

LUPEROX F

Material Safety Data Sheet

Arkema Inc.

-3222	EMERGENCY PHONE NUMBERS: Chemtrec: (800) 424-9300 (24hrs) or (703) 527-34 Medical: Rocky Mountain Poison Control Center (866) 767-5089 (24Hrs)	
Numbers	Phone Number	Available Hrs
ber	(800) 331-7654	8:00 AM - 5:00 PM EST
LUPEROX F		
Organic Peroxide - Dialkyl		
	-3222 <u>Numbers</u> ber LUPEROX F Organic Peroxide - Dialkyl	-3222 Numbers ber LUPEROX F

Ingredient Name	CAS RegistryNumber	Typical %	OSHA
alpha,alpha-Bis(t-butylperoxy)diisopropylbenzene(s)	25155-25-3	>or= 97% 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 either on the TSCA Inventory list or exempt as impurities.

# **3 HAZARDS IDENTIFICATION**

# Emergency Overview

Yellow waxy solid; slight odor

WARNING! ORGANIC PEROXIDE HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES.

## 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 practically non-toxic if swallowed, slightly toxic if absorbed through skin, no more than moderately toxic if inhaled and slightly irritating to eyes and skin.

# 4 FIRST AID MEASURES

IN CASE OF CONTACT, flush the area with plenty of water. Remove material from clothing. Wash clothing before reuse.



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**4 FIRST AID MEASURES** 

IF SWALLOWED, induce vomiting as directed by medical personnel. Get medical attention. 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	>430 C
Flash Point	130 - 135 C
Flammable Limits- Upper	NE
Lower	NE

Flash Point Method

COC

#### 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 such as sodium bicarbonate, sodium carbonate, calcium carbonate, clean sand or non-acidic clay directly on the spilled peroxide, then wet down (dampen) the mixture with water. Sweep or scoop up using non-sparking tools and place into a polyethylene bag for disposal. The sweepings should be wetted down further with water. Dispose of immediately. After all of the material has been collected, wash down the area with detergent and water. 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.

#### HANDLING AND STORAGE 7

### 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.



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# 7 HANDLING AND STORAGE

Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of material from eyes, skin and clothing. Do not reuse container as it may retain hazardous product residue.

### 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.

#### Eye / Face Protection

Use good industrial practice to avoid eye contact.

#### **Skin Protection**

Minimize skin contamination by following good industrial hygiene practice. Wearing protective gloves is recommended. Wash hands and contaminated skin thoroughly after handling.

#### **Respiratory Protection**

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 a 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.



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# 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor	Yellow waxy solid; slight odor
рН	NA
Specific Gravity	0.935 @ 20°C
Vapor Pressure	~3 hPa @ 20 C
Vapor Density	11.7
Melting Point	35 - 55 C
Freezing Point	NE
Boiling Point	140 C (decomposes)
Solubility In Water	<1 g/l
SADT	90 C (HAST)

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 selfaccelerating 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 = 9 %

# **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.

#### Hazardous Polymerization

Does not occur.

#### Incompatibility

Contact with foreign materials, such as, strong acids, bases, oxidizers, amines, reducing agents, and promoters/accelerators 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**

Single exposure (acute) studies indicate: Oral - Practically Non-toxic to Rats (LD50 >23,100 mg/kg) Dermal - Slightly Toxic to Rats (LD50 >2,000 mg/kg) Inhalation - No More than Moderately Toxic to Rats (4-hr LC50 >0.1 mg/l) Eye Irritation - Slightly Irritating to Rabbits Skin Irritation - Slightly Irritating to Rabbits

No skin allergy was observed in guinea pigs following repeated exposure. No genetic changes were observed in tests using bacteria or animal cells.



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### 12 ECOLOGICAL INFORMATION

### Ecotoxicological Information

This material is practically non-toxic to guppies (96-hr LC50 750 mg/l).

### Chemical Fate Information

This material was not biodegradable in a closed bottle test (OECD 301D).

# **13 DISPOSAL CONSIDERATIONS**

#### Waste Disposal

Incineration is the recommended method for disposal observing all local, state and federal regulations.

14 TRANSPORT INFORMATION	
DOT Name	Organic Peroxide Type D, Solid
DOT Technical Name	[Di-(2-tert-butylperoxyisopropyl)-benzene(s), >42-100%]
DOT Hazard Class	5.2
UN Number	UN 3106
DOT Packing Group RQ	PG II
DOT Special Information	Packing method - OP7

# **15 REGULATORY INFORMATION**

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370)		
Immediate (Acute) Health N	Fire	Ν
Delayed (Chronic) Health N	Reactive	Y
	Sudden Release of Pressure	Ν

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

Ingredient Related Regulatory Information:			
SARA Reportable Quantities	CERCLA RQ	SARA TPQ	
alpha,alpha-Bis(t-butylperoxy)diisopropylbenzene(s)	NE		
New Janaar Diabt to Know			

#### 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. alpha,alpha-Bis(t-butylperoxy)diisopropylbenzene(s)

# **16 OTHER INFORMATION**



# **Revision Information**

Revision Date02 JAN 2007Supercedes Revision Dated15-AUG-2006

Revision Number 7

### **Revision Summary**

This material has been transferred to the Functional Additives group.

Key

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

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