

**1 PRODUCT AND COMPANY IDENTIFICATION****Organic Peroxides**

2000 Market Street

Philadelphia, Pa 19103

Information Telephone Numbers

Customer Service

**EMERGENCY PHONE NUMBERS:**

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

Medical: Rocky Mountain Poison Control Center

(303) 623-5716 (24Hrs)

Phone Number

1-800-558-5575

Available Hrs

Business Hours

Product Name LUPEROX 223M75

Product Synonym(s) Formerly LUPERSOL 223M75

Chemical Family Organic Peroxide - Peroxydicarbonate

Chemical Formula

Chemical Name Di-(2-ethylhexyl)peroxydicarbonate in OMS

EPA Reg Num

Product Use

**2 COMPOSITION / INFORMATION ON INGREDIENTS**

Ingredient Name	CAS RegistryNumber	Typical Wt. %	OSHA
Di-2-ethylhexyl peroxydicarbonate	16111-62-9	75	Y
Petroleum distillate	64742-48-9	< 25	Y
Odorless mineral spirits	64741-65-7	< 25	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**

Colorless liquid, unpleasant odor

**WARNING!**

THERMALLY UNSTABLE - REFRIGERATION REQUIRED

MAY CAUSE ALLERGIC SKIN REACTION.

MAY CAUSE SKIN 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 practically non-toxic if swallowed, no more than slightly toxic if absorbed through skin, slightly irritating to eyes and moderately irritating to skin. 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, drowsiness and, in severe exposures, loss of consciousness and death. Repeated or prolonged contact may cause an

allergic skin reaction. Prolonged or repeated contact removes oils from the skin and may dry skin and cause irritation, redness and rash. 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.

IF ON SKIN, immediately wash with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Destroy contaminated shoes.

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.

#### 5 FIRE FIGHTING MEASURES

##### Fire and Explosive Properties

Auto-Ignition Temperature	NE	Flash Point Method	Seta CC
Flash Point	>38 C (>100 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. Keep container closed. Use explosion proof equipment. Do not reuse container as it may retain hazardous product residue. Minimize exposure to ambient temperatures. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

**Storage**

REFRIGERATION REQUIRED. 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. Minimize exposure to ambient temperatures. To maintain stability and active oxygen content, store below -10 C (14 F) .

**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**

Thermally insulated gloves should be worn when handling this material. Wear face shield and chemical resistant clothing such as a rubber apron when splashing may occur. Wash contaminated clothing and clean protective equipment before reuse. Rinse contaminated skin promptly. 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.

**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	Colorless liquid, unpleasant odor
pH	NE
Specific Gravity	0.913 @ -10 C
Vapor Pressure	3.3 mmHg @ 0 F
Vapor Density	11.9
Melting Point	NA
Freezing Point	<-78 C (<-108.4 F)
Boiling Point	NE
Solubility In Water	Negligle
Evaporation Rate	NE
Percent Volatile	NE
SADT	10 C/ 50 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: 3.46-3.56%

**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, oxidizers, amines, accelerators/promoters and reducing agents 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 autoignite.

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

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

LUPEROXfi 223M75

Single exposure (acute) studies indicate that LUPEROXfi 223M75 is practically non-toxic to rats (LD50 10,200 mg/kg) if swallowed and moderately irritating to rabbit skin (4-hr exposure 3.8/8.0). Skin allergy was observed in guinea pigs following repeated exposure. LUPEROXfi 223M75 produced no genetic changes in a standard test using bacterial cells.

**Odorless Mineral Spirits**

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 odorless mineral spirit 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 odorless mineral spirits 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.

**12 ECOLOGICAL INFORMATION**

**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, Temperature Controlled
DOT Technical Name	[Di-(2-ethylhexyl)peroxydicarbonate, <= 77%]
DOT Hazard Class	5.2
UN Number	3115
DOT Packing Group	PG II
RQ	
DOT Special Information	DOT Control Temperature = -15 C DOT Emergency Temperature = -5 C

**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:**

<b>SARA Reportable Quantities</b>	<b>CERCLA RQ</b>	<b>SARA TPQ</b>
Petroleum distillate	NE	
Di-2-ethylhexyl peroxydicarbonate	NE	
Odorless mineral spirits	NE	

**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.

Di-2-ethylhexyl peroxydicarbonate

**16 OTHER INFORMATION****Revision Information**

Revision Date                      17 JUN 2000                      Revision Number 3  
Supersedes Revision Dated    16-AUG-1999

**Revision Summary**

The manufacturer has changed its name from Elf Atochem North America, Inc. to ATOFINA Chemicals, Inc.

**Key**

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

**Miscellaneous**

Back-up or emergency refrigeration should be available in case primary refrigeration is lost. Emergency dry ice source(s) should be known in case of refrigeration failure. Temperatures in storage areas should be monitored. Refrigeration systems should have high temperature alarms to warn of loss of refrigeration.

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