



1 PRODUCT AND COMPANY IDENTIFICATION

Functional Additives

2000 Market Street
21st Floor
Philadelphia, PA 19103-3222

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 Number	(800) 331-7654	8:00 AM - 5:00 PM EST

Product Name LUPEROX A75
Product Synonym(s)
Chemical Family Organic Peroxide - Diacyl Peroxide
Chemical Formula
Chemical Name
EPA Reg Num
Product Use Polymerization Initiator

2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS RegistryNumber	Typical %	OSHA
Dibenzoyl peroxide	94-36-0	73-77% By Wt.	Y
Water	7732-18-5	<or= 25% By Wt.	Y
Benzoic Acid	65-85-0	<or= 0.5% By Wt.	Y
Benzoyl chloride	98-88-4	<or= 0.1% 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

White, granular solid; no odor

WARNING!
ORGANIC PEROXIDE
CAUSES EYE IRRITATION.
MAY CAUSE ALLERGIC SKIN REACTION.
MAY CAUSE RESPIRATORY TRACT 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 to practically non-toxic if swallowed, practically non-toxic if inhaled, severely irritating to eyes and non-irritating to skin. Repeated exposure may cause an allergic skin



reaction. Inhalation of dust may be irritating to the 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, 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. If breathing is difficult, get medical attention.

5 FIRE FIGHTING MEASURES

Fire and Explosive Properties

Auto-Ignition Temperature	NE	
Flash Point	NA	Flash Point Method
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

Wet down (dampen) the spilled peroxide 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.

7 HANDLING AND STORAGE

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 contact with eyes. 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 below airborne exposure limits. Provide ventilation if necessary to control exposure levels below airborne exposure limits (see below). 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 immediately 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. Rinse contaminated skin promptly. Wash contaminated clothing and clean protective equipment before reuse. Wash skin thoroughly after handling.

Respiratory Protection

Avoid breathing dust. 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
Benzoyl chloride		
ACGIH CEILING	-	0.5ppm (2.8 mg/m3)
WEEL STEL	-	1 ppm
Dibenzoyl peroxide		
ACGIH TWA	-	5 mg/m3
OSHA TWA PEL	-	5 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	White, granular solid; no odor
pH	NA
Specific Gravity	1.334 @ 15 C
Vapor Pressure	NA
Vapor Density	NA
Melting Point	NA
Freezing Point	NA
Boiling Point	Decomposes
Solubility In Water	Negligible
SADT	71 C/160 F (25 lb cont.)

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 = 4.82-5.08%

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, alkalis, 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 may autoignite.

11 TOXICOLOGICAL INFORMATION

Toxicological Information

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

11 TOXICOLOGICAL INFORMATION

Dibenzoyl peroxide

Single exposure (acute) studies indicate that this material is slightly toxic to practically non-toxic if swallowed (rat LD50 >950 to >5,000 mg/kg), practically non-toxic if inhaled (rat 4-hr LC50 >22.4 mg/l, nominal concentration; the highest atmospheric concentration achievable in the study), severely irritating to rabbit eyes and non-irritating to rabbit skin (4-hr exposure).

Skin allergy was observed in humans and guinea pigs following repeated skin exposure. Long-term dietary administration to rats showed an increased incidence of testicular atrophy. Long-term skin application or dietary administration studies in rats and mice produced no evidence of carcinogenicity. However, repeated long-term skin application along with a known carcinogen has enhanced skin tumor production in mice. The International Agency for Research on Cancer (IARC) has evaluated this material and determined that it is "unclassifiable as to its carcinogenicity to humans" (Group 3). No genetic changes were observed in standard tests using animals or bacteria. Both positive and negative responses occurred in tests with animal cells.

12 ECOLOGICAL INFORMATION

Ecotoxicological Information

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

Dibenzoyl peroxide

This material is highly toxic to *Daphnia magna* (48-hr EC50 0.07 mg/l) and algae (72-hr EC50 0.83 mg/l). It is moderately toxic to guppies (96-hr LC50 2.0 mg/l) and slightly toxic to activated sludge (30-min EC50 35 mg/l).

Chemical Fate Information

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

Dibenzoyl peroxide

This material is biodegradable under aerobic conditions (60% after 28-days) and has a low potential to bioaccumulate (log Pow 1.87). It is degraded in air by OH radicals (half-life 54-hrs).

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 C, Solid
DOT Technical Name	[Dibenzoyl Peroxide, <= 77%]
DOT Hazard Class	5.2
UN Number	UN 3104
DOT Packing Group	PG II
RQ	
DOT Special Information	OP packing method - OP6

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	Y
		Sudden Release of Pressure	N

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

Ingredient Related Regulatory Information:

SARA Reportable Quantities

	CERCLA RQ	SARA TPQ
Water	NE	
Benzoic Acid	5000 LBS	
Benzoyl chloride	1000 LBS	
Dibenzoyl peroxide	NE	

SARA Title III, Section 313

This product does contain chemical(s) which are defined as toxic chemicals under and subject to the reporting requirements of, Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. See Section 2

- Benzoyl chloride
- Dibenzoyl peroxide

Massachusetts Right to Know

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

- Benzoic Acid
- Benzoyl chloride
- Dibenzoyl peroxide

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.

- Benzoic Acid
- Benzoyl chloride
- Dibenzoyl peroxide

Pennsylvania Environmental Hazard

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

- Benzoic Acid
- Benzoyl chloride
- Dibenzoyl peroxide

Pennsylvania Right to Know

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

- Benzoic Acid
- Benzoyl chloride
- Dibenzoyl peroxide

16 OTHER INFORMATION



Revision Information

Revision Date 02 JAN 2007 Revision Number 11
Supercedes Revision Dated 02-JAN-2007

Revision Summary

This product has been moved to the Functional Additives business unit.

Key

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

Miscellaneous

Additional Safe Handling and Use Information:

This material contains 25% water. Mishandling or improper storage may result in loss of water content, forming a SHOCK and FRICTION sensitive material. Dry material may be stabilized by the addition of water.

Luperox is a registered trade mark of Arkema Inc.

Arkema Inc. believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use are beyond the control of Arkema Inc., Arkema Inc. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.