

# Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.31.2015

Page 1 of 7

## Benzoyl Peroxide

### SECTION 1 : Identification of the substance/mixture and of the supplier

**Product name :** Benzoyl Peroxide

**Manufacturer/Supplier Trade name:**

**Manufacturer/Supplier Article number:** S25672

**Recommended uses of the product and uses restrictions on use:**

**Manufacturer Details:**

AquaPhoenix Scientific  
9 Barnhart Drive, Hanover, PA 17331

**Supplier Details:**

Fisher Science Education  
15 Jet View Drive, Rochester, NY 14624

**Emergency telephone number:**

Fisher Science Education Emergency Telephone No.: 800-535-5053

### SECTION 2 : Hazards identification

**Classification of the substance or mixture:**



**Flammable**

Flammable solids, category 1



**Health hazard**

Carcinogenicity, category 2



**Irritant**

Acute toxicity (oral, dermal, inhalation), category 4



**Environmentally Damaging**

Acute hazards to the aquatic environment, category 1  
Chronic hazards to the aquatic environment, category 1

Flam. Sol. 1

Acute Oral Tox. 4

Carc. 2

Aquatic Acute 1

Aquatic Chronic 1

**Signal word :** Danger

**Hazard statements:**

Flammable solid

Harmful if swallowed

Suspected of causing cancer

Very toxic to aquatic life with long lasting effects

**Precautionary statements:**

If medical advice is needed, have product container or label at hand

# Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.31.2015

Page 2 of 7

## Benzoyl Peroxide

Keep out of reach of children  
Read label before use  
Obtain special instructions before use  
Wear protective gloves/protective clothing/eye protection/face protection  
Do not handle until all safety precautions have been read and understood  
Keep away from heat/sparks/open flames/hot surfaces. No smoking  
Ground/bond container and receiving equipment  
Use explosion-proof electrical/ventilating/light/equipment  
Wash skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Avoid release to the environment  
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
IF exposed or concerned: Get medical advice/attention  
Rinse mouth  
In case of fire: Use agents recommended in section 5 for extinction  
Collect spillage  
Store locked up  
Dispose of contents and container to an approved waste disposal plant

### Other Non-GHS Classification:

#### WHMIS



#### NFPA/HMIS



NFPA SCALE (0-4)

Health	2
Flammability	2
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

### SECTION 3 : Composition/information on ingredients

Ingredients:		
CAS 91-20-3	Naphthalene	100 %
Percentages are by weight		

### SECTION 4 : First aid measures

#### Description of first aid measures

**After inhalation:** Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give

## Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.31.2015

Page 3 of 7

### Benzoyl Peroxide

oxygen. Loosen clothing and place exposed in a comfortable position. Call a physician or Poison Control Center immediately.

**After skin contact:** Wash hands and exposed skin with soap and plenty of water. Seek medical attention if irritation persists or if concerned.

**After eye contact:** Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes. Remove contact lenses while rinsing. Seek medical attention if irritation persists or concerned.

**After swallowing:** Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention if irritation, discomfort, or vomiting persists.

#### Most important symptoms and effects, both acute and delayed:

Irritation. Shortness of breath. Headache. Nausea. Dizziness. Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer. Naphthalene is retinotoxic and systemic absorption of its vapors above 15ppm, may result in: cataracts, optic neuritis, corneal injury, Eye irritation, Ingestion may provoke the following symptoms: hemolytic anemia, hemoglobinuria, Nausea, Headache, Vomiting, Gastrointestinal disturbance, Convulsions, anemia, Kidney injury may occur., Seizures., Coma.

#### Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically. Move out of dangerous area.

### SECTION 5 : Firefighting measures

#### Extinguishing media

**Suitable extinguishing agents:** Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

**For safety reasons unsuitable extinguishing agents:** Water or foam may cause frothing.

#### Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors. Dusts may be an explosion hazard if mixed with air at critical proportions and in the presence of an ignition source. Volatile solid that gives off flammable vapors when heated.

#### Advice for firefighters:

**Protective equipment:** Wear protective eyewear, gloves, and clothing. Refer to Section 8.

**Additional information (precautions):** Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing.

### SECTION 6 : Accidental release measures

#### Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that air-handling systems are operational. Avoid contact with skin, eyes and clothing.

#### Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

#### Methods and material for containment and cleaning up:

Wear protective eyewear, gloves, and clothing. Refer to Section 8. Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to Section 13. Keep in suitable closed containers for disposal. Use non-sparking equipment.

#### Reference to other sections:

### SECTION 7 : Handling and storage

# Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.31.2015

Page 4 of 7

## Benzoyl Peroxide

### Precautions for safe handling:

Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Refer to Section 13. Do not eat, drink, smoke, or use personal products when handling chemical substances. Use adequate general or local explosion-proof ventilation. Take measures to prevent the build up of electrostatic charge.

### Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials. Keep away from open flames, hot surfaces and sources of ignition.

## SECTION 8 : Exposure controls/personal protection



### Control Parameters:

91-20-3, Naphthalene, ACGIH TLV: 50 mg/m<sup>3</sup> (10ppm)  
91-20-3, Naphthalene, OSHA PEL TWA 50 mg/m<sup>3</sup>

### Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

### Respiratory protection:

Not required under normal conditions of use. 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. When necessary use NIOSH approved breathing equipment.

### Protection of skin:

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.

### Eye protection:

Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses or goggles are appropriate eye protection.

### General hygienic measures:

Perform routine housekeeping. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Before re-wearing wash contaminated clothing.

## SECTION 9 : Physical and chemical properties

<b>Appearance (physical state,color):</b>	White Solid	<b>Explosion limit lower:</b> <b>Explosion limit upper:</b>	0.9% (V) 5.9% (V)
<b>Odor:</b>	Mothball-like	<b>Vapor pressure:</b>	0.08 mbar @ 20 °C
<b>Odor threshold:</b>	Not Determined	<b>Vapor density:</b>	4.4
<b>pH-value:</b>	Not Determined	<b>Relative density:</b>	0.990

## Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.31.2015

Page 5 of 7

### Benzoyl Peroxide

<b>Melting/Freezing point:</b>	79.5 - 81.0 °C (175.1 - 177.8 °F)	<b>Solubilities:</b>	Insoluble in water
<b>Boiling point/Boiling range:</b>	218 °C (424 °F)	<b>Partition coefficient (n-octanol/water):</b>	log Pow: 3.30
<b>Flash point (closed cup):</b>	80.0 °C (176.0 °F)	<b>Auto/Self-ignition temperature:</b>	526.0 °C (978.8 °F)
<b>Evaporation rate:</b>	Not Determined	<b>Decomposition temperature:</b>	Not Determined
<b>Flammability (solid,gaseous):</b>	Flammable solid	<b>Viscosity:</b>	a. Kinematic: Not Determined b. Dynamic: Not Determined
<b>Density:</b> Not Determined			

### SECTION 10 : Stability and reactivity

**Reactivity:** Nonreactive under normal conditions.

**Chemical stability:** Stable under normal conditions.

**Possible hazardous reactions:** None under normal processing.

**Conditions to avoid:** Incompatible materials. Ignition sources, dust generation, moisture, excess heat, exposure to moist air or water, steam

**Incompatible materials:** Strong oxidizing agents.

**Hazardous decomposition products:** Irritating and toxic fumes and gases. Carbon oxides.

### SECTION 11 : Toxicological information

<b>Acute Toxicity:</b>	
<b>Oral:</b>	LD50 Rat: 490 mg/kg
<b>Inhalation:</b>	LC50 Rat: >85 mg/m3 - 4h
<b>Chronic Toxicity:</b> No additional information.	
<b>Corrosion Irritation:</b>	
<b>Ocular:</b>	Rabbit: mild eye irritation
<b>Sensitization:</b>	No additional information.
<b>Single Target Organ (STOT):</b>	No additional information.
<b>Numerical Measures:</b>	No additional information.
<b>Carcinogenicity:</b>	IARC:: Group 2B: Possibly carcinogenic to humans (Naphthalene) NTP:: Reasonably anticipated to be a human carcinogen (Naphthalene)
<b>Mutagenicity:</b>	No additional information.
<b>Reproductive Toxicity:</b>	No additional information.

# Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.31.2015

Page 6 of 7

## Benzoyl Peroxide

### SECTION 12 : Ecological information

#### Ecotoxicity

**Fish LC50 - Oncorhynchus mykiss (rainbow trout) - 0.9 - 9.8 mg/l - 96.0 h:** 91-20-3 (Naphthalene)

**Invertebrates EC50 - Daphnia magna (Water flea) - 1.00 - 3.40 mg/l - 48 h:** 91-20-3 (Naphthalene)

**Algae EC50 - No information available. - 33.00 mg/l - 24 h:** 91-20-3 (Naphthalene)

**Persistence and degradability:** Not readily biodegradable.

**Bioaccumulative potential:** Bioconcentration factor (BCF): 427 - 1,158

**Mobility in soil:**

**Other adverse effects:**

### SECTION 13 : Disposal considerations

#### Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Product or containers must not be disposed together with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

### SECTION 14 : Transport information

#### UN-Number

1334

#### UN proper shipping name

Naphthalene, crude

#### Transport hazard class(es)



#### Class:

4.1 Flammable solids, self-reactive substances and solid desensitized explosives

**Packing group:** III

**Environmental hazard:**

**Transport in bulk:**

**Special precautions for user:**

### SECTION 15 : Regulatory information

#### United States (USA)

##### SARA Section 311/312 (Specific toxic chemical listings):

Acute, Chronic, Fire

##### SARA Section 313 (Specific toxic chemical listings):

91-20-3 Naphthalene

##### RCRA (hazardous waste code):

91-20-3 Naphthalene - U165

##### TSCA (Toxic Substances Control Act):

All ingredients are listed.

##### CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

## Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.31.2015

Page 7 of 7

### Benzoyl Peroxide

91-20-3 Naphthalene 100 lb

#### Proposition 65 (California):

##### Chemicals known to cause cancer:

91-20-3 Naphthalene

##### Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

##### Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

##### Chemicals known to cause developmental toxicity:

None of the ingredients is listed

#### Canada

##### Canadian Domestic Substances List (DSL):

All ingredients are listed.

##### Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

##### Canadian NPRI Ingredient Disclosure list (limit 1%):

91-20-3 Naphthalene

### SECTION 16 : Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note: . The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

#### GHS Full Text Phrases:

#### Abbreviations and acronyms:

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