Eliminate potential sources of ignition. Wear appropriate respirator and other protective clothing. Shut off source of leak only if safe to do so. Dike and contain. Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand or other suitable material. Place in non-leaking containers and seal tightly for proper disposal. Flush area with water to remove trace residue; dispose of flush solution as above. ***Small Spills*** take up with an absorbent material and place in non-leaking containers for proper disposal.

Waste Disposal Method: Under EPA-RCRA (40 CFR 261.21) if this product becomes a waste material, it would be ignitable hazardous waste material, hazardous waste number D001. Refer to latest EPA or state regulations regarding proper disposal.

Precautions-Handling/Storing: Store in cool/dry/well ventilated area. Aluminum containers are not recommended for storage. Avoid skin contact. Empty containers are hazardous.

Other Precautions: Don't allow to enter storm/sanitary sewers/lakes/rivers/streams/public waterways. Block off drains/ditches. Spill area must be cleaned and restored to original condition or to the satisfaction of authorities.

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Special Precautions
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Keep liquid and vapor away from heat, sparks and flame. Surfaces that are sufficiently hot may ignite even liquid products in the absents of sparks and flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone. Vapors may accumulate and travel to ignition sources distant form the handling site. Flashfire can result. Keep containers closed when not in use. Use with adequate ventilation.

Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize drum containers to empty them. Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground transfer containers and equipment.

Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing before reuse. Air-dry contaminated clothing in a well ventilated area before laundering.

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Control Measures
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Respiratory Protection: Avoid prolonged or repeated breathing of vapors. If exposure may or does exceed occupational exposure limits use a NIOSH-approved respirator to prevent overexposure. In accord with 29 CFR 1810.134 use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.

Protective Clothing: Avoid contact with eyes. Wear chemical goggles if there is likelihood of contact with eyes. Avoid prolonged or repeated contact with skin. Wear Chemical-Resistant gloves and other clothing as required to minimize contact.

Additional Protective Measures: Use explosion-proof ventilation as required to control vapor concentrations. Air dry contaminated clothing in a well ventilated area then launder before reusing.

Ventilation: General: To control fugitive emissions. Local/mechanical: In Confined spaces. Make-up air: To balance air exhausted.

Protective Gloves: Impervious (Butyl Rubber)

Eye Protection: Chemical safety goggles

Other Protective Equipment: Impervious clothing (apron, coveralls)

Work Hygienic Practices: Use good personal hygiene.

Suppl. Safety & Health Data:

Density: 940 KG/cubic meter. Empty containers are hazardous, may contain flammable/explosive liquid residue/vapors.

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Transportation Data

Department of Transportation Classification: Class 3 (Flammable liquids), III

The DOT information in this section is based upon an evaluation of the product against the requirements of 49 CFR 172 and 173 as revised by HM-181.

DOT Proper Shipping Name: Diacetone Alcohol

Other Requirements: UN1148, Guide 26

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Other regulatory Controls

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This product is listed on the EPA/TSCA inventory of chemical substances.

Protection of stratospheric ozone (pursuant to section 611 of the clean air act amendments of 1990): Per 40 CFR part 82, this product does not contain nor was it directly manufactured with and class I or class II ozone depleting substances.

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Other Regulatory Control

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

State Listed Component

Percent

State Code

Diacetone Alcohol

100

CA, FL, IL, MA, ME,

(CAS NO. 123-42-2)

MN, NJ, PA, RI

CA * California Haz. Subst. List: CA65 – California Safe Drinking Water and Toxic Enforcement Act

List: FL – Florida subst. List; IL – Illinois Tox. Subst. List: MA - Massachusetts subst.list: ME – Maine

Haz. Subst. List: MN – Minnesota Haz. Subst. List: NJ Haz. Subst. List: PA – Pennsylvania Haz. Subst.

List: RI – Rhode Island Haz. Subst. List

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Disposal Data

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Refer to applicable regional, state and federal codes.

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Label Data

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Common Name: 199259 Diacetone Alcohol

Chronic Hazard: Yes

Signal Word: Danger!

Acute Health Hazard-Severe: X

Contact Hazard-Slight: X

Fire Hazard-Severe: X

Reactivity Hazard-Slight: 0

Special Hazard Precautions

Eyes: Irritation.

Skin: De-fatting, dermatitis, and irritation.

Inhalation: CNS depression. Accidental ingestion is the most likely route of exposure as the material is poorly and incompletely absorbed through skin.

Target Organs: Skin, Eyes, Central Nervous System.

Protect Eye: Y

Protect Skin: Y

Protect Respiratory: Y

The information contained herein is based on data considered to be accurate. However, no warranty is expressed regarding the accuracy of these data or the results to be obtained from the use thereof. It is the user's obligation to determine the conditions of safe use of the product.

--Rev 2.0 12/18/01 JC