

**MATERIAL SAFETY DATA SHEET**

Date Revised: 01/31/08

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BPO Catalyst Benox B-11-518 Red/Hot formula

MSDS Number: 130040

**SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION****Material Identity**

Product Name: Quantum BPO Catalyst Red (Hot)  
 Product Numbers: 51506A  
 Product Use: Polymerization initiator

**Distributed By**

The Easthill Group  
 dba/ The Eastwood Company  
 263 Shoemaker Road  
 Pottstown, PA 19464  
 USA & Canada: 800-345-1178  
 Outside USA: 610-323-2200

**Emergency Telephone Numbers:**

CHEMTREC: 1-800-424-9300

Prepared By: Safety Department

**SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS**

| <b>Ingredient(s)</b>                                    | <b>CAS Number</b>     | <b>% (by weight)</b> |
|---|-----------------------|----------------------|
| Benzoyl Peroxide  | 94-36-0               | 9 - 11               |
| Propane, 2,2-bis[p-(2,3-epoxypropoxy)phenyl]-, polymers | 25085-99-8            | 56 - 60              |
| Alkyl(C12-14) glycidyl ether                            | 68609-97-2            | 11 - 13              |
| Soda lime borasilicate glass                            | 65997-17-3            | 05 - 08              |
| Water   | 7732-18-5             | 04 - 05              |
| C <sub>9-11</sub> -branched alkyl benzoate              | 131298-44-7           | 02 - 04              |
| Silicon Dioxide   | 112945-52-5           | 02 - 04              |
| Zinc Stearate   | 557-05-1              | 01 - 02              |
| Calcium Sulfate Dihydrate                               | 7778-18-9             | 00 - 02              |
| Nonionic Surfactant                                     | 9038-95-3             | 00 - 01              |
| Blue Pigment  | 25869-00-5/14038-43-8 | 00 - 01              |

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

**SECTION 3. HAZARDS IDENTIFICATION****\*\*\*EMERGENCY OVERVIEW\*\*\***

WARNING! CAUSES EYE AND SKIN IRRITATION. HARMFUL IF SWALLOWED.  
 OXIDIZER.

**Potential Health Effects****Acute Effects (Short Term):**

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

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**Skin:** May cause allergic skin reactions, irritation and redness of the skin. burning, drying and cracking of skin, and skin burns.

**Swallowing:** May cause irritation of the digestive tract. May be harmful if swallowed. May cause human systemic effects by ingestion: hallucinations distorted perceptions, nausea or vomiting and kidney, ureter or bladder changes.

**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. OSHA PEL and ACGJH TWA are 5 mg/m<sup>3</sup> for Benzoyl Peroxide.

**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.

**SECTION 4. FIRST AID MEASURES**

**Eyes:** Remove any contact lenses at once. Flush eyes with water for at least 15 minutes. Ensure adequate flushing by separating the eyelids with fingers. If irritation or adverse symptoms develop, seek medical attention.

**Skin:** Immediately remove any contaminated clothing. Wash contaminated area thoroughly with soap and copious amounts of water for at least 15 minutes. If irritation or adverse symptoms develop, seek medical attention.

**Swallowing:** Contact a physician, hospital or Poison Control Center at once. DO NOT INDUCE VOMITING

**Inhalation:** Remove to fresh air, if coughing, breathing becomes labored, irritation develops or other symptoms develop, seek medical attention at once, even if symptoms develop several hours after the exposure.

**SECTION 5. FIRE FIGHTING MEASURES**

**Flash Point:** Not applicable

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

**Autoignition Temperature:** Not applicable

**OSHA Flammability Class:** N/D

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**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:** Water from a safe distance - preferably with a fog nozzle. In case of very small fires, other means such as carbon dioxide, foam or dry chemical extinguishers may be effective.

**NFPA Rating:** Health – 1, Flammability – 2, Reactivity - 2

**SECTION 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.

**SECTION 7. HANDLING AND STORAGE**

**Handling:** Rotate stock using the oldest material first. Keep containers tightly closed when not in use. Reseal containers immediately after use to prevent contamination and drying. **DO NOT USE NEAR FOOD OR DRINK.** Avoid skin and eye contact. Wear personal protection equipment recommended in section 8. Wash thoroughly after handling. **Keep out of reach of children.**

**Storage:** Keep material *in* its original container away from any incompatible materials, direct sunlight or other sources of heat. Store in an isolated, cool and well-ventilated area and remove only as needed. Keep material sealed to prevent contamination and drying. **DO NOT STORE WITH FOOD OR DRINK.** Refer to NFPA 432 Code for the Storage of Organic Peroxide Formulations from the National Fire Protection Association for additional storage information.

**Other Precautions:** Avoid any conditions that may cause contamination and drying. Do not leave material uncovered. Containers of this material may be hazardous *when* empty since they retain product residues, observe all warnings and precautions listed. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**VENTILATION:** No special ventilation required.**RESPIRATORY PROTECTION EYE PROTECTION:** Safety goggles recommended**HAND PROTECTION:** Protective gloves recommended, solvent resistant, such as butyl rubber, nitrile or neoprene.**Safety shower and eyewash recommended when there is a risk of exposure****OTHER:** None**Exposure Guidelines:**

| Hazardous Ingredients | CAS Number | OSHA PEL/TWA        | ACGIH TLV           |
|-----------------------|------------|---------------------|---------------------|
| Benzoyl Peroxide      | 94-36-0    | 5 mg/m <sup>3</sup> | 5 mg/m <sup>3</sup> |

Mppcf- millions of particles per cubic foot of air

N/E-Not Established

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

|  |                              |   |                    |
|--|------------------------------|---|--------------------|
| <b>Boiling Point:</b>                              | Decomposes                   | <b>Vapor Density:</b>   | Heavier than air.  |
| <b>Specific Gravity / Density:</b>                 | 7.30 lbs/gal                 | <b>Percent Volatiles by weight:</b>                                   | 0%                 |
| <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>  | N/A                |
| <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 Paste          |
| <b>VOC (as packaged - less exempts and water):</b> | 0 lbs/gal or 0 g/L           | <b>VOC (as applied*- 2% by wt hardener- less exempts and water):</b>  | 0 lbs/gal or 0 g/L |
| <b>Percent Solids by weight – as packaged:</b>     | 85.5%                        | <b>Percent Solids by weight – as applied* - 2 % by wt hardener:</b>   | N/A %              |
| <b>VHAP Content by weight – as packaged:</b>       | N/A %                        | <b>VHAP Content by weight – as applied* - 2 % by weight hardener:</b> | N/A %              |

\*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.

**SECTION 10. STABILITY AND REACTIVITY**

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**Hazardous Polymerization:** Decomposition products are potentially flammable. Dense white smoke of benzoic acid; phenyl benzoate; terphenyls; biphenyls; benzene and carbon dioxide. Will not occur.

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

**Chemical Stability:** Stable unless exposed to heat, flames, drying conditions and contamination from incompatible materials.

**Incompatibility:** Dimethylaniline, cobalt naphthenate and other promoters, accelerators, reducing agents, or any hot material. Contamination. Water loss (drying). Direct sunlight. Open flame. Prolonged storage above 100°F (38°C). Storage above SADT. Storage near flammable or combustible materials.

**SECTION 11. TOXICOLOGICAL INFORMATION****Benzoyl Peroxide Hazard Data:**

**Intraperitoneal:** Mouse--LD<sub>50</sub>: 250 mg/kg. Oral: Rat--LD<sub>50</sub>: 7710 mg/kg; Mouse-- LD<sub>50</sub>: 5700 mg/kg.

**Skin:** Mammal (unspecified)--LD<sub>50</sub>: >1 gm/kg.

**Propane, 2,2-bis[p-(2,3-epoxypropoxy)phenyl]-, polymers**

**Hazard Data:**Oral: Rat--LD<sub>50</sub>: > 5000 mg/kg.Skin: Rabbit--LD<sub>50</sub>: >20000 mg/kg.

Alkyl (C12-14) Glycidyl Ether **Hazard Data:** Oral: Rat--LD<sub>50</sub>: > 5000 mg/kg.

**Skin:** Rabbit--LD<sub>50</sub>: >20000 mg/kg.

Soda Lime Borosilicate **Glass Hazard Data:** No data available.

C<sub>9-11</sub> Branched Alkyl Benzoate **Hazard Data:** Oral: Rat--LD<sub>50</sub>: > 5000 mg/kg.

Silicon Dioxide **Hazard Data:** Oral: Rat --LD<sub>50</sub>: >10000 mg/kg.

Zinc Stearate **Hazard Data:**Inhalation: Mammal (species unspecified)--LC: >1241 mg/m<sup>3</sup>/4H.**Intraperitoneal:** Mouse--LD<sub>50</sub>: 354 mg/kg. Oral: Rat and Mouse--LD<sub>50</sub>: >10 gm/kg.

Calcium Sulfate Dihydrate **Hazard Data:** Inhalation: Human-TC<sub>10</sub>: 194 mg/m<sup>3</sup>/10Y-I. **Nonionic Surfactant Hazard Data:**

**Oral:** Rat--LD<sub>50</sub>: 12300 mg/kg. Skin: Rabbit--LD<sub>50</sub>: >20 mL/kg. **Calcium Stearate Hazard Data:**

**Inhalation:** Mammal (species unspecified)--LC: >1241 mg/m<sup>3</sup>/4H.

**Intraperitoneal:** Mouse--LD<sub>50</sub>: >10 gm/kg.

Oral: Mouse and Rat--LD<sub>50</sub>: >10 gm/kg. **Blue Pigment Hazard Data:** Oral: Rat-LD<sub>50</sub>: >5110 gm/kg.

**Acute Toxicity Data:**

| Ingredient       | CAS #   | LD <sub>50</sub> Oral-Rat | LC <sub>50</sub> Inhalation-Rat |
|------------------|---------|---------------------------|---------------------------------|
| Benzoyl Peroxide | 94-36-0 | 7,710 mg/kg               | N/E                             |

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

**Mutagenicity:** No significant evidence found.

**Teratogenicity:** No significant evidence found.

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity:** No data is available on the preparation itself. The product should be prevented from entering drains, sewers, streams, etc. The ecological toxicity of this product is not known.

**SECTION 13. DISPOSAL CONSIDERATION**

Whatever cannot be saved for recovery or recycling should be handled as hazardous

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waste and sent to a RCRA approved facility. Processing, use, or contamination of this product may change the waste management options.

Immediately dispose of waste material at a RCRA approved hazardous waste management facility in accordance with federal, state and local regulations.

**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).

**SECTION 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.

**DOT Shipping Name:** ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE, 522cY0) 5.2 PG II

**DOT Hazard Class: UN/NA ID No.:**  
UN3108

**DOT Packing Group** 5.2 (Organic Peroxide) 145

**Labels:** 145

**2004 ERG GUIDE NO.:**

**SECTION 15. REGULATORY INFORMATION**

The following chemicals are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

| Chemical Name    | CAS Number | Percent |
|------------------|------------|---------|
| Benzoyl Peroxide | 94-36-0    | 20 - 22 |
| Zinc Stearate    | 557-05-1   | 02 - 03 |

**Canadian Domestic Substances List (DSL)**

The ingredients in this product are listed in the Canadian DSL Inventory.

**Chinese Inventory of Existing Chemical Substances Manufactured or Imported in China**

**(IECSC)** The ingredients in this product are listed in the Chinese IECSC Inventory,

**Korean Existing Chemicals List (ECL)**

The ingredients in this product are listed in the Korean ECL Inventory\_

**US Toxic Substances Control Act (TSCA)**

The ingredients in this product are listed in the US TSCA Inventory.

**Status of Carcinogenicity**

Not recognized as a carcinogen by the IARC, NTP or OSHA

**WHMIS Classification**

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

**Physical Hazard:** B3 (Combustible)

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**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

**SECTION 16. OTHER INFORMATION****NFPA 432 Organic Peroxide****Classification** Class IV**HMIS Rating**

| Health | Flammability | Reactivity |
|--------|--------------|------------|
| 1      | 2            | 1          |

**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.

Additional Information may be obtained by calling the Evercoat MSDS Hotline at 1-800-729-7600.

**NOTICE:** The information accumulated herein is believed to be correct as of the date issued from manufacturer/sources, which are believed to be accurate and reliable. Technical parameters were supplied by manufacturer. 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.