

J.T. Baker Inc. 222 Red School Lane Phillipsburg, NJ 08865

24-Hour Emergency Telephone 908-859-2151 National Response Center 800-424-8802 Chemtrec 800-424-9300

ERIAL SAFETY DATA SHE SIGNALETIQUE

DESEGURIDAD

National Response In Canada CANUTEC 613-996-6666

Outside U.S. and Canada Chemtrec 202-483-7616

E2875 -02 Effective:

05/01/89

Ethyl Acetoacetate

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J.T.BAKER INC., 222 Red School Lane, Phillipsburg, NJ 08865

SECTION I - PRODUCT IDENTIFICATION

Product Name:

Ethyl Acetoacetate

Common Synonyms: Acetoacetic acid, Ethyl Ester; Diacetic Ether; Ethyl Acetyl

Acetate; Ethyl 3-Oxobutanoate

Chemical Family: Esters

Formula:

CH2COCH2COOC2H2

Formula Wt.:

130.15 141-97-9

CAS No.: NIOSH/RTECS No.: AK5250000

Product Use:

Laboratory Reagent

Product Codes:

L332

PRECAUTIONARY LABELING

(ER SAF-T-DATA* System

HEALTH SI TGHT

FLAMMABILITY MODERATE

REACTIVITY SLIGHT

CONTACT SI TCHT

Laboratory Protective Equipment









U.S. Precautionary Labeling

CAUTION!

COMBUSTIBLE.

Keep away from heat, sparks, flame. Do not get in eyes, on skin, on clothing. Keep in tightly closed container. Wash thoroughly after handling. In case of fire, use water spray, alcohol foam, dry chemical, or carbon dioxide. spill area with water spray.



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Page: 2 Ethyl Acetoacetate E2875 -02 Issued: 02/05/91 Effective: 05/01/89 PRECAUTIONARY LABELING (CONTINUED) International Labeling After contact with skin, wash immediately with Avoid contact with eyes. plenty of water. Keep container tightly closed. SAF-T-DATA* Storage Color Code: Red (flammable) SECTION II - COMPONENTS ________ OSHA/PEL ACGIH/TLU Weight % Component CAS No. 141-97-9 90-100 Ethyl Acetoacetate SECTION III - PHYSICAL DATA Vapor Pressure (mmHg): 0.8 Boiling Point: 180°C (356°F) (20°C) (at 760 mm Hg) Vapor Density (air=1): 4.48

Melting Point: -43°C (-45°F)

(at 760 mm Hq)

Specific Gravity: 1.02

 $(H_00=1)$

Solubility(H₂O): Moderate (1-10%)

Evaporation Rate: 0.1

(Butyl Acetate = 1)

% Volatiles by Volume: 100

(21°C)

pH: N/A

Odor Threshold (ppm): N/A

Physical State: Liquid

Coefficient Water/Oil Distribution: N/A

Appearance & Odor: Colorless liquid. Fruity odor.

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SECTION IU - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Closed Cup): 84°C (185°F)

NFPA 704M Rating: 2-2-0

Autoignition Temperature: 294°C (563°F)

Upper - 15.2 % Lower -Flammable Limits:

Fire Extinguishing Media

Use water spray, alcohol foam, dry chemical or carbon dioxide.

Special Fire-Fighting Procedures

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode. Move exposed containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.

<u> Unusual Fire & Explosion Hazards</u>

None identified.

Toxic Gases Produced

carbon monoxide, carbon dioxide

Explosion Data-Sensitivity to Mechanical Impact

None identified.

Explosion Data-Sensitivity to Static Discharge

None identified.

SECTION U - HEALTH HAZARD DATA

Threshold Limit Value (TLV/TWA): Not Established

Short-Term Exposure Limit (STEL): Not Established

Permissible Exposure Limit (PEL): Not Established

Toxicity of components

Oral Rat LDsn for Ethyl Acetoacetate

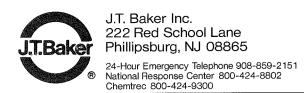
3980 mg/kg

fral Mouse LD₅₀ for Ethyl Acetoacetate

5105 mg/kg

Z List: No OSHA Req: No Carcinogenicity: NTP: No IARC: No

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SECTION V - HEALTH HAZARD DATA (CONTINUED)

Carcinogenicity

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Effective:

None identified.

Reproductive Effects

None identified.

Effects of Overexposure

INHALATION:

may cause narcosis

SKIN CONTACT:

irritation

EYE CONTACT:

irritation

SKIN ABSORPTION: none identified

INGESTION:

none identified

CHRONIC EFFECTS: none identified

Target Organs

none identified

Medical Conditions Generally Aggravated by Exposure

none identified

Primary Routes of Entry

none indicated

Emergency and First Aid Procedures

INGESTION:

CALL A PHYSICIAN.

INHALATION:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give

oxygen.

SKIN CONTACT: In case of contact, flush skin with water.

EYE CONTACT:

In case of eye contact, immediately flush with plenty of

water for at least 15 minutes.

SARA/TITLE III HAZARD CATEGORIES and LISTS

Flammability: Yes Pressure: No Reactivity: No Acute: No Chronic: No

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"antilation:

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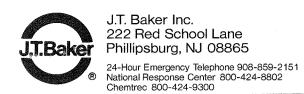
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SECTION U - HEA	LTH HAZARD DATA (CONTINUE	0)
Extremely Hazardous Substance: N CERCLA Hazardous Substance: N SARA 313 Toxic Chemicals: N	o o o es	
	VI - REACTIVITY DATA	
Stability: Stable	Hazardous Polymerizat:	ion: Will not occur
Conditions to Avoid: heat, fl		
Incompatibles: strong o	xidizing agents, alkali me	etals
Decomposition Products: carbon m	onoxide, carbon dioxide	
SECTION VII -	SPILL & DISPOSAL PROCEDUR	===
Steps to be Taken in the Event of Wear suitable protective cloos smoking, or flames in area. Water spray to reduce vapors absorbent material and place area with water.	thing. Shut off ignition Stop leak if you can do : Take up with sand or of	so without risk, use ther non-combustible
J. T. Baker SOLUSORB $^{\mathrm{R}}$ solvent adproduct.	sorbent is recommended for	r spills of this
<u>Disposal Procedure</u> Dispose in accordance with a environmental regulations.	all applicable federal, sta	ate, and local
EPA Hazardous Waste Number:	D001 (Ignitable Waste)	
SECTION VIII - I	NDUSTRIAL PROTECTIVE EQUI	PMENT

Use adequate general or local exhaust ventilation to keep vapor and mist levels as low as possible.



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HOJAS DE DATOS DE SEGURIDAD

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Page: 6 Ethul Acetoacetate E2875 - 02Issued: 02/05/91 Effective: 05/01/89 SECTION VIII - INDUSTRIAL PROTECTIVE EQUIPMENT (CONTINUED) Respiratory Protection: None required where adequate ventilation conditions If airborne concentration is high, a chemical exist. cartridge respirator with organic vapor cartridge is recommended. If concentration exceeds capacity of cartridge respirator, a self-contained breathing apparatus is advised. Safety goggles, uniform, apron, rubber gloves are Eye/Skin Protection: recommended. SECTION IX - STORAGE AND HANDLING PRECAUTIONS SAF-T-DATA* Storage Color Code: Red (flammable) rage Requirements Keep container tightly closed. Store in a cool, dry, well-ventilated, flammable liquid storage area or cabinet. SECTION X - TRANSPORTATION DATA AND ADDITIONAL INFORMATION Domestic (D.O.T.)

Proper Shipping Name: Combustible liquid, n.o.s. (Ethyl Acetoacetate)

Hazard Class: Combustible liquid

UN/NA: NA1993

Labels: NO LABEL REQUIRED UNDER 110 GALLONS Regulatory References: 49CFR 172.101; 173.118a

International (I.M.O.)

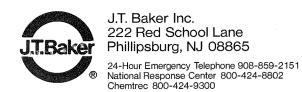
Proper Shipping Name: Chemicals, n.o.s. (Non-regulated)

Marine Pollutants: No

AIR (I,C,A,O,)

Proper Shipping Name: Chemicals, n.o.s. (Non-regulated)

S. Customs Harmonization Number: 29189060005



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N/A = Not Applicable or Not Available

N/E = Not Established

The information in this Material Safety Data Sheet meets the requirements of the United States OCCUPATIONAL SAFETY AND HEALTH ACT and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and the Canadian WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM. This document is intended only as a guide to the appropriate precautionary handling of the material by a person trained in, or supervised by a person trained in, chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face quards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes.

Exposure to this product may have serious adverse health effects. chemical may interact with other substances. Since the potential uses are so varied, Baker cannot warn of all of the potential dangers of use interaction with other chemicals or materials. Baker warrants that t a chemical meets the specifications set forth on the label. BAKER DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR PURPOSE.

The user should recognize that this product can cause severe injury and even death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Baker will periodically revise this Material Safety Data Sheet.

Note: CHEMTREC, CANUTEC, and NATIONAL RESPONSE CENTER emergency telephone numbers are 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-JTBAKER) for assistance.

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Approved by Quality Assurance Department.