



RT-BPO-50
Page: 1 of 5
Revised:02.25.10

Product Name: RT-BPO-50

Res-Tek Inc.
110 Riverside Drive
Cartersville, Georgia 30120

Emergency Phone Number:
CHEMTREC (800) 424-9300
General MSDS Information:
(888) 737-8351

Hazardous Materials Identification System (HMIS) Rating

HEALTH -1	KEY: 4=Severe	1=Slight
FLAMMABILITY- 2	3=Serious	0=Minimal
REACTIVITY -2	2=Moderate	

A. PRODUCT IDENTIFICATION

Synonyms: Dibenzoyl peroxide, BPO-50 with phthalate
Chemical Name: Dibenzoyl peroxide
Chemical Family: Diacyl Peroxide
Chemical Formula: $C_{14}H_{10}O_4$
CAS Reg. Number: 94-36-0
Product Number: 20.6

Product and/or Components Entered on EPA's TSCA Inventory:

This product is in U.S. commerce, and is listed in the Toxic Substances Control Act (TSCA) Inventory of Chemicals; hence, it is subject to all applicable provisions and restrictions of 40 CFR, Sections 721 and 723.250.

B. COMPONENTS

Ingredients	CAS Number	% by wt	OSHA PEL	ACGIH TLV
Dibenzoyl Peroxide	94-36-0	49 ~ 51	5 mg/m ³	5 mg/m ³
Dicyclohexyl Phthalate	84-61-7	49 ~ 51	5 mg/m ^{3*}	NE

*UK OES TWA

NA-Not Applicable

NE-Not Established

C. PERSONAL PROTECTION INFORMATION

Ventilation: Use adequate ventilation.

Respiratory Protection: Not generally required unless needed to prevent respiratory irritation. In case of spill or leak resulting in unknown concentration, use NIOSH/MSHA approved supplied air respirator. When entry into or exit from concentrations of unknown exposure, use NIOSH/MSHA approved self-contained breathing apparatus (SCBA).

Eye Protection: Use chemical goggles

Skin Protection: Use butyl rubber gloves. Wear protective garments to prevent excessive skin contact.

Note: Personal protection information shown in Section C is based upon general information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

D. HANDLING AND STORAGE PRECAUTIONS

HANDLE WITH CARE. Keep away from materials or conditions listed below in Section E, Reactivity Data. Do not grind or subject Benzoyl Peroxide to frictional heat or shock. Do not add peroxide to hot reaction mixtures. Do not transfer to rigid containers with tight or screw-on closures. Do not allow benzoyl peroxide to dry out, as the material will become shock and friction sensitive.

Wear protective equipment and/or garments described in Section C if exposure conditions warrant. Avoid inhalation and skin and eye contact. Wash hands after handling. Launder contaminated clothing before reuse. Handle only in a well-ventilated area.

Dispense and transfer in an area separate from storage area. Store ONLY in original containers in a cool, isolated, well ventilated area. The addition of accelerators for polymerization may result in vigorous decomposition. Store below 100°F (38°C). Do not return residues to original container. Consult NFPA 432 for storage area guidance. . Storage and handling designs should be arranged in consultation with a person experienced in these types of assessments.

E. REACTIVITY DATA

Stability: This material is thermally and chemically reactive, either of which may result in dangerous conditions. Self Accelerating Decomposition Temperature \cong 140°F (60°C).

Conditions to Avoid: Heat, flames, sparks, metal contamination and direct sunlight. Temperatures above the storage temperature of 100°F (38°C) could lead to a loss of product quality and a thermal decomposition of the product that could generate hazardous and flammable chemicals.

Incompatibility (materials to avoid): Combustion materials, acids, oxidizing and reducing agents, accelerators, corrosives, and metals.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Not established.

F. HEALTH HAZARD DATA

Recommended Exposure Limits: See Section B.

Acute Effects of Overexposure:

Eye: May produce severe eye and mucous membrane irritation, including superficial corneal opacity, and redness and swelling of eye membranes.

Skin: May produce moderate skin irritation, including redness, swelling, and burning sensation.

Inhalation: May be moderately irritating to the nose, throat, and mucous membranes. Tearing, salivation, decreased respiratory rates, difficulty breathing and lethargy may occur with overexposure.

Ingestion: May produce slight muscular weakness.

SUBCHRONIC AND CHRONIC EFFECTS OF OVEREXPOSURE:

Repeated exposure may produce allergic reactions in some individuals characterized by redness, itching, oozing, crusting and scaling of skin and asthmatic wheezing.

OTHER HEALTH EFFECTS:

Topical application of benzoyl peroxide to mice, previously initiated by exposure to 7,12-dimethylbenz(a)anthracene, promoted both papillomas and carcinomas. Benzoyl peroxide was inactive on the skin of mice as a complete carcinogen or as a tumor initiator.

HEALTH HAZARD CATEGORIES:

	<u>Animal</u>	<u>Human</u>		<u>Animal</u>	<u>Human</u>
Known carcinogen	--	--	Toxic	--	--
Suspect carcinogen	--	--	Corrosive	--	--
Mutagen	--	--	Irritant	X	X
Teratogen	--	--	Target organ toxin	--	--
Allergic Sensitizer	X	X	Specify -		
Highly toxic	--	--			

FIRST AID AND EMERGENCY PROCEDURES

Eye: Flush eyes with running water for AT LEAST 15 minutes. Seek medical attention.

Skin: Wash skin with soap and water. If irritation develops, seek medical attention.

Inhalation: Remove from exposure. If breathing becomes labored or irritation develops, seek immediate medical attention.

Ingestion: Do not induce vomiting. Seek immediate medical attention.

G. PHYSICAL DATA

Appearance: White, free-flowing granules
Odor: Odorless
Boiling Range: NA
Vapor Pressure: NE
Vapor Density: NE
Evaporation Rate (ethyl ether = 1): NE

Solubility (in water): Negligible
Specific Gravity (H₂O=1): 0.64 Kg/l
Percent Volatile by Volume: NA
Viscosity: NA
NE = Not Established

H. FIRE AND EXPLOSION DATA

Flash Point (Method used): NA

Auto ignition temperature: NE

Flammable Limits (% by volume): LEL: NE UEL: NE

Fire Extinguishing Media: Dry chemical, foam, carbon dioxide

Special Fire Fighting Procedures: Wear protective equipment and/or garments described in Section C if exposure conditions warrant. Self-contained breathing apparatus may be needed for large fires or if fire is in confined area. For large fires, evacuate the area and fight fire from a safe distance using large amounts of coolants or water.

Fire and Explosion Hazards: Benzoyl peroxide will explode at temperatures above 392°F (200°C). Do not do any fire fighting where an explosion hazard exists. Toxic fumes may be released in a fire involving benzoyl peroxide. Containers of benzoyl peroxide near fire should be cooled with a water spray to prevent contents from reaching decomposition temperature.

I. SPILL, LEAK AND DISPOSAL PROCEDURES

Precautions Required if Material is Released or Spilled:

Evacuate area of all unnecessary personnel. Wear protective equipment and/or garments described in Section C if exposure conditions warrant. Keep out of water sources and sewers. Carefully collect the material and transfer to polyethylene-lined disposal containers. **DO NOT ALLOW BENZOYL PEROXIDE TO DRY OUT; ADD WATER IF NECESSARY.**

Waste Disposal (Insure Conformity with all Applicable Disposal Regulations):

Treat or dispose of at a RCRA approved hazardous waste management facility. Care should be taken when treating or disposing of this product. Material may be very reactive.

J. DOT TRANSPORTATION

Shipping Name: Organic Peroxide Type D, Solid, (Dibenzoyl peroxide, 50%)

Hazard Class: Organic Peroxide, 5.2

ID Number: UN3106

Marking: Organic Peroxide Type D, Solid, (Dibenzoyl peroxide, 50%)
UN3106

Placard: Organic Peroxide, 5.2

Hazardous Substance/RQ: NA

Shipping Description: Organic Peroxide Type D, Solid, (Dibenzoyl peroxide, 50%) 5.2,
UN3106, PG II

Packaging References: 49CFR 173.225

K. RCRA CLASSIFICATION - UNADULTERATED PRODUCT AS A WASTE

Reactive (D003)

L. PROTECTION REQUIRED FOR WORK ON CONTAMINATED EQUIPMENT

Contact immediate supervisor for specific instruction before work is initiated. Wear protective garments and/or equipment described in Section C if exposure conditions warrant.

M. HAZARD CLASSIFICATION

Yes This product meets the following hazard definition(s) as defined by the Occupational Safety and Health Hazard Communication Standard (29 CFR Section 1910.1200)

No	Combustible Liquid	No	Flammable Aerosol	Yes	Oxidizer
No	Compressed Gas	No	Explosive	No	Pyrophoric
No	Flammable Gas	Yes	Health Hazard (Sec.F)	Yes	Unstable
No	Flammable Liquid	Yes	Organic Peroxide	No	Water Reactive
No	Flammable Solid				

No Based on the information presently available, this product does not meet any of the hazard definitions of 29 CFR Section 1910.1200.

N. ADDITIONAL COMMENTS

SARA 313: This product contains a chemical or chemicals 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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