



# 3,3,5-TRIMETHYLCYCLOHEXANONE

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 3,3,5-TRIMETHYLCYCLOHEXANONE  
Product Synonym(s)

Chemical Family Ketones  
Chemical Formula (CH<sub>3</sub>)<sub>3</sub>[C<sub>6</sub>H<sub>7</sub>]=O  
Chemical Name 3,3,5-Trimethylcyclohexanone  
EPA Reg Num  
Product Use

## 2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS RegistryNumber	Typical Wt. %	OSHA
3,3,5-Trimethylcyclohexanone	873-94-9	100%	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

Slight yellow liquid with characteristic (Ketones) odor.

WARNING!

HARMFUL IF INHALED.

MAY CAUSE EYE IRRITATION.

MAY BE HARMFUL IF SWALLOWED.

### 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, no more than slightly toxic if absorbed through skin, practically non-toxic if inhaled, moderately irritating to eyes and non-irritating to skin. High vapor concentrations may be irritating to the eyes, skin and respiratory tract.

**4 FIRST AID MEASURES**

IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Get medical attention.

IF ON SKIN, immediately wash with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Thoroughly clean shoes before reuse.

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 not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

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

Auto-Ignition Temperature	430	
Flash Point	152 F; 67 C	Flash Point Method
Flammable Limits- Upper	NE	
Lower	NE	

**Extinguishing Media**

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

**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**

Closed containers of this material may explode when subjected to heat from surrounding fire. Cool exposed containers with water.

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

Contain spill. Stop leak at source if this can be done safely. Ventilate area. Nonessential personnel should leave the area until cleanup is completed. Pump liquid into DOT-approved drums for disposal. Absorb remaining liquid onto inert absorbent and place in DOT approved drums for disposal. Wash area with water. Keep concentrate and wash water from entering sewers or waterways. 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**

Do not taste or swallow. Do not breathe vapor. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Use only with adequate ventilation. Use explosion proof equipment.

**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



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## 7 HANDLING AND STORAGE

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 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 separate from oxidizers. Do NOT store near strong bases.

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### Engineering Controls

Investigate engineering techniques to reduce exposures. Provide ventilation if necessary to minimize exposures. If practical, use local mechanical exhaust ventilation 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. Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. If exposures cannot be kept at a minimum with engineering controls, 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 there may be a potential for significant exposure, 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

The components of this product have no established Airborne Exposure Guidelines

- 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	Slight yellow liquid with characteristic (Ketones) odor.
pH	(23 C) 894 kg/m <sup>3</sup> NE
Specific Gravity	NE
Vapor Pressure	700 Pa @ 50 C
Vapor Density	NE
Melting Point	NE
Freezing Point	-8 C
Boiling Point	(186 - 191) C
Solubility In Water	Slightly Soluble
Molecular Weight	140.22

**10 STABILITY AND REACTIVITY****Stability**

This material is chemically stable under normal and anticipated storage and handling conditions. However, avoid temperatures above 67 C.

**Incompatibility**

Plastics, synthetic rubber, aluminum and galvanized metals, strong oxidizing agents.

**Hazardous Decomposition Products**

Oxides of Carbon including toxic Carbon Monoxide gas.

**11 TOXICOLOGICAL INFORMATION****Toxicological Information**

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

3,3,5-Trimethylcyclohexanone

Single exposure (acute) studies indicate that this material is slightly toxic if swallowed (rat LD<sub>50</sub> 3,450 mg/kg), no more than slightly toxic if absorbed through skin (rabbit LD<sub>0</sub> 3,160 mg/kg), practically non-toxic if inhaled (rat 4-hr LC<sub>50</sub> 14.2 mg/l; vapor), moderately irritating to rabbit eyes and non-irritating to rabbit skin (4-hr exposure). 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, no more than slightly toxic if absorbed through skin, practically non-toxic if inhaled, moderately irritating to eyes and non-irritating to skin. High vapor concentrations may be irritating to the eyes, skin and respiratory tract.

**12 ECOLOGICAL INFORMATION****Ecotoxicological Information**

No data are available.

**Chemical Fate Information**

No data are available.



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## 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	Toxic Liquid, Organic, NOS
DOT Technical Name	(3,3,5-trimethylcyclohexanone)
DOT Hazard Class	6.1
UN Number	UN 2810
DOT Packing Group	PG III
RQ	
DOT Special Information	Toxic classification is based on inhalation data.

## 15 REGULATORY INFORMATION

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

Immediate (Acute) Health	Y	Fire	N
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

3,3,5-Trimethylcyclohexanone

CERCLA RQ

SARA TPQ

NE

## 16 OTHER INFORMATION

### Revision Information

Revision Date	28 DEC 2004	Revision Number	4
Supersedes Revision Dated	11-OCT-2004		

### Revision Summary

Product moved to new division

### Key

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



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