



# MATERIAL SAFETY DATA

**Chemtrec 24-Hour Emergency Telephone**

Domestic North America (800) 424-9300

International (800) 527-3887

*This MSDS complies with 29 CFR 1910.1200 (Hazard Communications)*

## 1. Product and Supplier Identification

**Product Name:** BPO Cream Hardener

**Product Number:** 0801001, 0801002, 0801011, 0801012, 0801022, 0801032, 0801042

**Date of Prep:** 10-15-2010

**Product Type:** Polymerization Initiator

**Supplier:** Fiberlay Inc.  
24 S. Idaho S.  
Seattle, Wa 98134  
(206)782-0660

## 2. Composition/Information On Ingredients

CAS No.	Chemical Name	EINECS NUMBER	% (by weight)
94-36-0	Benzoyl Peroxide	202-327-6	45-50
Proprietary	Plasticizer, non-phthalate	Proprietary	25-30
7732-18-5	Water	231-791-2	15-20
7631-86-9	Silica, amorphous	231-545-4	0-2
1317-65-3	Calcium Carbonate	215-279-6	0-2
Various	Pigments	Various	0-2

OSHA Regulatory Status: This material is classified as hazardous under OSHA regulations.

## 3. Hazards Identification

**Hazard Category:** Hazardous

**Hazardous Identification Information:** Warning! Causes eye and skin irritation. Harmful if swallowed. Oxidizer

**Potential Health Effects Short Term/ Acute:**

**Eye:** Contact with paste may result in irritation, redness, tearing, and blurred vision

**Skin:** May cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns.

**Swallowing:** Ingestion of this material may cause gastrointestinal irritation, nausea, diarrhea, and vomiting. Aspiration of this material into the lungs due to vomiting may produce chemical pneumonitis which can be fatal. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs.

**Inhalation:** Not expected to be an inhalation hazard.

**Chronic Effects of Overexposure (Long Term): Benzoyl Peroxide:** Repeated or prolonged contact may cause skin sensitization. Overexposure to this material has been known to cause the following effects in lab animals:

- skin damage.
- Benzoyl Peroxide has caused tumorigenic effects in laboratory animals

**Cancer Information:** This product does not contain any substance, which is listed as a carcinogen by NTP, IARC or OSHA in quantities greater than 0.1%.

**Primary Route(s) of Entry:** Inhalation, Skin contact, Eye contact, Ingestion, Skin absorption.

#### 4. First Aid Measures

**Eyes:**

- Flush eyes gently with water for at least 15 minutes
- Seek medical attention

**Skin:**

- Immediately remove contaminated clothing
- Wash exposed area with soap and water
- Seek medical attention
- Launder clothing before reuse.

**Swallowing:**

- Consult a physician or poison control center immediately
- DO NOT INDUCE VOMITING
- If individual is drowsy or unconscious, do not give anything by mouth
- Place individual on the left side with the head down
- If possible, do not leave individual unattended.

**Inhalation:**

- If symptoms develop, immediately move individual away from exposure and into fresh air
- Seek immediate medical attention
- Keep person warm and quiet
- If person is not breathing, begin artificial respiration
- If breathing is difficult, oxygen may be beneficial if administered by trained personnel.

## 5. Fire Fighting Measures

**Flash Point:** 184°F (84°C)

**Explosive Limit:** Lower: N/D Upper: N/D

**Autoignition Temperature:** Not Determined

**OSHA Flammability Class:** Combustible Liquid – Class IIIA

**Hazardous Products of Combustion:** May form toxic and corrosive gases: carbon dioxide, carbon monoxide, benzoic acid and various hydrocarbons.

**Fire and Explosion Hazards:** Fire hazard increases when material becomes dry. Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point.

**Extinguishing Media:** Regular foam, carbon dioxide, dry chemical.

**Fire Fighting Instructions:** Fight fire like a fuel oil fire. Water may be used to keep fire-exposed containers cool until fire is out. Wear a self-contained breathing apparatus NIOSH approved with a full face piece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment.

**NFPA Rating:** Health - 2, Flammability - 2, Reactivity - 2

## 6. Accidental Release Measures

### In Case of Spill:

- Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks
- Ventilate the area
- Wear proper protective equipment (Section 8)
- Avoid breathing vapors
- Collect with an inert absorbant and dispose of properly.

## 7. Handling and Storage

### Handling:

- All hazard precautions given in the data sheet must be observed
- Avoid contact with eyes, skin and clothing
- Wash thoroughly after handling
- Use only with adequate ventilation
- Do not breathe vapors or spray mist
- Do not take internally
- Close container after each use
- **Keep out of reach of children.**

**Storage:**

- Store material in a cool well-ventilated area
- For maximum product quality, avoid prolonged storage at temperatures above 75°F (25°C)
- To prevent possible decomposition, temperatures in the storage facility must not exceed 217°F (103°C). Do not use or store near heat, sparks, or open flame. Keep container tightly closed. Avoid contact with incompatible materials.

<b>8. Exposure Controls / Personal Protection</b>
---

**Eye Protection:** Chemical splash goggles in compliance with OSHA regulations are recommended.

**Skin Protection:** Protective gloves and proper clothing should be worn to prevent skin contact. Gloves should be made of neoprene or natural rubber. A barrier cream may be used for additional skin protection. To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

**Respiratory Protection:** Use a NIOSH approved respirator designed to remove particulate matter and organic solvent vapors.

**Engineering Controls:** Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below acceptable limits. Explosion-proof ventilation system is acceptable.

**Exposure Guidelines:**

Hazardous Ingredients	CAS Number	OSHA PEL/TWA	ACGIH TLV
Benzoyl Peroxide	94-36-0	5 mg/m <sup>3</sup>	5 mgm <sup>3</sup>
Calcium Carbonate	1317-65-3	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Silica, amorphous	7631-86-9	20 mppcf	N/E

<b>9. Physical and Chemical Properties</b>
--

<b>Boiling Point:</b>	Decomposes explosively	<b>Vapor Density:</b>	Heavier than air
<b>Specific Gravity / Density</b>	1.2 / 10.0 lbs / gal	<b>% Volatiles by wt</b>	10-20%
<b>Evaporation Rate:</b>	Slower than ethyl ether	<b>Physical State:</b>	Paste
<b>Melting Point:</b>	217° F / 103° C Decomposes	<b>pH:</b>	Neutral
<b>Odor:</b>	Slight ester odor	<b>Solubility:</b>	Slightly in water
<b>Vapor Pressure:</b>	<1 mmHg @ 68°F / 20°C	<b>Appearance:</b>	Red, White, or Blue paste
<b>Octanol /Water Partition Coefficient:</b>	Unknown	<b>VOC*</b> (as packaged – less exempts and water):	0 lbs/gal or 0 g/L

\*NOTE: This material is used as a catalyst with a variety of products; refer to the other MSDS for additional VOC information for the mixture.

## 10. Stability and Reactivity

**Hazardous Polymerization:** Product will not undergo polymerization under normal conditions of use.

**Hazardous Decomposition:** May form toxic and corrosive gases: carbon dioxide, carbon monoxide, benzoic acid and various hydrocarbons.

**Chemical Stability:** Stable under normal handling conditions. **Incompatibility:** Avoid contact in uncontrolled conditions with: organic materials, inorganic acids, strong oxidizing agents, accelerators, reducing materials, alcohols, amines and strong bases.

## 11. Toxicological Information

Ingredient	CAS #	LD50 Oral-Rat	LC50 Inhalation-Rat
Benzoyl Peroxide	94-36-0	7,710 mg/kg	N/E
Calcium Carbonate	1317-65-3	6,450 mg/kg	N/E

**Carcinogenicity:** See Cancer Information, Section 3

**Mutagenicity:** No significant evidence found

**Teratogenicity:** No significant evidence found

## 12. Ecological Information

**Ecotoxicity:** The ecological toxicity of this product is not known.

## 13. Disposal Considerations

**RCRA Hazardous Waste:** This material as supplied, if discarded, would be regulated as a hazardous waste under RCRA (40 CFR 261). Dispose of in accordance with applicable federal, state, and local regulations. Incineration is the preferred method for disposal. DO NOT incinerate in closed containers.

**RCRA Hazard Class:** This material would be regulated as EPA Hazardous Waste Number D001 based on the characteristic of ignitability (oxidizer).

## 14. Transport Information

**DOT Description:** The DOT Classification for shipping is dependant on quantity, type of packaging (a kit may include other components), or method of shipment.

## 15. Regulatory Information

### US Federal Regulations:

- **TSCA (Toxic Substances Control Act) Status:** TSCA (USA) The intentional ingredients of this product are listed.
- **CERCLA RQ - 40 CFR 302.4(a):** None
- **SARA Title III: Section 302-** Extremely Hazardous Substances: None
- **SARA Title III: Section 313-** Toxic Chemical List

Component	CAS Number	Percentage
Benzoyl Peroxide	94-36-0	45-50%

- **EPA Hazardous Air Pollutants (HAPS) 40 CFR 63:** None

### International Regulations:

- **EINECS (Europe):** The intentional ingredients of this product are listed.
- **DSL (Canada)** The intentional ingredients of this product are listed.

#### **WHMIS Classification:**

**Health Hazard:** D2B, C, F (Toxic Effects, Oxidizer, Dangerously Reactive Materials)

**Physical Hazard:** B3 (Combustible)

- **State and Local Regulations California Proposition 65:**

This product contains the following chemical(s) known to the state of California to cause cancer: NONE

This product contains the following chemical(s) known to the state of California to cause birth defects or reproductive harm: NONE

## 16. Other Information

**HMIS Rating:** Health – 2, Flammability - 2, Reactivity - 2

Key- 0=Least, 1=Slight, 2=Moderate, 3=Serious, 4=Extreme, \*=Chronic Effects

### **Other Precautions for Use:**

- DO NOT return unused material to the original container
- DO NOT contaminate product with foreign materials, it may cause hazardous decomposition
- DO NOT add to hot material
- This product must be mixed with other components prior to use
- Please refer to the Material Safety Data Sheet for all components before using.

**NOTICE:** The information accumulated herein is believed to be correct as of the date issued from sources, which are believed to be accurate and reliable. Since it is not possible to anticipate all circumstances of use, recipients are advised to confirm, in advance of need, that the information is current, applicable and suitable to their circumstances.

**Preparation Date:** March 13<sup>th</sup>, 2009

**Prepared by:** Fiberlay Inc

Comments: This Material Safety Data Sheet was prepared using information provided by Sewon Chemical Co. Ltd., Fiberlay Inc. and CCINFO.

**Revisions:** None