

# 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/m<sup>3</sup> (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 LD<sub>50</sub>: 7710 mg/kg  
IHL-RAT LC<sub>50</sub>: N.A.  
SKN-RBT LD<sub>50</sub>: 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**

This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

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