Benzoyl Peroxide Paste (Technical Data Sheet)

GENERAL NAME: BP PASTE
CHEMICAL NAME: Benzoyl Peroxide Paste
PEROXIDE CLASS: Diacyl Peroxide
STRUCTURE: \((\text{C}_6\text{H}_5\text{CO}_2\text{)}_2\)
MOLECULAR WEIGHT: 242.2
CAS No.: 94-36-0
PACKING: 50 Kg wide mouth HDPE drum

TYPICAL PROPERITES

APPEARANCE: White thixotropic paste
ASSAY: Min. 50% w/w
ACTIVE OXYGEN: Min. 3.31%
SPECIFIC GRAVITY (@25°C): 1.15
SADT: 55°C
SHELF LIFE: Six months @ 25°C
SOLUBILITY: Soluble in ethyl acetate, Dimethyl Phthalate; insoluble in water.

USES:

It’s a white thixotropic paste used as an initiator for curing of unsaturated polyester resins.

Main application is curing of putties at ambient temperature in combination with amine accelerators.

HAZARDS, HANDLING AND STORAGE:

When working with organic peroxides always wear eye protection and protective gloves.

Avoid prolonged or repeated exposure. If contact with eyes and skin occurs, flush with copious amount of water for at least 15 min. Call a physician.

Extinguish fire from a safe distance with copious amounts of water, foam or dry chemical

Keep container tightly closed. Keep away from combustible materials, heat sparks and open flame. Above 55°C spontaneous decomposition may occur under conditions of restricted heat transfer.

WARRANTY:

The above details are given in good faith for your guidance without assuming any liability whatsoever arising there from.
Section 1 - PRODUCT AND COMPANY INFORMATION

Product Name 50% BENZOYL PEROXIDE PASTE

Section 2 - COMPOSITION/INFORMATION ON INGREDIENT

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS #</th>
<th>Percent (w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZOYL PEROXIDE</td>
<td>94-36-0</td>
<td>50 - 55%</td>
</tr>
<tr>
<td>DI METHYL PHTHALATE</td>
<td>131-11-3</td>
<td>45-50%</td>
</tr>
</tbody>
</table>

Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Oxidizing. Irritant. Explosive when dry. Contact with combustible material may cause fire. Irritating to eyes. May cause sensitization by skin contact. Readily absorbed through skin. Target organ(s): Lungs. Nerves.

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

Section 4 - FIRST AID MEASURES

ORAL EXPOSURE
If swallowed, thoroughly wash out mouth with water provided person is conscious. 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

EXPLOSION HAZARDS
May explode when heated. Container explosion may occur under fire conditions.

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 vapor. 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 at less than 30°C

SPECIAL REQUIREMENTS
Vent periodically.

Section 8 - EXPOSURE CONTROLS / PPE

PERSONAL PROTECTIVE EQUIPMENT
Respiratory: Government approved respirator.
Hand: Wear heavy rubber gloves.
Eye: Chemical safety goggles.
Other: Rubber boots.

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

Section 9 - PHYSICAL/ CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>At Temperature or Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White thixotropic paste</td>
<td></td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>242</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.1g/cc</td>
<td>20°C</td>
</tr>
<tr>
<td>MP/MP Range</td>
<td>103 – 104°C with decomposition</td>
<td></td>
</tr>
<tr>
<td>Autoignition Temp</td>
<td>80°C</td>
<td></td>
</tr>
<tr>
<td>Solubility</td>
<td>Solubility in Water: Insoluble</td>
<td></td>
</tr>
</tbody>
</table>

Section 10 - STABILITY AND REACTIVITY

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

HAZARDOUS DECOMPOSITION PRODUCTS
Carbon monoxide, Carbon dioxide.

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.
Eye Contact: Causes eye irritation.
Inhalation: May be harmful if inhaled.
Ingestion: Harmful if swallowed.

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.

TOXICITY DATA
### Section 12 - ECOLOGICAL INFORMATION

**ACUTE ECOTOXICITY TESTS**

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>&gt; 950 mg/kg</td>
<td>LD50</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>&gt; 5,000 mg/kg</td>
<td>LD50</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Rat</td>
<td>&gt; 22.4 ppm</td>
<td>LC50</td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
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<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Fish</td>
<td>96 h</td>
<td>2 mg/l</td>
<td>LC50</td>
</tr>
<tr>
<td>Daphnia magna</td>
<td>48h</td>
<td>2.9 mg/l</td>
<td>EC50</td>
</tr>
</tbody>
</table>

### 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 state, and local environmental regulations.

### Section 14 - TRANSPORT INFORMATION

**DOT**

Proper Shipping Name: Organic peroxide Type E, solid (benzoyl peroxide as paste)

UN#: 3108

Class: 5.2

Packing Group: Packing Group II

Hazard Label: Organic Peroxide

PIH: Not PIH

### Section 15 - REGULATORY INFORMATION

Indication of Danger Corrosive. Oxidizing.

**Risk Statements**: Explosive when dry. Contact with combustible material may cause fire. Irritating to eyes.

**Safety Statements**: Keep away from combustible material. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and gloves.

### Section 16 - OTHER INFORMATION

The above information is believed to be correct and shall be used only as a guide. The information in this document is based on 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.