



MATERIAL SAFETY DATA SHEET

BENOX[®] B-50 106 WHITE

Syrgis Performance
Initiators, Inc.

Helena, AR

SECTION 1 - IDENTIFICATION OF THE PRODUCT AND THE COMPANY

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|------------------------|---|---------------------------------|--|
| PRODUCT NAME | BENOX[®] B-50 106 White | TELEPHONE | 870-572-2935 |
| MANUFACTURER | Syrgis Performance Initiators, Inc. | CHEMTREC (24hr) (USA) | 800-424-9300 |
| ADDRESS | 334 Phillips 311 Rd., Helena, AR 72342 | (Maritime/International) | 703-527-3887 |
| CHEMICAL NAME | Benzoyl Peroxide/Ester/Water Emulsion | CAS NO. | See Section 2 |
| CHEMICAL FAMILY | Diacyl Peroxide | CHEMICAL FORMULA | (C ₆ H ₅ CO) ₂ O ₂ |

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

| <u>COMPONENTS</u> | <u>CAS NO.</u> | <u>%</u> |
|--|----------------|----------|
| Benzoyl Peroxide | 94-36-0 | 49 - 50 |
| Water | 7732-18-5 | 20 - 21 |
| C ₉₋₁₁ -branched alkyl benzoate | 131298-44-7 | 15 - 16 |
| Zinc Stearate | 557-05-1 | 5 - 6 |
| Calcium Sulfate Dihydrate | 7778-18-9 | 3 - 4 |
| Nonionic Surfactant | 9038-95-3 | 3 - 4 |

SECTION 3 - HAZARD IDENTIFICATION OF THE PREPARATION

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| PHYSICAL HAZARDS | Organic Peroxide. Decomposition. |
| HEALTH HAZARDS | Irritant. |
| EXPOSURE LIMITS | OSHA PEL and ACGIH TWA are 5 mg/m ³ for Benzoyl Peroxide. |
| ROUTES OF EXPOSURE | |
| Skin Absorption | May cause irritation and redness of the skin. |
| Eye Contact | Eye contact may cause inflammation. |
| Ingestion | Poison by ingestion. May cause human systemic eye effects by ingestion: hallucinations distorted perceptions, nausea or vomiting and kidney, ureter or bladder changes. |
| Inhalation | Not expected to be an inhalation hazard. |
| EFFECTS OF OVER-EXPOSURE | May cause dermatitis, asthmatic effects, testicular atrophy, and vasodilation. Mutation data reported. |

SECTION 4 - FIRST-AID MEASURES

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| 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. |
| 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. |
| Ingestion | 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

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| FLASH POINT | Not applicable. |
| FLAMMABLE LIMITS | Not applicable. |
| AUTOIGNITION POINT | Not applicable. |
| FIRE EXTINGUISHER MEDIA | 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. |
| SPECIAL FIRE FIGHTING PROCEDURES | Fireman should be equipped with full protective clothing and SCBA's. In case of fire near storage area, cool the containers with water spray. |
| UNUSUAL FIRE AND EXPLOSION HAZARDS | Part of the oxygen for combustion is supplied by the peroxide itself. Fire hazard increases when material becomes dry. |

BENOX[®] B-50 106 White**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

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| STEPS TO BE TAKEN IN EVENT OF SPILL OR RELEASE | Spilled material not immediately cleaned up may increase the fire hazard due to evaporation of water away from the benzoyl peroxide. Transfer material into a clean DOT approved container for proper disposal. Spilled material not immediately cleaned up should be wetted with water prior to transfer into disposal container. Dike to prevent runoff from entering drains, sewers, streams, etc. Wear necessary PPE as indicated by Section 8. Be sure to following all instructions in Section 7 when storing spilled material. |
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SECTION 7 - HANDLING AND STORAGE

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| 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 <u>DO NOT USE NEAR FOOD OR DRINK</u> . Avoid skin and eye contact. Wear personal protection equipment recommended in section 8. Wash thoroughly after handling. |
| 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. <u>DO NOT STORE WITH FOOD OR DRINK</u> . 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 CONTROL/PERSONAL PROTECTION

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

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

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| APPEARANCE AND ODOR: | White paste with slight ester odor. | SPECIFIC GRAVITY: | 1.2 at 25°C. |
| BOILING POINT: | Decomposes. | FLASH POINT: | Not applicable. |
| VAPOR PRESSURE: | Not applicable. | FLAMMABLE LIMITS: | Not applicable. |
| VAPOR DENSITY: | Not applicable. | SADT: | >50°C. |
| EVAPORATION RATE: | Not applicable. | pH: | Not applicable. |
| % VOLATILE BY VOLUME: | Not applicable. | | |
| SOLUBILITY IN WATER: | Negligible. | | |

SECTION 10 - STABILITY AND REACTIVITY

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| STABILITY | Stable unless exposed to heat, flames, drying conditions and contamination from incompatible materials. |
| MATERIALS TO AVOID | Dimethylaniline, cobalt naphthenate and other promoters, accelerators, reducing agents, or any hot material. |
| CONDITIONS TO AVOID | Contamination. Water loss (drying). Direct sunlight. Open flame. Prolonged storage above 100°F (38°C). Storage above SADT. Storage near flammable or combustible materials. |
| HAZARDOUS DECOMPOSITION PRODUCTS | Decomposition products are potentially flammable. Dense white smoke of benzoic acid; phenyl benzoate; terphenyls; biphenyls; benzene and carbon dioxide. |
| HAZARDOUS POLYMERIZATION | Will not occur. |

BENOX[®] B-50 106 White**SECTION 11 - TOXICOLOGICAL INFORMATION****Benzoyl Peroxide****Hazard Data:****Intraperitoneal:** Mouse--LD₅₀: 250 mg/kg.**Oral:** Rat--LD₅₀: 7710 mg/kg; Mouse-- LD₅₀: 5700 mg/kg.**Skin:** Mammal (unspecified)--LD₅₀: >1 gm/kg.**C₉₋₁₁ Branched Alkyl Benzoate****Hazard Data:****Oral:** Rat--LD₅₀: > 5000 mg/kg.**Zinc Stearate****Hazard Data:****Inhalation:** Mammal (species unspecified)--LC: >1241 mg/m³/4H.**Intraperitoneal:** Mouse--LD₅₀: 354 mg/kg.**Oral:** Rat and Mouse--LD₅₀: >10 gm/kg.**Calcium Sulfate Dihydrate****Hazard Data:****Inhalation:** Human-TC_{Lo}: 194 gm/m³/10Y-I.**Nonionic Surfactant****Hazard Data:****Oral:** Rat--LD₅₀: 12300 µL/kg.**Skin:** Rabbit--LD₅₀: >20 mL/kg.**SECTION 12 - ECOLOGICAL INFORMATION**

No data is available on the preparation itself. The product should be prevented from entering drains, sewers, streams, etc.

SECTION 13 - DISPOSAL CONSIDERATIONS

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

SECTION 14 - TRANSPORT INFORMATION**DOMESTIC****DOT Competent Authority Approval:****OP-9210025**

NON REGULATED BY DOT

NO DOT LABEL REQUIRED

EXPORT**DOT Shipping Name:**ORGANIC PEROXIDE TYPE E, SOLID
(DIBENZOYL PEROXIDE, 50%)**DOT Hazard Class:**

5.2

UN/NA ID No.:

UN3108

DOT Packing Group:

PG II

Labels:

5.2 (Organic Peroxide)

2004 ERG GUIDE NO.:

145

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

Benzoyl Peroxide

CAS Number

94-36-0

Percent

49-50

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)

BENOX[®] B-50 106 White

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.

SECTION 16 - OTHER INFORMATION**NFPA 432 Organic Peroxide Classification**

Class IV

NFPA 704 Rating

| <u>Health</u> | <u>Flammability</u> | <u>Reactivity</u> |
|---------------|---------------------|-------------------|
| 1 | 2 | 2 |

HMIS Rating

| <u>Health</u> | <u>Flammability</u> | <u>Reactivity</u> |
|---------------|---------------------|-------------------|
| 1 | 2 | 1 |

MSDS Reference: B-50 106 White MSDS 0709

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