

Safety Data Sheet

Revision Date: 06/28/2023

1. Product and Company Identification

Product Name: Benzoyl Peroxide (Catalyst for Mercox)

Product Catalog Number(s): 21246A, 21246A5

Identified Uses: Laboratory Chemicals, Manufacture of substances

Supplier of the Safety Data Sheet:

Ladd Research

3 Ewing Place

Essex Junction, VT 05452 USA

Telephone: (802) 658-4961

FAX: (802) 660-8859

Emergency Telephone Number: (800) 424-9300 (Chemtrec)

2. Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Organic peroxides (Type E), H242

Eye irritation (Category 2A), H319

Skin sensitization (Category 1), H317

Reproductive toxicity (Category 1B), H360

Acute aquatic toxicity (Category 1), H400

GHS Label elements, including precautionary statements

Pictogram(s)



Signal word Danger

Hazard statement(s)

H242 Heating may cause a fire

H317 May cause an allergic skin reaction

H319 Causes serious eye irritation

H360 May damage fertility or the unborn child

H410 Very toxic to aquatic life with long lasting effects

Precautionary statement(s)

P201 Obtain special instructions before use

P202 Do not handle until all safety precautions have been read and understood

P210	Keep away from heat/sparks/open flames/hot surfaces. NO SMOKING
P220	Keep/Store away from clothing/combustible materials
P234	Keep only in original container
P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P264	Wash skin thoroughly after handling
P272	Contaminated work clothing should not be allowed out of the workplace
P273	Avoid release to the environment
P280	Wear protective gloves and clothing/eye protection/face protection
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
P308 + P313	IF exposed or concerned: Get medical advice / attention
P321	Specific treatment (see supplemental first aid instructions in this SDS)
P333 + P313	If skin irritation or rash occurs: Get medical advice / attention
P337 + P313	If eye irritation persists: Get medical advice /attention
P363	Wash contaminated clothing before reuse.
P391	Collect spillage
P405	Store locked up
P410	Protect from sunlight
P411 + P235	Store at temperatures not exceeding 30°C/86°F. Keep cool
P420	Store away from other materials
P501	Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified or not covered by GHS

None

3. Composition/Information on Ingredients

Synonyms: Benzoyl peroxide, blend in dibutyl phthalate. Dibenzoyl peroxide

Formula: C₁₄H₁₀O₄

Molecular Weight: 242.23 g/mol

Hazardous Components	Classification	Concentration
Dibutyl phthalate is included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No 1907/2006 (REACH)		
CAS No: 84-74-2	Repr. 1B; Aquatic Acute 1;	≥30 - <50 %
EC No: 202-327-6	H360, H400	
Index No: 607-318-00-4		
Registration Number: 01-2119493042-44-XXXX		

Benzoyl Peroxide

CAS No: 94-36-0

EC No: 202-327-6

Index No: 617-008-00-0

Org. Perox. B; Eye Irrit. 2A;

Skin Sens. 1; Aquatic Acute 1;

Aquatic Chronic 1; H241

H317, H319, H241, H317,

H319, H410

≥30 - <50 %

Calcium Stearate

CAS No: 1592-23-0

EC No: 26-472-8

≥ 1 - < 5%

Silane, dichlorodimethyl-, reaction products with silica

CAS No: 68611-44-9

Acute Tox. 2; H330

≥ 1 - < 5%

4. First Aid Measures

General Advice: Consult a physician. Show this SDS to the doctor in attendance. Move out of dangerous area.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty water for at least 15 minutes and consult a physician.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. Firefighting Measures

Extinguishing Media: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special Hazards arising from the substance or mixture: No data available

Advice for firefighters: Wear self-contained breathing apparatus if necessary.

Further Information: Use water spray to cool unopened containers.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure

adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up: Sweep up and shovel. Contain spillage, then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. Keep in suitable, closed containers for disposal.

For Disposal see section 13

7. Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition.

Conditions for safe storage, including any incompatibilities: Store in original container. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature is 2 - 8°C.

8. Exposure Controls / Personal Protection

Component	CAS No.	Value	Control	
			Parameters	Basis
Dibutyl phthalate	84-74-2	TWA	5.00 mg/m ³	ACGIH TLV
Benzoyl peroxide	94-36-0	TWA	5.00 mg/m ³	ACGIH TLV
Calcium stearate	1592-23-0	TWA	10.00 mg/m ³	ACGIH TLV

Engineering Controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

Eye/Face Protection: Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous

substance at the specific workplace.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of Environmental Exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. Physical and Chemical Properties

Appearance: White paste

Odor: No data available

Melting Point: No data available

Boiling Point: 81°C

Flash Point: 95°C

Evaporation Rate: No data available

pH: No data available

Vapor Density: No data available

Water solubility: No data available

Auto-Ignition Temperature: No data available

Decomposition Temperature: No data available

Viscosity: No data available

10. Stability and Reactivity

Reactivity: No data available

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: No data available

Conditions to Avoid: Heat, flame and sparks

Incompatible Materials: Strong acids, strong bases, oxidizing agents, amines, polymerizing initiators, reducing agents

Hazardous Decomposition Products: No data available

11. Toxicological Information

Acute Toxicity: No data available

Skin Corrosion/Irritation: No data available

Serious Eye Damage/Eye Irritation: No data available

Respiratory or Skin Sensitization: No data available

Germ Cell Mutagenicity:

Carcinogenicity

IARC: Group 3: Not classifiable as to its' carcinogenicity to humans (benzoyl peroxide)

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity: No data available

Specific Target Organ Toxicity – Single Exposure: No data available

Specific Target Organ Toxicity – Repeated Exposure: No data available

Aspiration Hazard: No data available

12. Ecological Information

Toxicity: No data available

Persistence and Degradability: No data available

Bioaccumulative Potential: No data available

Mobility in Soil: No data available

Other Adverse Effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life.

13. Disposal Considerations**Waste Treatment Methods**

Product: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated Packaging: Dispose of as unused product.

14. Transport Information**DOT (US)**

UN Number: 3108 Class: 5.2 Packing Group: II

Proper shipping name: Organic peroxide type E, solid (Dibenzoyl peroxide)

Reportable Quantity (RQ): 25 lbs.

IMDG

UN Number: 3108 Class 5.2 EMS-No: F-J, S-R

Proper shipping name: Organic peroxide type E, Solid (Dibenzoyl peroxide)

Marine pollutant: Yes

IATA

UN Number: 3108 Class: 5.2 (Heat)
Proper shipping name: Organic peroxide type E, solid (Dibenzoyl peroxide)

15. Regulatory Information

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:

The following components are subject to reporting levels established by SARA Title III, Section 313:

Dibutyl phthalate	CAS No: 84-74-2	Revision Date: 2007-07-1
Benzoyl peroxide	CAS No: 94-36-0	Revision Date: 2007-07-1

SARA 311/312 Hazards: Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components:

Dibutyl phthalate	CAS No: 84-74-2	Revision Date: 2007-07-1
Benzoyl peroxide	CAS No: 94-36-0	Revision Date: 2007-07-1

Pennsylvania Right to Know Components:

Dibutyl phthalate	CAS No: 84-74-2	Revision Date: 2007-07-1
Benzoyl peroxide	CAS No: 94-36-0	Revision Date: 2007-07-1
Water	CAS No: 7732-18-5	

New Jersey Right to Know Components:

Dibutyl phthalate	CAS No: 84-74-2	Revision Date: 2007-07-1
Benzoyl peroxide	CAS No: 94-36-0	Revision Date: 2007-07-1
Water	CAS No: 7732-18-5	
Calcium Stearate	CAS No: 1592-23-0	

California Prop. 65 Components: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm -

Dibutyl phthalate	CAS No: 84-74-2	Revision Date: 2008-06-17
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16. Other Information

Full text of H-Statements referred to under sections 2 and 3

Acute Tox.	Acute toxicity
Aquatic Acute	Acute aquatic toxicity
Aquatic Chronic	Chronic aquatic toxicity
Eye Irrit.	Eye irritation
H241	Heating may cause a fire or explosion
H242	Heating may cause a fire

HMIS Rating

Health Hazard: 4

Chronic Health Hazard: *
Flammability: 1
Physical Hazard: 1

NFPA Rating

Health Hazard: 3
Fire Hazard: 1
Reactivity Hazard: 1
Special Hazard: OX

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