Material Data Safety Sheet
Epoxy.com #695

SECTION 1 - IDENTIFICATION OF THE PRODUCT AND THE COMPANY

PRODUCT NAME: Epoxy.com #695
COMPANY: Epoxy Systems, Inc.
ADDRESS: 20774 W Pennsylvania Ave Dunellon, FL 34431
CHEMICAL NAME: Benzoyl Peroxide/Dicyclohexyl Phthalate
CHEMICAL FAMILY: Organic Peroxide (Diacyl Peroxide)/Phthalate Ester

TELEPHONE: 352-489-1666
PERS (24hr) (USA): 1-800-633-8253

CAS NO.: 94-36-0
CHEMICAL FORMULA: (C6H14CO)2O2

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS: 
- Benzoyl Peroxide: 94-36-0, 50%
- Dicyclohexyl Phthalate: 84-61-7, 50%

SECTION 3 - HAZARD IDENTIFICATION OF THE PREPARATION

PHYSICAL HAZARDS: Organic Peroxide - Decomposition. Moderate fire hazard.
HEALTH HAZARDS: Irritant.
EXPOSURE LIMITS: OSHA PEL and ACGIH TWA is 5 mg/m³ for benzoyl peroxide.

ROUTES OF EXPOSURE:
- Skin Absorption: May cause irritation with redness and pain, and skin sensitization in some individuals. Stinging or burning sensation may occur for a brief time after application to skin.
- Eye Contact: May cause mild to moderate irritation, redness, swelling, tearing and pain.
- Ingestion: May cause irritation to gastrointestinal tract.
- Inhalation: No toxic effects are expected by inhalation of fumes or vapors. Inhalation of powder or dusts may be irritating to the upper respiratory tract. Decomposition products are toxic and inhalation of the products can produce life threatening health effects.

EFFECTS OF OVER-EXPOSURE: May cause dermatitis, asthmatic effects, testicular atrophy, and vasodilation. Human mutation data reported.

SECTION 4 - FIRST-AID MEASURES

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. Give water only if victim is conscious and coherent.
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.
FLAMMABLE LIMITS: Not applicable.
AUTOIGNITION POINT: Not applicable.
FIRE EXTINGUISHER MEDIA: Water from a safe distance - preferably with a fog nozzle. Do not use concentrated stream of water. 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: Container explosion may occur under fire conditions. May explode when heated. May be shock-sensitive. Emits toxic fumes under fire conditions. Contact with other material may cause fire. Self-ignition is possible. May accelerate combustion.
SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN EVENT OF SPILL OR RELEASE
Clean up spilled material immediately. Wet with water prior to transfer into disposal container. Cautiously pick up with non-sparking equipment. Transfer material into a clean DOT approved container for proper disposal. Wet again prior to sealing container. Keep ignition sources away from spill. Prevent spill material 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.

SECTION 7 - HANDLING AND STORAGE

HANDLING
Keep containers closed to prevent contamination. Rotate stock using the oldest material first. When necessary employ grounding, bonding, and explosion venting due to static discharge. Protect from shock, impact, heat, friction, or blows. Do not use near potential ignition sources (e.g., sparks, flames, smoking, etc.) Use necessary PPE as indicated by Section 8.

STORAGE
Store in a cool, dry, well-ventilated and fire-resistant location. Shield containers from direct sunlight and maintain their temperature at less than 30°C (86°F). DO NOT STORE WITH FOOD OR DRINK. Keep away from potential ignition sources. See NFPA 432 for additional storage information/requirements.

OTHER PRECAUTIONS
Avoid any conditions that may cause contamination. Do not leave material uncovered. Store in proper storage area and remove only as needed. Keep material in its original container. Do not return unused material to its original container. DO NOT USE NEAR FOOD OR DRINK.

SECTION 8 - EXPOSURE CONTROL/PERSOAL PROTECTION

VENTILATION
Mechanical, general.

RESPIRATORY PROTECTION
If airborne concentrations are expected to exceed acceptable levels wear a NIOSH/MSHA approved air-purifying respirator with appropriate dust filtration and if necessary an organic vapor cartridge or canister. When using respirators refer to OSHA’s 29CFR 1910.134.

EYE PROTECTION
Safety goggles recommended. Permanent eyewash is highly recommended.

HAND PROTECTION
Protective gloves recommended, solvent resistant, such as butyl rubber, nitrile or neoprene.

OTHER
None

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:
White granular powdery solid with a faint odor.

BOILING POINT:
Decomposes.

VAPOR PRESSURE:
Not established.

SPECIFIC GRAVITY:
~.6 at 25°C

FLASH POINT:
Not applicable.

VAPOR DENSITY:
Not established.

FLAMMABLE LIMITS:
Not applicable.

EVAPORATION RATE:
Not established.

SADT:
60°C (140°F)

% VOLATILE BY VOLUME:
Not established.

pH:
Not applicable.

SOLUBILITY IN WATER:
Insoluble.

SECTION 10 - STABILITY AND REACTIVITY

STABILITY
Stable unless exposed to heat, flames and contamination.

MATERIALS TO AVOID
Dimethylaniline, cobalt napthenate and other promoters, accelerators, reducing agents, strong oxidizers, acids, alkalis, transition metal salts or any hot material.

CONDITIONS TO AVOID
Product contamination. Direct sunlight. Open flames. Prolonged storage above 86°F (30°C). Storage above SADT (60°C (140°F)). Storage near flammable or combustible materials.

HAZARDOUS DECOMPOSITION PRODUCTS
Dense white smoke of benzoic acid; phenyl benzoate; terphenyls; biphenyls: benzene and carbon dioxide. Decomposition products may be flammable.

HAZARDOUS POLYMERIZATION
Will not occur.
Product #695

SECTION 11 - TOXICOLOGICAL INFORMATION

Benzoyl Peroxide
Hazard Data:
Inhalation: Rat-- LC50: >24.3 mg/l/4hr
Intraperitoneal: Mouse--LD50: 250 mg/kg
Oral: Rat--LD50: 7710 mg/kg; Mouse--LD50: 5700 mg/kg
Skin: Mammal (unspecified)--LD50: >1 gm/kg

Dicyclohexyl Phthalate
Hazard Data:
Oral: Rat--LD50: >2000 mg/kg

SECTION 12 - ECOLOGICAL INFORMATION

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

Benzoyl Peroxide
Biological degradability: readily biodegradable (Closed Bottle Test OECD 0301D).
Partition coeff - Kow: 3160 (log Kow = 3.5) (experimental)
Bioconcentration factor (BCF): 92
Aquatic Toxicity
Fish: Poecilia reticulata--LC50: 2.0 mg/l/96hr
Daphnia: Daphnia magna--EC50: 2.91 mg/l/48hr
Algae: (Pseudokirchneriellaa subcapitata)--ErC50: 0.44 mg/l/72hr (water accommodated fraction)
(Pseudokirchneriella subcapitata)--EbC50: 0.83 mg/l/72hr (water accommodated fraction)

Dicyclohexyl Phthalate
Biological degradability: 67% after 28. (MITI-test)
Partition coeff - Kow: 1.6x10^6 (log Kow = 6.2)
(estimated) Bioconcentration factor (BCF): 12,000
Aquatic Toxicity
Fish: (Brach. rerio)--LC50: >10,000 mg/l/96hr
Algae: (Activated sludge)--EC50: >10,000 mg/l

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. Under RCRA, 40 CFR 261.33, this material is hazardous waste number D003.

SECTION 14 - TRANSPORT INFORMATION

DOT Shipping Name: ORGANIC PEROXIDE TYPE D, SOLID (DIBENZOYL PEROXIDE, 50%)
DOT Hazard Class: 5.2
UN/NA ID No.: UN3106
DOT Packaging 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.

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<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Percent</th>
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<td>Benzoyl Peroxide</td>
<td>94-36-0</td>
<td>50</td>
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Australian Inventory of Chemical Substances (AICS)
The ingredients in this product are listed in the Australian AICS Inventory.
Canadian Domestic Substances List (DSL)
The ingredients in this product are listed in the Canadian DSL Inventory.

Korean Existing Chemicals List (ECL)
The ingredients in this product are listed in the Korean Existing Chemicals List.

European Inventory of Existing Commercial Chemical Substances (EINECS)
The ingredients in this product are listed in the European EINECS Inventory.

Japanese Exiting and New Chemical Substances (ENCS)
The ingredients in this product are listed in the Japanese Exiting and New Chemical Substances List.

Philippines Inventory of Chemicals and Chemical Substance (PICCS)
The ingredients in this product are listed in the Philippines Inventory of Chemicals and Chemical Substance.

Toxic Substances Control Act (TSCA)
The ingredient in this product is listed in the US Toxic Substances Control Act Inventory.

Status of Carcinogenicity
Not recognized as a carcinogen by the IARC, NTP or OSHA.

SECTION 16 - OTHER INFORMATION

VOC Information
None of the ingredients in Epoxy.com Product #695 meet the definition of a VOC.

NFPA 432 Organic Peroxide Classification
Class IV

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MSDS Reference: C-50 MSDS 0709