Section 1 - Product and Company Information

Product Name                 BENZOYL PEROXIDE MOISTENED WITH WATER (H2O ~25%)
Product Number               33581
Brand                        FLUKA
Company                      Sigma-Aldrich
Address                      3050 Spruce Street
SAINT LOUIS MO 63103 US
Technical Phone:             800-325-5832
Fax:                         800-325-5052
Emergency Phone:             314-776-6555

Section 2 - Composition/Information on Ingredient

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>CAS #</th>
<th>SARA 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZOYL PEROXIDE, 70-75% IN WATER</td>
<td>None</td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS #</th>
<th>Percent</th>
<th>SARA 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZOYL PEROXIDE</td>
<td>94-36-0</td>
<td>&gt;= 70</td>
<td>Yes</td>
</tr>
<tr>
<td>&lt; 75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WATER</td>
<td>7732-18-5</td>
<td>&gt;= 25</td>
<td>No</td>
</tr>
<tr>
<td>&lt; 30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chemical Family: Organic peroxide.
Synonyms: Acnecgel * Aztec BPO * Benzoperoxide * Benzoyl peroxide (German) * Benzoyl peroxide (ACGIH:OSHA) * Benzoylperoxyde (Dutch) * Benzoyl superoxide * BZF-60 * Cadat BPO * Cadox B-CH 50 * Cadox BS * Debroxide * Dibenzyolperoxid (German) * Di benzyol peroxide * Dibenzyloperoxyde (Dutch) * Diphenylglyoxal peroxide * Fostex * Garox * Incidol * Loroxide * Lucidol * Luperco AA * Luperco AST * Luperox FL * Nayper B and BO * Norox bzp-250 * Norox bzp-C-35 * Novadelox * Oxylite * Panoxyl * Perossido di benzoile (Italian) * Peroxide, dibenzoyl * Peroxyde de benzyole (French) * Persadox * Quinolor compound * Superox 744 * Theraderm * Topex * Vanoxide * Xerac

RTECS Number: DM8575000

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Oxidizing. Irritant.
Explosive when dry. May cause fire. Irritating to eyes. May cause sensitization by skin contact.
Target organ(s): Lungs. Nerves.

HMIS RATING
HEALTH: 3*
FLAMMABILITY: 0  
REACTIVITY: 3  
SPECIAL HAZARD(S): Oxidizer

NFPA RATING  
HEALTH: 3  
FLAMMABILITY: 0  
REACTIVITY: 3  
SPECIAL HAZARD(S): Oxidizer

*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE  
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE  
If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

DERMAL EXPOSURE  
In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

EYE EXPOSURE  
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

FLASH POINT  
N/A

AUTOIGNITION TEMP  
80 °C

FLAMMABILITY  
N/A

EXTINGUISHING MEDIA  
Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING  
Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions. Contact with other material may cause fire. May accelerate combustion.

Section 6 - Accidental Release Measures

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL  
Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP
Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

HANDLING
User Exposure: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

STORAGE
Suitable: Keep tightly closed. Keep away from combustible materials, heat, sparks, and open flame. Store below 30℃

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS
Use only in a chemical fume hood. Safety shower and eye bath.

PERSONAL PROTECTIVE EQUIPMENT
Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). 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.
Hand: Compatible chemical-resistant gloves.
Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES
Wash thoroughly after handling. Remove and wash contaminated clothing promptly. Discard contaminated shoes.

Section 9 - Physical/Chemical Properties

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Physical State: Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property</td>
<td>Value</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>BP/BP Range</td>
<td>N/A</td>
</tr>
<tr>
<td>MP/MP Range</td>
<td>103.0 - 104.0 °C</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Saturated Vapor Conc.</td>
<td>N/A</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>N/A</td>
</tr>
<tr>
<td>Volatile%</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC Content</td>
<td>N/A</td>
</tr>
<tr>
<td>Water Content</td>
<td>N/A</td>
</tr>
<tr>
<td>Solvent Content</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Viscosity</td>
<td>N/A</td>
</tr>
<tr>
<td>Surface Tension</td>
<td>N/A</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>N/A</td>
</tr>
<tr>
<td>Decomposition Temp.</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Section 10 - Stability and Reactivity

STABILITY
Stable: Unstable.
Conditions of Instability: Self-ignition is possible.
Conditions to Avoid: Heat, Contamination.
Materials to Avoid: Strong acids, Strong bases, Strong oxidizing agents, Amines, Polymerizing initiators, Reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Benzoic acid.

HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE
Skin Contact: May cause skin irritation.
Skin Absorption: May be harmful if absorbed through the skin.
Readily absorbed through skin.
Eye Contact: Causes eye irritation.
Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
Ingestion: May be harmful if swallowed.

SENSITIZATION
Skin: May cause skin sensitization

TARGET ORGAN(S) OR SYSTEM(S)
Lungs, Nerves, Testes.

SIGNS AND SYMPTOMS OF EXPOSURE
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION
Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
Proper Shipping Name: Organic peroxide type C, solid
UN#: 3104
Class: 5.2
Packing Group: Packing Group II
Hazard Label: Organic Peroxide
PIH: Not PIH

IATA
Proper Shipping Name: Organic peroxide type C, solid
IATA UN Number: 3104
Hazard Class: 5.2

Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION
Symbol of Danger: O-Xi
Indication of Danger: Oxidizing. Irritant.
R: 1-7-36-43
Risk Statements: Explosive when dry. May cause fire. Irritating to eyes. May cause sensitization by skin contact.
S: 7-14-26-35/36/37/39-47-45
Safety Statements: Keep container tightly closed. Keep away from combustible material. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. This material and its container must be disposed of in a safe way. Wear suitable protective clothing, gloves, and eye/face protection. Keep at temperature not exceeding 30°C In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US CLASSIFICATION AND LABEL TEXT
Indication of Danger: Oxidizing. Irritant.
Risk Statements: Explosive when dry. May cause fire. Irritating to eyes. May cause sensitization by skin contact.
Safety Statements: Keep container tightly closed. Keep away from combustible material. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. This material and its container must be disposed of in a safe way. Wear suitable protective clothing, gloves, and eye/face protection. Keep at temperature not exceeding 30°C

UNITED STATES REGULATORY INFORMATION
SARA LISTED: Yes
DEMINIMIS: 1 %
NOTES: This product is subject to SARA section 313 reporting requirements.

CANADA REGULATORY INFORMATION
WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
DSL: Yes
NDSL: No

Section 16 - Other Information

DISCLAIMER
For R&D use only. Not for drug, household or other uses.

WARRANTY
The above information is believed to be correct but does not
purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2010 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.