

## SAFETY DATA SHEET

according to the Globally Harmonized System and Canadian regulation

### PERKADOX CH-50

Version 5

Revision Date 11/12/2018

Print Date 09/27/2019

CA / EN

#### 1. IDENTIFICATION

Product name : PERKADOX CH-50

Product Use Description : Specific use(s): Curing agent

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Netherlands

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#### 2. HAZARDS IDENTIFICATION


##### Emergency Overview

Appearance	powder
Colour	white
Odour	Faint.
Hazard Summary	Risk of dust explosion.

##### GHS Classification

Organic peroxides, Type D  
Combustible dust, Category 1  
Eye irritation, Category 2B  
Skin sensitisation, Category 1  
Reproductive toxicity, Category 1B  
Acute aquatic toxicity, Category 1  
Chronic aquatic toxicity, Category 1

##### GHS label elements

Hazard pictograms : 

Signal word : Danger

Hazard statements : H242 Heating may cause a fire.

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May form combustible dust concentrations in air.  
H317 May cause an allergic skin reaction.  
H320 Causes eye irritation.  
H360 May damage fertility or the unborn child.  
H410 Very toxic to aquatic life with long lasting effects.

## Precautionary statements

: **Prevention:**  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P234 Keep only in original packaging.  
P235 Keep cool.  
P240 Ground and bond container and receiving equipment.  
P261 Avoid breathing dust or fume.  
P264 Wash skin thoroughly after handling.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
P302 + P352 IF ON SKIN: Wash with plenty of water.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P362 + P364 Take off contaminated clothing and wash it before reuse.  
P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.  
P391 Collect spillage.  
**Storage:**  
P403 Store in a well-ventilated place.  
P405 Store locked up.  
P410 Protect from sunlight.  
P420 Store separately.  
**Disposal:**  
P501 Dispose of contents/container in accordance with local regulation.

## Carcinogenicity:

**IARC** : No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA** : No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**ACGIH** : No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name : Organic peroxide  
Pure substance/mixture : Mixture

### Hazardous components

Chemical name	CAS-No.	Classification	Concentration [% W/W]
Dibenzoyl peroxide	94-36-0	Org. Perox. B; H241 Eye Irrit. 2B; H320 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	49 - 51
Dicyclohexyl phthalate	84-61-7	Skin Sens. 1; H317 Repr. 1B; H360 Aquatic Acute 3; H402 Aquatic Chronic 3; H412	48 - 55

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

General advice : Move out of dangerous area.  
Consult a physician.  
Show this safety data sheet to the doctor in attendance.

Inhalation : Remove to fresh air.  
Keep patient warm and at rest.  
Rinse nose and mouth with water.

Skin contact : Take off contaminated clothing and shoes immediately.  
Wash the skin immediately with soap and water.  
If skin irritation persists, call a physician.

Eye contact : Rinse with plenty of water.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
Obtain medical attention.

Ingestion : Clean mouth with water and drink afterwards plenty of water.  
Never give anything by mouth to an unconscious person.  
Obtain medical attention.

### Notes to physician

Symptoms : The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.

Risks : May cause an allergic skin reaction.

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Causes eye irritation.  
May damage fertility or the unborn child.

Treatment : Treat symptomatically.

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## 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

Specific hazards during firefighting / Specific hazards arising from the chemical : CAUTION: reignition may occur.  
Supports combustion.  
Do not use a solid water stream as it may scatter and spread fire.  
Water spray may be ineffective unless used by experienced firefighters.  
Do not allow run-off from fire fighting to enter drains or water courses.  
Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.  
Hazardous decomposition products formed under fire conditions.

Combustion products : Fire will produce smoke containing hazardous combustion products (see section 10).

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : Use water spray to cool unopened containers.  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

See also Section 9. Physical and chemical properties: Safety data

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## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.  
Wear respiratory protection.  
Avoid dust formation.  
Avoid breathing dust.  
Ensure adequate ventilation.  
Remove all sources of ignition.

Emergency measures on accidental release : Evacuate personnel to safe areas.  
Only qualified personnel equipped with suitable protective equipment may intervene.  
Prevent unauthorised persons entering the zone.

Environmental precautions : Prevent product from entering drains.

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- If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods for cleaning up /  
Methods for containment : Soak up with inert absorbent material and dispose of as hazardous waste.  
Keep wetted with water.  
Confinement must be avoided.  
Pick up and arrange disposal without creating dust.  
Keep in suitable, closed containers for disposal.  
Never return spills in original containers for re-use.
- Reference to other sections : For disposal considerations see section 13.  
  
For personal protection see section 8.

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## 7. HANDLING AND STORAGE

### Handling

- Advice on safe handling : For personal protection see section 8.  
Avoid formation of respirable particles.  
Do not breathe vapours/dust.  
Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
Smoking, eating and drinking should be prohibited in the application area.  
Open drum carefully as content may be under pressure.  
Dispose of rinse water in accordance with local and national regulations.  
Obtain special instructions before use.
- Advice on protection against  
fire and explosion : Use explosion protected equipment.  
Provide appropriate exhaust ventilation at places where dust is formed.  
Keep away from sources of ignition - No smoking.  
No sparking tools should be used.  
Keep away from reducing agents (e.g. amines), acids, alkalies and heavy metal compounds (e.g. accelerators, driers, metal soaps).  
Do not cut or weld on or near this container even when empty.  
Keep away from combustible material.
- Temperature class : It is recommended to use electrical equipment of temperature group T3. However, autoignition can never be excluded.

### Storage

- Requirements for storage  
areas and containers : Prevent unauthorized access.  
No smoking.  
Keep in a well-ventilated place.  
Keep in a dry place.  
Electrical installations / working materials must comply with the technological safety standards.  
Store at room temperature in the original container.  
Keep only in original container.  
Store away from other materials.
- Maximum storage  
temperature: : 25 °C

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Other data : Do not allow to dry out.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

#### Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis	Form of exposure
Dibenzoyl peroxide	94-36-0	TWA	5 mg/m3	2007-01-01	CA AB OEL	
	Further information	:	3: Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required			
		TWA	5 mg/m3	2006-11-29	CA BC OEL	
		TWAEV	5 mg/m3	2006-12-29	CA QC OEL	

ACGIH: American Conference of Governmental Industrial Hygienists

BEI: Biological Exposure Index

MAC: Maximum Allowable Concentration

NIOSH: National Institute for Occupational Safety and Health

OEL: OEL: Occupational exposure limit.

STEL: Short term exposure limit

TWA: Time Weighted Average

#### Occupational exposure limits of decomposition products

Decomposition products	CAS-No.	Value	Control parameters	Update	Basis	Form of exposure
Benzene	71-43-2	TWA	0.5 ppm 1.6 mg/m3	2009-04-30	CA AB OEL	
	Further information	:	A1: Confirmed Human Carcinogen (means that the agent is carcinogenic to humans) 1: Substance may be readily absorbed through intact skin			
		STEL	2.5 ppm 8 mg/m3	2009-04-30	CA AB OEL	
	Further information	:	A1: Confirmed Human Carcinogen (means that the agent is carcinogenic to humans) 1: Substance may be readily absorbed through intact skin			
		TWA	0.5 ppm	2006-11-29	CA BC OEL	
	Further information	:	1: IARC '1' applies to substances categorized as carcinogenic to humans, and used when there is sufficient evidence of carcinogenicity in humans. A1: ACGIH 'A1' applies to those substances confirmed as human carcinogens based on the weight of evidence from epidemiological studies Skin: Contributes significantly to the overall exposure by the skin route.			
		STEL	2.5 ppm	2006-11-29	CA BC OEL	
	Further information	:	1: IARC '1' applies to substances categorized as carcinogenic to humans, and used when there is sufficient evidence of carcinogenicity in humans. A1: ACGIH 'A1' applies to those substances confirmed as human carcinogens based on the weight of evidence from epidemiological studies Skin: Contributes significantly to the overall exposure by the skin route.			
		TWA	0.5 ppm	2010-11-05	CA ON OEL	
	Further information	:	Skin *: Denotes a chemical agent listed in Table 1 of Ontario Regulation 490/09 (Designated Substances) made under the Act. See clause 2 (2) (a) of this Regulation.			
		STEL	2.5 ppm	2010-11-05	CA ON OEL	

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	Further information	:	Skin *: Denotes a chemical agent listed in Table 1 of Ontario Regulation 490/09 (Designated Substances) made under the Act. See clause 2 (2) (a) of this Regulation.			
			TWAEV	1 ppm 3 mg/m3	2006-12-29	CA QC OEL
	Further information	:	RP: A substance which may not be recirculated in accordance with section 108 EM: A substance to which exposure must be reduced to a minimum in accordance with section 42 C1: Carcinogenic effect detected in humans			
			STEV	5 ppm 15.5 mg/m3	2006-12-29	CA QC OEL
	Further information	:	RP: A substance which may not be recirculated in accordance with section 108 EM: A substance to which exposure must be reduced to a minimum in accordance with section 42 C1: Carcinogenic effect detected in humans			
Carbon dioxide	124-38-9		TWA	5,000 ppm 9,000 mg/m3	2007-01-01	CA AB OEL
			STEL	30,000 ppm 54,000 mg/m3	2007-01-01	CA AB OEL
			TWA	5,000 ppm	2006-11-29	CA BC OEL
			STEL	15,000 ppm	2006-11-29	CA BC OEL
			STEV	30,000 ppm 54,000 mg/m3	2006-12-29	CA QC OEL
			TWAEV	5,000 ppm 9,000 mg/m3	2006-12-29	CA QC OEL

## Appropriate engineering controls

Explosion proof ventilation recommended.

Provide appropriate exhaust ventilation at places where dust is formed.

Ensure that eyewash stations and safety showers are close to the workstation location.

## Personal protective equipment

Eye/face protection : Tightly fitting safety goggles

Hand protection : Glove material: Neoprene

: Glove material: Nitrile rubber

Skin and body protection : Protective suit

Respiratory protection : Half mask with a particle filter P2 (EN 143)

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.  
When using do not eat or drink.  
When using do not smoke.  
Wash hands before breaks and at the end of workday.  
Wash contaminated clothing before re-use.

## Environmental exposure controls

General advice : Prevent product from entering drains.  
If the product contaminates rivers and lakes or drains inform respective authorities.



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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form	: powder
Colour	: white
Odour	: Faint.
Odour Threshold	: No data available

### Safety data

pH	: not determined
Melting point	: Decomposes before melting.
Boiling point/boiling range	: Decomposes below the boiling point.
Flash point	: Not applicable
Evaporation rate	: Not applicable
Flammability (solid, gas)	: Decomposition products may be flammable.
Flammability (liquids)	: Not applicable
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Vapour pressure	: Not applicable
Relative vapour density	: Not applicable
Relative density	: 1.23 at 20 °C
Bulk density	: 640 kg/m <sup>3</sup> at 20 °C
Water solubility	: at 20 °C insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: Test method not applicable
Decomposition temperature	: SADT - (Self accelerating decomposition temperature) is the lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the SADT. Contact with incompatible substances can cause decomposition below the SADT.

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Self-Accelerating decomposition temperature (SADT)	: 55 °C
Viscosity, dynamic	: Not applicable
Viscosity, kinematic	: Not applicable
Explosive properties	: Not explosive
Oxidizing properties	: Not classified as oxidising.
Active Oxygen Content	: 3.3 %
Organic peroxides	: 49 - 51 %

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

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## 10. STABILITY AND REACTIVITY

Conditions to avoid	: Do not allow to dry out. Confinement must be avoided. Heat, flames and sparks.
Materials to avoid	: Contact with the following incompatible materials will result in hazardous decomposition: Acids and bases Iron Copper Reducing agents Heavy metals Rust Do not mix with peroxide accelerators, unless under controlled processing. Use only stainless steel 316, PP, polyethylene or glass-lined equipment. For queries regarding the suitability of other materials please contact the supplier.
Hazardous decomposition products	: Benzoic acid Benzene Carbon dioxide Carbon oxides
Thermal decomposition	: SADT - (Self accelerating decomposition temperature) is the lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the SADT. Contact with incompatible substances can cause decomposition below the SADT.
Reactivity	: Stable under normal conditions.
Chemical stability	: Stable under recommended storage conditions.
Hazardous reactions	: Dust may form explosive mixture in air.

Self-Accelerating decomposition temperature (SADT) : 55 °C

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## 11. TOXICOLOGICAL INFORMATION

### PRODUCT INFORMATION:

#### Hazard Summary

Acute toxicity : Not classified based on available information.

Skin corrosion/irritation : Not classified based on available information.

Serious eye damage/eye irritation : Causes eye irritation.

Respiratory or skin sensitisation : Respiratory sensitisation: Not classified based on available information.  
Skin sensitisation: May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified based on available information.

Carcinogenicity : Not classified based on available information.

Reproductive toxicity : May damage fertility or the unborn child.

STOT - single exposure : Not classified based on available information.

STOT - repeated exposure : Not classified based on available information.

Aspiration hazard : Not classified based on available information.

#### Potential Health Effects

Inhalation : Thermal decomposition can lead to release of irritating gases and vapours.  
Product dust may be irritating to the respiratory system.

Skin : Product dust may be irritating to skin.  
May cause an allergic skin reaction.  
May cause skin irritation.

Eyes : Causes serious eye irritation.

Ingestion : May cause irritation of the mucous membranes.

Aggravated Medical Condition : None known.

Symptoms of Overexposure : The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.

#### Toxicology Assessment

Further information : May damage fertility or the unborn child.

#### Carcinogenicity:

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- IARC** : No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- OSHA** : No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
- ACGIH** : No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

## TOXICOLOGY DATA FOR THE COMPONENTS:

### Toxicology Assessment

#### Component: Dibenzoyl peroxide

- CMR effects : Carcinogenicity: Not carcinogenic.  
Mutagenicity: Not mutagenic.  
Teratogenicity: Did not show teratogenic effects in animal experiments.  
Reproductive toxicity: No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

#### Component: Dicyclohexyl phthalate

- CMR effects : Reproductive toxicity: Clear evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments

### Test result

#### Component: Dibenzoyl peroxide

- Acute oral toxicity : LD50: > 5,000 mg/kg  
Species: Rat
- Acute inhalation toxicity : LC50 (Rat): > 24.3 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour  
Assessment: The substance or mixture has no acute inhalation toxicity
- Acute dermal toxicity : No data available
- Skin irritation : slight irritation
- Eye irritation : Result: Irritation to eyes, reversing within 7 days
- Germ cell mutagenicity  
Genotoxicity in vitro : Result: No evidence of genotoxic effects in vitro.
- Genotoxicity in vivo : Result: No evidence of genotoxic effects in vivo.

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- Carcinogenicity : Not classified due to data which are conclusive although insufficient for classification.
- Reproductive toxicity/Fertility : Species: Rat, male  
Application Route: Oral  
General Toxicity - Parent: No observed adverse effect level:  
1,000 mg/kg bw/day  
Method: OECD Test Guideline 422
- Species: Rat, females  
Application Route: Oral  
General Toxicity - Parent: No observed adverse effect level:  
500 mg/kg bw/day  
Method: OECD Test Guideline 422
- Target Organ Systemic Toxicant - Single exposure : Exposure routes: Ingestion  
The substance or mixture is not classified as specific target organ toxicant, single exposure.
- Target Organ Systemic Toxicant - Repeated exposure : Exposure routes: Ingestion  
The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
- Aspiration toxicity : No aspiration toxicity classification

## **Component: Dicyclohexyl phthalate**

- Acute oral toxicity : LD50: > 2,000 mg/kg  
Species: Rat
- Acute dermal toxicity : LD50: > 2,000 mg/kg  
Species: Rat
- Skin irritation : Result: No skin irritation
- Eye irritation : Result: No eye irritation
- Sensitisation : Species: Mouse  
Classification: May cause sensitisation by skin contact.
- Repeated dose toxicity : Species: Rat  
NOAEL: 50 mg/kg  
Application Route: Oral  
Exposure time: 90 d
- Germ cell mutagenicity  
Genotoxicity in vitro : in vitro assay  
Result: No evidence of genotoxic effects in vitro.
- Genotoxicity in vivo : No data available
- Carcinogenicity : No data available
- Reproductive toxicity/Fertility : Species: Rat, male and female  
Application Route: Oral  
Dose: 0, 240, 1200, 6000

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General Toxicity - Parent: No observed adverse effect level: 240 ppm  
General Toxicity F1: 240 ppm  
Fertility: No observed adverse effect level Parent: 240 ppm  
Method: OECD Test Guideline 416

Target Organ Systemic Toxicant - Repeated exposure : Exposure routes: Ingestion  
The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration toxicity : No aspiration toxicity classification

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## 12. ECOLOGICAL INFORMATION

### PRODUCT INFORMATION:

#### Ecotoxicology Assessment

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Very toxic to aquatic life with long lasting effects.

### COMPONENTS:

#### Ecotoxicology Assessment

##### Component: Dibenzoyl peroxide

Acute aquatic toxicity : Very toxic to aquatic organisms.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

##### Component: Dicyclohexyl phthalate

Acute aquatic toxicity : Harmful to aquatic life.

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

### Test result

#### Component: Dibenzoyl peroxide

##### Ecotoxicity effects

Toxicity to fish : LC50: 0.06 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50: 0.11 mg/l  
Exposure time: 48 h  
Species: Daphnia magna (Water flea)

Toxicity to algae : EC50: 0.06 mg/l  
Exposure time: 72 h  
Species: algae

Toxicity to bacteria : EC50: 35 mg/l

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Species: Bacteria

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC10: 0.001 mg/l  
Exposure time: 21 d  
reproduction rate  
Species: Daphnia magna (Water flea)  
Test Type: semi-static test  
Analytical monitoring: yes  
Method: OECD Test Guideline 211

## **Elimination information (persistence and degradability)**

Bioaccumulation : Bioconcentration factor (BCF): 66.6

Biodegradability : Result: Inherently biodegradable.

## **Component: Dicyclohexyl phthalate**

### **Ecotoxicity effects**

Toxicity to fish : LC50: > 2 mg/l  
Exposure time: 96 h  
Species: Oryzias latipes (Orange-red killifish)  
No toxicity at the limit of solubility

Toxicity to daphnia and other aquatic invertebrates : EC50: > 2 mg/l  
Exposure time: 48 h  
No toxicity at the limit of solubility

Toxicity to algae : ErC50: > 2 mg/l  
Exposure time: 72 h  
Species: Pseudokirchneriella subcapitata (green algae)  
Test Type: Growth inhibition  
Method: OECD Test Guideline 201  
No toxicity at the limit of solubility

NOEC:

Exposure time: 72 h  
Species: Pseudokirchneriella subcapitata (green algae)  
Test Type: Growth inhibition  
Method: OECD Test Guideline 201  
No toxicity at the limit of solubility

Toxicity to bacteria : NOEC: > 100 mg/l  
Exposure time: 3 h  
Species: activated sludge  
Test Type: Respiration inhibition  
Method: Domestic OECD Guideline 209

## **Elimination information (persistence and degradability)**

Bioaccumulation : No bioaccumulation is expected.

Biodegradability : Result: Readily biodegradable.

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## 13. DISPOSAL CONSIDERATIONS

- Product : The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Hazardous waste  
Dispose of contents/container in accordance with local regulation.
- Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not burn, or use a cutting torch on, the empty drum.  
Due to the high risk of contamination recycling/recovery is not recommended.  
Follow all warnings even after the container is emptied.

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## 14. TRANSPORT INFORMATION

### International Regulations

#### IATA-DGR

- UN/ID No. : UN 3106  
Proper shipping name : Organic peroxide type D, solid (Dibenzoyl peroxide)  
Class : 5.2  
Subsidiary risk : HEAT  
Packing group : Not Assigned  
Labels : 5.2 (HEAT)  
Packing instruction (cargo aircraft) : 570  
Packing instruction (passenger aircraft) : 570  
Environmentally hazardous : yes

#### IMDG-Code

- UN number : UN 3106  
Proper shipping name : ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide)  
Class : 5.2  
Packing group : Not Assigned  
Labels : 5.2  
EmS Code : F-J, S-R  
Marine pollutant : yes (Dibenzoyl peroxide)

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### National Regulations

#### TDG

- UN number : UN 3106  
Proper shipping name : ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide)  
Class : 5.2  
Packing group : II



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Labels : 5.2  
ERG Code : 145  
Marine pollutant : yes  
(Dibenzoyl peroxide)

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## 15. REGULATORY INFORMATION

### Notification status

DSL : YES. All components of this product are on the Canadian DSL  
AICS : YES. On the inventory, or in compliance with the inventory  
NZIoC : YES. On the inventory, or in compliance with the inventory  
ENCS : YES. On the inventory, or in compliance with the inventory  
ISHL : YES. On the inventory, or in compliance with the inventory  
KECI : YES. On the inventory, or in compliance with the inventory  
PICCS : YES. On the inventory, or in compliance with the inventory  
IECSC : YES. On the inventory, or in compliance with the inventory  
TCSI : YES. On the inventory, or in compliance with the inventory  
TSCA : YES. All chemical substances in this product are either listed on the TSCA Inventory or in compliance with a TSCA Inventory exemption.

For explanation of abbreviation see section 16.

### Canadian lists

#### Canadian Environmental Protection Act - National Pollutant Release Inventory

Dibenzoyl peroxide94-36-0

#### Canada. CEPA 1999 Significant New Activity (SNAc) List

No substances are subject to a Significant New Activity Notification.

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## 16. OTHER INFORMATION

### Full text of H-Statements

H241 : Heating may cause a fire or explosion.  
H317 : May cause an allergic skin reaction.  
H320 : Causes eye irritation.  
H360 : May damage fertility or the unborn child.  
H400 : Very toxic to aquatic life.  
H402 : Harmful to aquatic life.  
H410 : Very toxic to aquatic life with long lasting effects.  
H412 : Harmful to aquatic life with long lasting effects.

### Full text of other abbreviations

CA AB OEL : Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)  
CA BC OEL : Canada. British Columbia OEL  
CA ON OEL : Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.  
  
CA QC OEL : Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants  
  
CA AB OEL / TWA : 8-hour Occupational exposure limit  
CA AB OEL / STEL : 15-minute occupational exposure limit  
CA BC OEL / TWA : 8-hour time weighted average  
  
CA BC OEL / STEL : short-term exposure limit  
CA ON OEL / TWA : Time-Weighted Average Limit (TWA)

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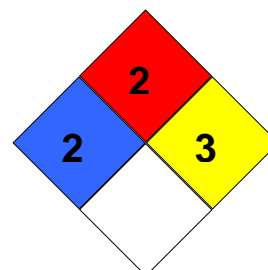
CA ON OEL / STEL : Short-Term Exposure Limit (STEL)  
CA QC OEL / TWAEV : Time-weighted average exposure value  
CA QC OEL / STEV : Short-term exposure value

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

## Further information

**HMIS Classification** : Health hazard: 2  
Chronic Health Hazard: \*  
Flammability: 2  
Physical hazards: 3

**NFPA Classification** : Health hazard: 2  
Fire Hazard: 2  
Reactivity Hazard: 3



## Notification status explanation

REACH : 1907/2006 (EU)  
DSL : Canadian Domestic Substances List (DSL)

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AICS	Australia Inventory of Chemical Substances (AICS)
NZIoC	New Zealand. Inventory of Chemical Substances
ENCS	Japan. ENCS - Existing and New Chemical Substances Inventory
ISHL	Japan. ISHL - Inventory of Chemical Substances
KECI	Korea. Korean Existing Chemicals Inventory (KECI)
PICCS	Philippines Inventory of Chemicals and Chemical Substances (PICCS)
IECSC	China. Inventory of Existing Chemical Substances in China (IECSC)
TCSI	Taiwan Chemical Substance Inventory (TCSI)
TSCA	United States TSCA Inventory

## Further information

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This data sheet contains changes from the previous version in section(s):

Physical and chemical properties  
Exposure controls/personal protection  
Handling and storage

The information in this material safety data sheet should be provided all who will use, handle, store, transport or otherwise be exposed to this product. The user must determine the appropriate measures that need to be implemented for the use and handling of this product in the context of the user's operations and use of this product. The information contained herein supersedes all previously issued bulletins on the subject matter covered. If the date on this document is more than three years old, call to make certain that this sheet is current. No warranty is made as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. User must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes, including mixing with other products. Nothing contained herein shall be construed as granting or extending any license under any patent.

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