



ACETONE

Company Information

Company's Name: REAGENTS

Company's Address: P.O. Box 240746, Charlotte, NC 28224; USA

Company's Info Ph #: 704/554-7474, 800/732-8484

Emergencies, call CHEMTREC: 800-424-9300

Date MSDS Prepared/Revised/Reviewed: 17 August 2011

1. Product Identification

Synonyms: Dimethylketone; 2-propanone; dimethylketal

CAS No.: 67-64-1

Molecular Weight: 58.08

Chemical Formula: (CH₃)₂CO

Product Codes: 1-10250; 1-10251; 1-10255; 2-10250; LS-A16; LS-A4; LS-A60; 600123; 600124

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	EC No.	Index No.
Acetone	67-64-1	100%	200-662-2	606-001-00-8

3. Hazards Identification

Emergency Overview: Extremely flammable liquid and vapor. Vapor may cause flash fire. Harmful if swallowed or inhaled. Causes irritation to skin, eyes and respiratory tract. Affects central nervous system.

OSHA Hazards: Flammable liquid, Target Organ Effect, Irritant

Target Organs: Liver, Kidneys, Central Nervous System.

HMIS Classification

NFPA Rating

Health Hazard: 2

Health Hazard: 2

Chronic Health Hazard: *

Fire: 3

Flammability: 3

Reactivity Hazard: 0

Physical hazards: 0

Special Hazard: none

Lab Protective Equip: Goggles, Gloves, Lab Coat, Apron, Respirator, Fume Hood; Class B Extinguisher

Storage Color Code: Red (flammable)

Potential Health Effects:

Inhalation: Inhalation of vapors irritates the respiratory tract. May cause coughing, dizziness, dullness, and headache. Higher concentrations can produce central nervous system depression, narcosis, and unconsciousness.

Ingestion: Swallowing small amounts is not likely to produce harmful effects. Ingestion of larger amounts may produce abdominal pain, nausea and vomiting. Aspiration into lungs can produce severe lung damage and is a medical emergency. Other symptoms are expected to parallel inhalation.

Skin Contact: Irritating due to defatting action on skin. Causes redness, pain, drying and cracking of the skin.

Eye Contact: Vapors are irritating. Splashes cause severe irritation, with stinging, tearing, redness and pain.

Chronic Exposure: Prolonged or repeated skin contact may produce severe irritation or dermatitis.

Aggravation of Pre-existing Conditions: Use of alcoholic beverages enhances toxic effects. Exposure may increase the toxic potential of chlorinated hydrocarbons, such as chloroform, trichloroethane.

4. First Aid Measures

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Aspiration hazard. If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Get immediate medical attention.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention.

5. Fire Fighting Measures

Fire: Flash point: -20C (-4F) CC **Autoignition temperature:** 465C (869F)

Flammable limits in air % by volume: lel: 2.5; uel: 12.8

Explosion: Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Vapors can flow along surfaces to distant ignition source and flash back. Contact with strong oxidizers may cause fire. Sealed containers may rupture when heated. This material may produce a floating fire hazard. Sensitive to static discharge.

Fire Extinguishing Media: Dry chemical, alcohol foam or carbon dioxide. Water may be ineffective, particularly as a thick stream. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full-face piece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

7. Handling and Storage

Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Keep away from water. This material is corrosive to steel, galvanized iron, copper and copper alloys. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits: -OSHA Permissible Exposure Limit (PEL): 1000 ppm (TWA); -ACGIH Threshold Limit Value (TLV): 500 ppm (TWA), 750 ppm (STEL) A4 - not classifiable as a human carcinogen

Ventilation System: A system of local and/or general exhaust is recommended.

Personal Respirators: Where risk assessment shows air-purifying respirators are appropriate, use a full-face respirator with multipurpose combination (organic vapor) respirator cartridges as a backup to engineering controls.

Skin Protection: Wear impervious protective clothing as appropriate to prevent skin contact. Gloves: Neoprene, natural rubber, butyl rubber.

Eye Protection: Use chemical safety goggles and/or a full face shield where dusting or splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance: Clear, colorless, volatile liquid.

Solubility: Miscible in all proportions in water.

pH: No information found.

Boiling Point: 56.5C (133F) @ 760 mm Hg

Vapor Density (Air=1): 2.0

Evaporation Rate (BuAc=1): ca. 7.7

Odor: Fragrant, mint-like

Specific Gravity: 0.79 @ 20C/4C

% Volatiles by volume @ 21C (70F): 100

Melting Point: -95C (-139F)

Vapor Pressure (mm Hg): 400 @ 39.5C (104F)

10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Carbon oxides.

Hazardous Polymerization: Will not occur.

Incompatibilities: Concentrated nitric and sulfuric acid mixtures, oxidizing materials, chloroform, alkalis, chlorine compounds, acids, potassium t-butoxide, phosphorus oxychloride, bases, reducing agents.

Conditions to Avoid: Heat, flames, ignition sources and incompatibles.

11. Toxicological Information

Oral rat LD₅₀: 5800 mg/Kg; Inhalation rat LC₅₀: 50,100mg/m³; Irritation eye rabbit, Standard Draize, 20 mg severe; investigated as a tumorigen, mutagen, reproductive effector. 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, ACGIH or IARC.

12. Ecological Information

Environmental Fate: When released into the soil or water, this material is expected to readily biodegrade, to leach into groundwater, and some portion is expected to quickly evaporate. This material has a log octanol-water partition coefficient of less than 3.0. This material is not expected to significantly bioaccumulate. When released into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals and photolysis; this material is expected to be readily removed from the atmosphere by wet deposition.

Environmental Toxicity: Not expected to be toxic to aquatic life. The LC₅₀/96-hour values for fish are over 100 mg/L.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements. RCRA waste code: U002.

14. Transport Information

US DOT: Proper Shipping Name: Acetone

Hazard Class: 3

UN/NA: UN1090

Packing Group: II

RQ: 5000lbs

Marine pollutant: No

Poison Inhalation Hazard: No

15. Regulatory Information

TSCA: Listed.

SARA 302 Components: None.

SARA 313 Components: None.

SARA 311/312 Hazards: Acute Health Hazard, Chronic Health Hazard, Fire Hazard.

CERCLA Hazardous Substance: Acetone, CAS No. 67-64-1, RQ 5000 lbs (2270 Kg).

Clean Air Act: This material does not contain any hazardous air pollutants. This material does not contain any Class 1 or Class 2 Ozone depleters.

Clean Water Act: This material does not contain any Priority Pollutants.

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.

DSL Status: All components of this product are on the Canadian DSL list.

16. Other Information

Product Use: Laboratory Reagent.

Disclaimer: Reagents 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. Reagents 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, Reagents will not be responsible for damages resulting from use of or reliance upon this information.