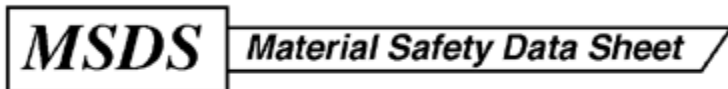


MSDS Number: **A0446** * * * * * *Effective Date: 09/01/09* * * * * * *Supersedes: 02/01/07*



From: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08865



24 Hour Emergency Telephone: 908-859-2151
CHEMTREC: 1-800-424-9300

National Response in Canada
CANUTEC: 613-996-6666

Outside U.S. and Canada
Chemtree: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

ACETONE

1. Product Identification

Synonyms: DimethylKetone; 2-propanone; dimethylketal

CAS No.: 67-64-1

Molecular weight: 58.08

Chemical formula: (CH₃)₂CO

Product Codes:

J.T. Baker: 5008, 5018, 5356, 5580, 5965, 5975, 9001, 9002, 9003, 9004, 9005, 9006, 9007, 9008, 9009, 9010, 9015, 9024, 9036, 9125, 9254, 9271, A134, V655

Mallinckrodt: 0018, 2432, 2435, 2437, 2438, 2440, 2443, 2850, H451, H580, H981

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
<u>Hazardous</u>		
-----	-----	-----

Acetone	67-64-1	99 - 100%
Yes		

3. Hazards Identification

Emergency Overview

DANGER! 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.

SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

[Health Rating](#): 2 - Moderate

[Flammability Rating](#): 3 - Severe ([Flammable](#))

Reactivity Rating: 0 - None

Contact Rating: 3 - Severe

Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD;
PROPER GLOVES; 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](#) to the eyes. Splashes may 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. Never give anything by mouth to an unconscious person. Call a physician immediately.

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

Extremely [Flammable](#) Liquid and [Vapor](#)! [Vapor](#) may cause flash fire.

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. 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 facepiece 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! If a leak or spill has not ignited, use water spray to disperse the [Vapors](#), to protect personnel attempting to stop leak, and to flush spills away from exposures. US Regulations ([CERCLA](#)) require reporting spills and releases to soil, water and [Air](#) in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

J. T. Baker SOLUSORB  [Solvent](#) adsorbent is recommended for spills of this product.

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](#). Containers of this material may be [Hazardous](#) when empty since they retain product residues ([Vapors](#), liquid); observe all warnings and precautions listed for the product.

8. Exposure Controls/[Personal protection](#)

Airborne [Exposure Limits](#):

Acetone:

-[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 to keep employee exposures below the Airborne [Exposure Limits](#). [Local exhaust ventilation](#) is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the [ACGIH](#) document, *Industrial [Ventilation](#), A Manual of Recommended Practices*, most recent edition, for details.

Personal [Respirators \(NIOSH Approved\)](#):

If the exposure limit is exceeded and [Engineering controls](#) are not feasible, a half-face [Organic Vapor Respirator](#) may be worn for up to ten times the exposure limit, or the maximum use [Concentration](#) specified by the appropriate regulatory agency or [Respirator](#) supplier, whichever is lowest. A full-face piece [Organic Vapor Respirator](#) may be worn up to 50 times the exposure limit, or the maximum use [Concentration](#) specified by the appropriate regulatory agency or [Respirator](#) supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, [Air-supplied Respirator](#). WARNING: [Air-purifying respirator](#)s do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent [Skin](#) contact.

Eye Protection:

Use [Chemical](#) safety goggles and/or a full face shield where splashing is possible. Maintain [Eye wash](#) fountain and quick-drench facilities in work area.

9. Physical and [Chemical](#) Properties

Appearance:

Clear, colorless, [Volatile](#) liquid.

Odor:

Fragrant, mint-like

[Solubility:](#)

[Miscible](#) in all proportions in water.

[Spec. gravity:](#)

0.79 @ 20C/4C

[PH:](#)

No information found.

% [Volatiles](#) by volume @ 21C (70F):

100

[Boiling point:](#)

56.5C (133F) @ 760 [mm Hg](#)

[Melting point:](#)

-95C (-139F)

[Vapor Density](#) (Air=1):

2.0

[Vapor pressure](#) ([mm Hg](#)):

400 @ 39.5C (104F)

[Evaporation rate](#) (BuAc=1):

ca. 7.7

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

[Hazardous Decomposition](#) Products:

[Carbon dioxide](#) and [Carbon monoxide](#) may form when heated to [Decomposition](#).

[Hazardous Polymerization:](#)

Will not occur.

[Incompatibilities:](#)

Concentrated nitric and sulfuric [Acid Mixtures](#), [Oxidizing](#) materials, chloroform, [Alkalies](#), [Chlorine](#) compounds, [Acids](#), [Potassium](#) t-butoxide.

Conditions to Avoid:

Heat, flames, ignition sources and [Incompatibles](#).

11. [Toxicological](#) Information

Oral rat [LD50](#): 5800 [mg/kg](#); [Inhalation](#) rat [LC50](#): 50,100[mg/m3](#); [Irritation](#) eye rabbit, Standard Draize, 20 [mg](#) severe; investigated as a tumorigen, [Mutagen](#), reproductive effector.

-----\Cancer Lists\-----

Ingredient Category	--- NTP Carcinogen ---		IARC
	Known	Anticipated	
Acetone (67-64-1)	No	No	None

12. Ecological Information

Environmental Fate:

When released into the soil, this material is expected to readily [Biodegrade](#). When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is expected to quickly [Evaporate](#). When released into water, this material is expected to readily [Biodegrade](#). When released into water, this material 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. When released into the air, this material may be moderately degraded by photolysis. When released into the air, this material is expected to be readily removed from the atmosphere by wet deposition.

Environmental Toxicity:

This material is 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.

14. Transport Information

Domestic (Land, D.O.T.)

Proper Shipping Name: ACETONE

Hazard Class: 3

[UN/NA](#): UN1090

Packing Group: II

Information reported for product/size: 188L

International (Water, I.M.O.)

Proper Shipping Name: ACETONE

Hazard Class: 3

[UN/NA](#): UN1090

Packing Group: II

Information reported for product/size: 188L

15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----

--
Ingredient [TSCA](#) EC Japan
Australia

-
Acetone (67-64-1) Yes Yes Yes Yes

-----\Chemical Inventory Status - Part 2\-----

--
Ingredient Korea [--Canada--](#) DSL NDSL Phil.

Acetone (67-64-1) Yes Yes No Yes

-----\Federal, State & International Regulations - Part 1\-----

--
-----[-SARA](#) 302- -----[SARA](#) 313--

Ingredient [RQ](#) TPQ List [Chemical](#)
Catg.

--
Acetone (67-64-1) No No Yes No

-----\Federal, State & International Regulations - Part 2\-----

--
Ingredient [CERCLA](#) [-RCRA-](#) 261.33 [-TSCA-](#) 8(d)

Acetone (67-64-1)

5000

U002

No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: Yes
SARA 311/312: Acute: Yes Chronic: No Fire: Yes Pressure: No
Reactivity: No (Pure / Liquid)

Australian Hazchem Code: 2[Y]E

Poison Schedule: None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: **1** **Flammability:** **3** **Reactivity:** **0**

Label Hazard Warning:

DANGER! 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.

Label Precautions:

Keep away from heat, sparks and flame.

Keep container closed.

Use only with adequate Ventilation.

Wash thoroughly after handling.

Avoid breathing Vapor.

Avoid contact with eyes, Skin and clothing.

Label First Aid:

Aspiration hazard. If swallowed, Vomiting may occur spontaneously, but DO NOT INDUCE. If Vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Call a physician immediately. If Inhaled, remove to Fresh Air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately Flush eyes or Skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. In all cases, get medical attention.

Product Use:

Laboratory Reagent.

Revision Information:

No Changes.

Disclaimer:

Mallinckrodt Baker, Inc. 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

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