

**Benzoyl Peroxide: BPO 38.5%; BPO 33%;**

**Colours: Neutral, Green; Black;**

**Viscosity: Thin, Thix**

## 1. IDENTIFICATION

<b>Product Name:</b>	Benzoyl Peroxide
<b>Other Names:</b>	Dibenzoyl peroxide BPO
<b>Chemical Family:</b>	Organic Peroxide
<b>Recommended Use:</b>	Catalyst for Thermosetting unsaturated polyester adhesive for use in industry
<b>Supplier:</b>	Scott Technology Pty Ltd
<b>ABN:</b>	57 939 912 650
<b>Street Address:</b>	1 / 28 Lee Holm Rd St Marys NSW 2760
<b>Telephone:</b>	(02) 9623 6444
<b>Fax:</b>	(02) 9623 6777
<b>Emergency Phone:</b>	Chem Call Australia 1800 127 406

## 2. HAZARDS IDENTIFICATION

### Hazardous Nature

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia (GHS)

Classified as dangerous goods in accordance with the Australian Code for the transport of Dangerous Goods by Road and Rail (ADG)

### GHS Hazardous Classification

Organic peroxides, Type E, H242

Serious eye damage/Eye irritation, Category 2, H319

Skin sensitisation, Category 1, H317

Reproductive toxicity Df, Category 1B, H360Df

### GHS Pictograms



### Signal Word

DANGER

### Hazard Statements

H242: Heating may cause a fire.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H360Df: May damage the unborn child. Suspected of damaging fertility.

H242: Heating may cause a fire.

**Precautionary Statements**

**Prevention**

P102 Keep out of reach from children

P210 Keep away from heat / sparks / open flames / hot surfaces. No Smoking

P220 Keep / Store away from combustible materials

P234 Keep in original container

P262 Do not get in eyes, on skin, or on clothing

P280 Wear protective gloves / eye / face protection

P272 Contaminated clothing should not be allowed out of the work place

P261 Avoid breathing fumes

P264 Wash thoroughly after handling

**Response**

P370 In case of fire use water spray or fog.

P352 If on skin wash with plenty of soap and water.

P313 If skin irritation or rash occurs get medical attention.

Wash contaminated clothes after use

If in eyes rinse cautiously for several minutes.

Remove contact lenses if present and easy to do.

Continue rinsing

If eye irritation persists get medical attention

**Storage**

Store in well ventilated place to keep cool

Store at temperatures not exceeding 40°C

**Disposal**

Disposal may be by chemical decomposition or burning of small quantities under controlled conditions. Approval may be required from relevant authorities.

**3. COMPOSITE: Information on Ingredients**

Chemical Ingredient	CAS No	Proportion (%v/v)
Benzoyl Peroxide	94-36-0	30-50%
Phlegmatizers	84-74-2	30 - < 60%

**4. FIRST AID MEASURES**

**For advice, contact Poisons Information Centre (Ph Aus: 13 1126) or a doctor**

**Eye Contact:** Immediately irrigate with copious amount of water for at least 15 minutes. Seek immediate medical advice

**Skin Contact:** Immediately wash the affected area with soap and water. Remove contaminated clothing including shoes, and launder before re-use. Seek medical advice if symptoms occur or persist.

**Ingestion:** Give water or milk to wash out mouth and drink. Do NOT induce vomiting. Seek medical attention - contact a doctor or Poisons Information Centre.

**Inhalation:**

Move victim to fresh air, keep warm and at rest. Seek immediate medical attention.

**5. FIRE FIGHTING MEASURES**

**Suitable Extinguishing Media:**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Hazards from combustion products:**

Hazardous decomposition products formed under fire conditions. - Carbon oxides

**Precaution for fire fighters and special protective equipment:**

Wear self contained breathing apparatus for fire fighting if necessary.

## 6. ACCIDENTIAL RELEASE MEASURES

### Personal Precautions (protective equipment and emergency procedures):

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

### Environmental Precautions:

Do not let product enter drains.

### Methods and materials for containment and cleaning up:

Contain spillage to prevent run-off into waterways. If possible collect spillage in clean plastic containers with vented lids. Alternatively, absorb spillage on inert material such as vermiculite, perlite or clean sand - not combustible absorbents such as sawdust. Addition of water is recommended. Contaminated material must be disposed of promptly. Disposal may be by chemical decomposition or burning of small quantities under controlled conditions. Approval may be required from relevant authorities.

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling:

Though phlegmatised, product should be regarded as flammable. Keep well away from sources of ignition

### Conditions for Safe Storage (including any incompatibilities):

Store in cool dark place away from sources of heat and open flames and in accordance with local statutory requirements and applicable standards for Organic Peroxides Avoid contamination with any materials. Never mix directly with accelerators or promoters.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Exposure Control Measures:

This product as supplied contains hazardous materials with occupational exposure limits

CHEMICAL NAME	AUSTRALIA
<b>Benzoyl Peroxide</b>	5mg/m <sup>3</sup> TWA
<b>Phlegmatisers</b>	5mg/m <sup>3</sup> TWA

### Biological Limit Values:

Not Available

### Engineering Controls: (Ventilation)

Ensure adequate ventilation

### Personal Protective Equipment:

Eye and Face Protection:

Safety glasses

Skin Protection:

Protective Clothing and gloves

Respiratory Protection:

Work in well ventilated area. Use respiratory equipment as needed.

Thermal Hazards:

See section 2

## 9. PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	UNITS	TYPICAL VALUE
Appearance		
Form		Smooth Paste
Colour		Cream, Green or Black
Odour		mild
pH		
Change in Condition		
Melting Point / Range	°C	Decomposes at 103.5°C

Boiling Point / Range	°C	Not Applicable
Flash Point	°C	Not Applicable
Flammability	°C	
Solid	°C	
Gas	°C	
Explosive limits (LEL-UEL)	%	No data
Auto Ignite temperature	°C	No data
Decomposition Temperature	°C	103
Vapour Pressure @ 20°C	Pa	.00929
Vapour Density @ 20°C	kPa	No data
Relative Density @ 15°C	g/ml	1.33
Solubility in water	% w/w	insoluble
Partition coefficient (n-octanol / water)		No data
Viscosity @ 20°C	cSt	varied

## 10. STABILITY AND REACTIVITY

### Reactivity:

This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

### Chemical Stability:

Relatively stable at normal ambient temperatures. Store in a cool place to maximise shelf life.

### Possible Hazardous Reactions:

Prolonged storage at temperatures above 40°C. may cause loss in activity. Will decompose at 103°C. with evolution of poisonous and flammable vapour of Diphenyl.

### Conditions to avoid:

Avoid heat, sparks, open flames and other ignition sources

### Incompatible Materials:

Acids, alkalis, reducing agents, oxidising agents, rust, transition metals and their compounds (such as iron, copper, brass, bronze, cobalt, nickel, lead), resins, promoters, accelerators and combustible materials

### Hazardous Decomposition Products:

Diphenyl, carbon monoxide, carbon dioxide and other organic compounds.

## 11. TOXICOLOGICAL INFORMATION

No adverse health effects are expected to occur if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms that may arise if the product is mishandled are:

### Acute Toxicity:

#### Information on likely routes of exposure

##### Skin Irritation:

May cause skin irritation on prolonged or repeated contact. May cause sensitisation by skin contact.  
Dermatitis may occur on prolonged use/contact.

##### Eye Damage / Irritation:

An eye irritant.

##### Ingestion:

Symptoms may include irritation of soft mucous tissue of the throat, mouth, gullet and stomach.  
Decomposition in the stomach may cause distension due to oxygen production.

##### Respiratory / Inhalation:

Unlikely under normal conditions of use, as product is a liquid, and the active component is non-volatile.

##### Carcinogenicity:

There is no evidence that Benzoyl Peroxide is a carcinogen.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Benzoyl peroxide	>5000mg/mg/kg	No data	>24.3mg/L
Phlegmatiser	(rat) 7499 mg/kg	(rabbit)>20mL/kg	No data

- **Benzoyl Peroxide**, Classification of the substance: Category 1;

SCL: Category 1: 1 % (General Limit)

Result: the mixture is classified in Category 1 .

- **Di Butyl Phthalate**, Classification of the substance: Category 1B

SCL: Category 1B: 0.3 % (General Limit) Category 2: 3 % (General Limit)

Result: the mixture is classified in Category 1B, Df .

Explanation: F/f: fertility damages; D/d: damages to the unborn child in the womb

**Delayed and immediate effects as well as chronic effects from short term exposure:**

Skin corrosion / irritation:

Irritating to skin

Serious eye damage / eye irritation:

Irritation to eyes

Sensitisation

May cause sensitisation by skin contact

Germ cell mutagenicity:

Not considered to be genotoxic

Carcinogenicity:

Evidence for tumor promoting activity has been reported. Other studies have suggested no direct carcinogenic affects.

**Reproductive toxicit**

No adverse affect level of 500mg/kg bw/day was recorded

**STOT – Single Exposure:**

No data

**STOT – Repeated Exposure:**

No considered to cause serious damage to health

**Aspiration Hazard:**

No data

**12. ECOLOGICAL INFORMATION**

Do not allow into any sewers, drains or waterways. See Section 6 for Accidental Release Measures.

Components which may contribute to acute hazard to the aquatic environment .

- Di Butyl Phthalate, M-Factor:

The mixture is not classified in this Hazard Category

**Other Adverse Effects:**

**Not Available**

**13. DISPOSAL CONSIDERATIONS**

**Disposal Methods:**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Special Considerations for Sewerage Disposal:**

Do not allow into any sewers, drains or waterways.

**Special Considerations for Incineration or Land Fill;**

Disposal may be by chemical decomposition or burning of small quantities under controlled conditions.

**14. TRANSPORT INFORMATION**

ROAD AND RAIL TRANSPORT		MARINE TRANSPORT		AIR TRANSPORT	
<b>UN No.</b>	3107	<b>UN No.</b>		<b>UN No.</b>	
<b>Proper Shipping Name</b>	Organic Peroxide Type E	<b>Proper Shipping Name</b>		<b>Proper Shipping Name</b>	
<b>ADG Hazard Class</b>	5.2	<b>ADG Hazard Class</b>		<b>ADG Hazard Class</b>	

<b>Packing Group</b>	II	<b>Packing Group</b>	<b>Packing Group</b>
<b>Environmental Hazards</b>		<b>Environmental Hazards</b>	<b>Environmental Hazards</b>
<b>Special Precautions</b>		<b>Special Precautions</b>	<b>Special Precautions</b>
<b>Additional Information</b>		<b>Additional Information</b>	<b>Additional Information</b>
<b>Hazchem Code</b>	2W	<b>Hazchem Code</b>	<b>Hazchem Code</b>

Organic Peroxides are incompatible in a **placard load** with any of the following:

- Class 1, Explosives
- Class 2.1, Flammable Gases, if both the Class 5.2 and
- Class 2.1 dangerous goods are in bulk
- Class 2.3, Toxic Gases
- Class 3, Flammable Liquids
- Class 4.2, Spontaneously Combustible Substances
- Class 5.1, Oxidising Agents
- Class 6, Toxic Substances (where the flammable liquid is nitromethane)
- Class 7, Radioactive Substances.

## 15. REGULATORY INFORMATION

### Australian Regulators:

ADG: Classified as a Dangerous Goods by road and rail.

GHS: Classified as a Hazardous substance.

SUSMP:

Poison Schedule No.5

NICNAS:

### International Inventories:

AICS: Australian Inventory of Chemical Substances                      Listed or Exempt

NICNAS Report:

NZIoC: New Zealand Inventory of Chemicals                              Listed or Exempt

PICCS: (Philippines)    Listed or Exempt

### International Regulators:

Ozone depleting substances:

Persistent Organic Pollutants:

Prior Informed Consent:

Hazardous Waste:

MARPOL:

## 16. OTHER INFORMATION

**Revision Date: March 2017**

### References:

[https://cfpub.epa.gov/ecotox/quick\\_query.htm](https://cfpub.epa.gov/ecotox/quick_query.htm)

<https://chem.nlm.nih.gov/chemidplus/>

<https://www.nicnas.gov.au/>

<http://www.gischem.de/index.htm>

Supplier SDS

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses, but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product.