



ETHYL ISOAMYL KETONE

Material Safety Data Sheet

Arkema Inc.

1 PRODUCT AND COMPANY IDENTIFICATION

Thio and Fine Chemicals

Arkema Inc.
2000 Market Street
Philadelphia, PA 19103

EMERGENCY PHONE NUMBERS:

Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center
(866) 767-5089 (24Hrs)

Information Telephone Numbers	Phone Number	Available Hrs
Customer Service	1-800-628-4453	8:30 to 5:30 EST

Product Name ETHYL ISOAMYL KETONE
Product Synonym(s)

Chemical Family Ketone

Chemical Formula C₈H₁₆O

Chemical Name 5-methyl-3-heptanone

EPA Reg Num

Product Use Paints and varnishes, defluxing, organic synthesis, stripping.

2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS RegistryNumber	Typical %	OSHA
5-Methyl-3-Heptanone	541-85-5	98-100% By Wt.	Y

The substance(s) marked with a "Y" in the OSHA column, are identified as hazardous chemicals according to the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200)

This material is classified as hazardous under Federal OSHA regulation.

The components of this product are all on the TSCA Inventory list.

3 HAZARDS IDENTIFICATION

Emergency Overview

Colorless liquid with pleasant odor.

WARNING!

FLAMMABLE LIQUID AND VAPOR.

MAY CAUSE EYE IRRITATION.

MAY CAUSE RESPIRATORY TRACT IRRITATION.

PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION.

Potential Health Effects

Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. Based on single exposure animal tests, it is considered to be slightly toxic if swallowed, practically non-toxic if absorbed through skin or inhaled and slightly to moderately irritating to skin. Prolonged or repeated contact may remove oils from the skin and may dry skin and cause irritation, redness and rash. High vapor concentrations may be irritating to the eyes and respiratory tract, and may result in central nervous system (CNS) effects such as headache, dizziness, nausea, drowsiness and, in severe exposures, loss of consciousness.

4 FIRST AID MEASURES

4 FIRST AID MEASURES

IF IN EYES, immediately flush with plenty of water. Get medical attention if irritation persists.

IF ON SKIN, flush the area with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops and persists.

IF SWALLOWED, do NOT induce vomiting. Give water to drink. Get medical attention immediately. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF INHALED, remove to fresh air. If breathing is difficult, get medical attention.

5 FIRE FIGHTING MEASURES**Fire and Explosive Properties**

Auto-Ignition Temperature	NA	
Flash Point	48 C (CC)	Flash Point Method
Flammable Limits- Upper	NA	
Lower	NA	

Extinguishing Media

Use water spray, carbon dioxide, foam or dry chemical. Do NOT use water in form of a jet.

Fire Fighting Instructions

Use water spray to cool containers exposed to fire. Contain run-off from fire. Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand NIOSH approved or equivalent). Fire fighting equipment should be thoroughly decontaminated after use.

Fire and Explosion Hazards

When burned, the following hazardous products of combustion can occur: Carbon monoxide

6 ACCIDENTAL RELEASE MEASURES**In Case of Spill or Leak**

Extinguish or turn off all ignition sources. Contain spill with inert materials. Collect with non-sparking tools to a suitable container. Flush with water. Wear appropriate personal protective equipment as indicated in section 8 of this MSDS. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

7 HANDLING AND STORAGE**Handling**

Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Use only with adequate ventilation. Use grounding and bonding connection when transferring material to prevent static discharges, fire or explosion.

Storage

Store in well ventilated area away from heat and sources of ignition such as flame, sparks and static electricity. Ensure that all storage and handling equipment is properly rated, grounded and installed to satisfy electrical classification requirements. Static electricity may accumulate and create a fire hazard. All storage containers, including containers such as drums, cylinders and IBC's, must be bonded and grounded during

7 HANDLING AND STORAGE

filling and emptying operations. Store away from oxidizers and reactive materials. Keep container tightly closed. Observe all federal, state and local regulations and National Fire Protection Association (NFPA) Codes which pertain to the specific local conditions of storage and use, including OSHA 29 CFR 1910.106 and NFPA 30, 70, 77, and 497. Store out of direct sunlight in a cool, well-ventilated place. Store at temperatures below 50 C. Check that all equipment is properly grounded and installed to satisfy electrical classification requirements.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Investigate engineering techniques to reduce exposures below airborne exposure limits. Provide ventilation if necessary to control exposure levels below airborne exposure limits (see below). Dilution ventilation acceptable, but local mechanical exhaust ventilation preferred, if practical, at sources of air contamination such as open process equipment.

Eye / Face Protection

Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment available.

Skin Protection

Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type glove material for given application. Wear face shield and chemical resistant clothing such as a rubber apron when splashing may occur. Rinse contaminated skin promptly. Wash contaminated clothing and clean protective equipment before reuse. Wash skin thoroughly after handling.

Respiratory Protection

Avoid breathing vapor or mist. When airborne exposure limits are exceeded (see below), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

Airborne Exposure Guidelines for Ingredients

Exposure Limit	Value
5-Methyl-3-Heptanone	
ACGIH TWA	-
OSHA TWA PEL	-
	10 ppm
	25 ppm 130 mg/m3

- Only those components with exposure limits are printed in this section.
- Skin contact limits designated with a "Y" above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required.
- ACGIH Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic reactions.
- WEEL-AIHA Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic skin reactions.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor	Colorless liquid with pleasant odor.
pH	NE
Specific Gravity	0.821 @ 20 C
Vapor Pressure	2.7 hPa (mbar) @ 20 C
Vapor Density	5.4 kg/m ³ @ 20 C
Melting Point	NA
Freezing Point	NE
Boiling Point	160.5 C
Solubility In Water	Negligible
n-Octanol/Water Partition Coefficient	log Pow = 2.3
Other Physical Data	Odor threshold: 6 ppm

10 STABILITY AND REACTIVITY**Stability**

This material is chemically stable under normal and anticipated storage and handling conditions. However, avoid temperatures above 50 C.

Incompatibility

Contact with plastics, oxidizers, synthetic rubber, aluminum and galvanized metals may result in a high energy release.

Hazardous Decomposition Products

Oxides of carbon including toxic Carbon Monoxide gas can be liberated at temperatures above ambient.

11 TOXICOLOGICAL INFORMATION**Toxicological Information**

Data on this material and/or its components are summarized below.

Single exposure (acute) studies indicate:

Oral - Slightly Toxic to Rats (LD50 3,500 mg/kg)

Dermal - Practically Non-toxic to Rabbits (LD50 >16,000 mg/kg)

Inhalation - Practically Non-toxic to Rats (8-hr LC50 >3,484 ppm; 4-hr LC50 >3,000 ppm)

Skin Irritation - Slightly to Moderately Irritating to Rabbits 5-Methyl-3-Heptanone

The odor threshold in humans is 5 ppm. Eyes and respiratory tract irritation have been reported in workers exposed to vapor. No skin allergy was observed in guinea pigs following repeated exposure. Respiratory irritation was observed in mice following acute exposure (RD50 760 ppm). Repeated oral administration produced peripheral nervous system damage, functional and behavioral effects, reduced weight gain, and reduced white blood cell numbers in rats. No genetic changes were observed in tests using bacteria.

12 ECOLOGICAL INFORMATION**Ecotoxicological Information**

Data on this material and/or its components are summarized below.

5-Methyl-3-Heptanone

This material is slightly toxic to goldfish (24-hr LC50 80 mg/l).

Chemical Fate Information

Data on this material and/or its components are summarized below.

5-Methyl-3-Heptanone



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12 ECOLOGICAL INFORMATION

The biological oxygen demand (BOD) for over 5 days was determined to be 75% of the theoretical oxygen demand. The chemical oxygen demand (COD) was 1.94 gram oxygen consumed per gram product. The log Pow is 2.3.

13 DISPOSAL CONSIDERATIONS

Waste Disposal

Recover, reclaim or recycle when practical.

Disposal via incineration is recommended. Appropriate pretreatment and disposal in an authorized landfill is acceptable. In all cases, dispose of material in accordance with all applicable federal, state, and local laws and regulations. Consult appropriate regulatory officials or your attorney for information on such disposal.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

14 TRANSPORT INFORMATION

DOT Name	Ethyl amyl ketone
DOT Technical Name	
DOT Hazard Class	3
UN Number	UN2271
DOT Packing Group	PG III
RQ	

15 REGULATORY INFORMATION

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370)

Immediate (Acute) Health	Y	Fire	Y
Delayed (Chronic) Health	N	Reactive	N
		Sudden Release of Pressure	N

The components of this product are all on the TSCA Inventory list.

Ingredient Related Regulatory Information:

SARA Reportable Quantities

5-Methyl-3-Heptanone

CERCLA RQ

NE

SARA TPQ

Massachusetts Right to Know

This product does contain the following chemical(s), as indicated below, currently on the Massachusetts Right to Know Substance List.

5-Methyl-3-Heptanone

New Jersey Right to Know

This product does contain the following chemical(s), as indicated below, currently on the New Jersey Right-to-Know Substances List.

5-Methyl-3-Heptanone

Pennsylvania Right to Know

This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Hazardous Substance List.



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Pennsylvania Right to Know

This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Hazardous Substance List.

5-Methyl-3-Heptanone

16 OTHER INFORMATION

Revision Information

Revision Date 08 MAY 2007 Revision Number 3
Supercedes Revision Dated 01-JUN-2006

Revision Summary

Revised Section 8

Key

NE= Not Established NA= Not Applicable (R) = Registered Trademark

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