

1 PRODUCT AND COMPANY IDENTIFICATION**Organic Peroxides**

2000 Market Street

Philadelphia, Pa 19103

Information Telephone Numbers

Customer Service

Phone Number

1-800-558-5575

Available Hrs

Business Hours

Product Name LUPEROX 533M75
Product Synonym(s) Formerly LUPERSOL 533M75

Chemical Family Organic Peroxide - Perketals

Chemical Formula

Chemical Name Ethyl 3,3 Di-t-AmylperoxyButyrate 75% in OMS

EPA Reg Num

Product Use Polymerization Initiator

EMERGENCY PHONE NUMBERS:

Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887

Medical: Rocky Mountain Poison Control Center

(303) 623-5716 (24Hrs)

2 COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient Name</u>	<u>CAS RegistryNumber</u>	<u>Typical Wt. %</u>	<u>OSHA</u>
Ethyl 3,3-di-(tert-amylperoxy) butyrate	67567-23-1	75	Y
Petroleum distillate	64742-48-9	< 25	Y
Odorless mineral spirits	64741-65-7	< 25	Y
Impurities including:			N
Mixed amylenes	26760-64-5	< 2	Y
2,2-Di(t-amylperoxy) propane	3052-70-8	< 2	Y
Di-t-amyl peroxide	10508-09-5	< 1.5	Y

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

This material is classified as hazardous under Federal OSHA regulation.

The components of this product are either on the TSCA Inventory list or exempt as impurities.

3 HAZARDS IDENTIFICATION**Emergency Overview**

Water white liquid, slight minty odor

WARNING!**ORGANIC PEROXIDE****MAY CAUSE SKIN IRRITATION.****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 its composition, it is anticipated to be moderately irritating to eyes and skin. Prolonged or repeated contact removes 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 and death. Mild to severe lung injury may occur if this material is drawn into the lungs (aspirated) during swallowing, or during vomiting after swallowing. Symptoms of injury may include increased breathing and heart rate, coughing and related signs of respiratory distress.

4 FIRST AID MEASURES

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

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. 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 breathing is difficult, get medical attention.

5 FIRE FIGHTING MEASURES

Fire and Explosive Properties

Auto-Ignition Temperature	NE	Flash Point Method	Seta CC
Flash Point	41 C/ 107 F		
Flammable Limits- Upper	NE		
Lower	NE		

Extinguishing Media

Use water spray, foam or dry chemical.

Fire Fighting Instructions

Fight fire with large amounts of water from a safe distance. Use water spray to cool containers exposed to 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. After a fire, wait until the material has cooled to room temperature before initiating clean up activities.

Fire and Explosion Hazards

Contact with incompatible materials or exposure to temperatures exceeding the SADT may result in a self accelerating decomposition reaction with release of flammable vapors which may autoignite.

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

Use inert, non-combustible absorbant material. Sweep or scoop up using non-sparking tools. Wet down and dispose of immediately. 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**

Contact with incompatible materials or exposure to temperatures exceeding SADT (See Section (9)) may result in a self accelerating decomposition reaction with release of flammable vapors which may autoignite. Keep away from heat sparks and flame. Avoid contamination. Use only with adequate ventilation. Use explosion proof equipment. Keep container closed. Do not reuse container as it may retain hazardous product residue. Avoid breathing vapor. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Storage

Store below 38 C/100 F to maintain stability and active oxygen content. Detached storage is preferred. Store out of direct sunlight in a cool well-ventilated place. Store away from combustibles and incompatible materials. Refer also to National Fire Protection Agency (NFPA) Code 432, Code for the Storage of Organic Peroxide Formulations.

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. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Eye / Face Protection

Use good industrial practice to avoid eye contact.

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. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. 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.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION**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.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor	Water white liquid, slight minty odor
pH	NE
Specific Gravity	0.8937 @ 22 C
Vapor Pressure	NE
Vapor Density	NE
Melting Point	- 55 C
Freezing Point	NE
Boiling Point	NE
Solubility In Water	Insoluble
SADT	80 C/176 F (35 lb ctn.)

This material is chemically unstable and should only be handled under specified conditions. See HANDLING AND STORAGE section of this MSDS for specified conditions.

SADT - Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction. This reaction will generate flammable vapors which may autoignite. The length of time to generated a decomposition reaction, after the SADT has been reached or exceeded, is dependent upon how much the SADT has been exceeded and the length of time needed for the reaction exotherm (heat spike from increasing decomposition rate) to initiate a rapid decomposition reaction. Typically, SADT is inversely proportional to package size. Larger packages will have a lower SADT due to smaller ratio to heat transfer area to volume of product.

Other Physical Data

Active Oxygen Content = 7.39-7.59%

10 STABILITY AND REACTIVITY**Stability**

This material is chemically unstable and should only be handled under specified conditions. See HANDLING AND STORAGE section of this MSDS for specified conditions.

SADT - Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction. This reaction will generate flammable vapors which may autoignite. The length of time to generated a decomposition reaction, after the SADT has been reached or exceeded, is dependent upon how much the SADT has been exceeded and the length of time needed for the reaction exotherm (heat spike from increasing decomposition rate) to initiate a rapid decomposition reaction. Typically, SADT is inversely proportional to package size. Larger packages will have a lower SADT due to smaller ratio to heat transfer area to volume of product.

Hazardous Polymerization

Does not occur.

Incompatibility

Contact with foreign materials, such as, strong acids, alkalis and oxidizers may result in a violent decomposition reaction or in product degradation.

Hazardous Decomposition Products

Temperatures at or above the SADT can result in the release of hazardous decomposition products which are flammable and may autoignite.

11 TOXICOLOGICAL INFORMATION**Toxicological Information**

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

Ethyl 3,3-di-(tert-amylperoxy) butyrate

This material (75% in mineral spirits) was evaluated for genotoxic potential in standard tests using bacterial cells. Both positive and negative responses were observed.

Odorless Mineral Spirits

Single exposure (acute) studies indicate that this material is practically non-toxic if swallowed (rat LD50 >10,000 mg/kg), no more than slightly toxic if absorbed through skin (rabbit LD50 >3,160 mg/kg) or inhaled (rat 4-hr LC50 >12.2 mg/l or >592 ppm), slightly irritating to rabbit eyes and moderately irritating to rabbit skin. No skin allergy was observed in humans following repeated exposure, although skin irritation was noted. No symptoms associated with solvent exposure were noted by human volunteers exposed to 100 ppm of this material for 6 hours. Repeated inhalation studies in rats produced kidney tubule damage in male rats only indicative of hydrocarbon nephropathy, but extensive studies have demonstrated that these effects occur only in male rats and are not relevant to humans. Repeated skin application of one type of this material has produced skin tumors in mice. These solvents have not been shown to be developmental toxicants, and generally produced no genetic changes in standard tests using bacteria and animals.

Mixed amylenes

Genetic changes were observed in standard tests using animals.

11 TOXICOLOGICAL INFORMATION

2,2-Di(t-amylperoxy) propane

Both positive and negative genetic changes have been reported in standard tests using bacterial cells.

Di-t-amyl Peroxide

Single exposure (acute) studies indicate that this material is practically non-toxic to rats if swallowed (LD50 >5,000 mg/kg), no more than slightly toxic to rats if absorbed through skin (LD50 >2,000 mg/kg), practically non-irritating to rabbit eyes (1.6/110.0), and severely irritating to rabbits skin (4-hr exposure, 5.0/8.0).

12 ECOLOGICAL INFORMATION**Ecotoxicological Information**

No data are available.

Chemical Fate Information

No data are available.

13 DISPOSAL CONSIDERATIONS**Waste Disposal**

Dispose of in accordance with federal, state and local regulations. Dilution followed by incineration is the preferred method. Dilution ration of 10:1 in a clean, compatible, combustible solvent (i.e., Fuel Oil #2, mineral oil) will reduce reactivity hazard during incineration and transportation.

14 TRANSPORT INFORMATION

DOT Name	Organic Peroxide, Type D, Liquid
DOT Technical Name	[Ethyl-3,3-Di-(t-amylperoxy) butyrate, <= 77%]
DOT Hazard Class	5.2
UN Number	3105
DOT Packing Group	PG II
RQ	
DOT Special Information	US DOT Competent Authority = OP-9412002

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	Y
		Sudden Release of Pressure	N

The components of this product are either on the TSCA Inventory list or exempt as impurities.

Ingredient Related Regulatory Information:

SARA Reportable Quantities

Petroleum distillate
Di-t-amyl peroxide
Mixed amylenes
2,2-Di(t-amylperoxy) propane
Odorless mineral spirits
Ethyl 3,3-di-(tert-amylperoxy) butyrate

CERCLA RQ

NE
NE
NE
NE
NE
NE

SARA TPQ**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.

Mixed amylenes

16 OTHER INFORMATION**Revision Information**

Revision Date 03 OCT 2000 Revision Number 1
Supersedes Revision Dated

Revision Summary**Key**

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

Miscellaneous

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