

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 109.00

Revision Date: February 24, 2012

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Benzoyl Peroxide

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Benzoyl peroxide

Synonym: Dibenzoyl peroxide, Benzoic acid peroxide

CAS#: 94-36-0

SECTION 3 — HAZARDS IDENTIFICATION

White, crystalline powder. Faint almond-like odor.

Slightly toxic by inhalation; avoid inhaling dust.

Powerful oxidizer and dangerous explosion hazard: may explode spontaneously upon heating or friction.

Irritant to skin, eyes, and mucous membranes.

FLINN AT-A-GLANCE

Health-1

Flammability-3

Reactivity-3

Exposure-2

Storage-2

0 is low hazard, 3 is high hazard

SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Combustible solid.

Easily ignited and burns rapidly. Powerful oxidizer and dangerous explosion hazard: may explode spontaneously upon heating or friction. Autoignition Temperature: 80 °C

Fire Fighting Instructions: Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

NFPA CODE

None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. Remove all ignition sources and water. Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #6. Store with peroxides, hydroperoxides, and azides.

Store in a cool, dry place. Store in a Flinn Chem-Saf can. Use and dispense in a hood.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: PEL 5 mg/m³ (OSHA)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White, crystalline powder with at faint almond like odor.
Solubility: Slightly soluble in water; soluble in many organic solvents.
Formula: $(C_6H_5CO)_2O_2$
Formula weight: 242.24

Melting point: 103-105 °C
Refractive index: 1.543
Specific gravity: 1.33

SECTION 10 — STABILITY AND REACTIVITY

Material must be moist. May explode spontaneously when dry. Never use unless 33% water is present. Avoid strong acids, alkalis, and oxidizers. Use no sparking tools for handling.
Shelf life: Poor. Plan not to store an item like this.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Irritant, sensitizer.
Chronic effects: Possible tumor promoter.
Target organs: N.A.

ORL-RAT LD₅₀: 7710 mg/kg
IHL-RAT LC₅₀: N.A.
SKN-RBT LD₅₀: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply, before proceeding.
Flinn Suggested Disposal Method #22b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Organic Peroxide Type B, Solid (Dibenzoyl Peroxide)
Hazard class: 5.2
UN number: UN3102
N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (202-327-6), RCRA code D001, D003.

SECTION 16 — OTHER INFORMATION

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*
for additional information about laboratory chemicals.**