

## SAFETY DATA SHEET

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

## 1.1 Product identifier

Product Name: MMA Catalyst

Contains: Dibenzoyl peroxide, 50% with dicyclohexyl phthalate

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: Chemical Curing Catalyst for MMA Markings/Surfacing Products.  
For industrial/professional use only.

Use advised against: No information available

## 1.3 Details of the supplier of the safety data sheet

Name of Supplier: SWARCO HITEX LTD

Address of Supplier: 4 Cloister Way  
Ellesmere Port  
Cheshire  
CH65 4E  
UK

Telephone: +44 (0)151-355 4100

Website: swarco.com/rms

Email: info.hitex@swarco.com

## 1.4 Emergency telephone number

Emergency Telephone: +44(0) 151 355 4100

Hours of operation: 08.00 to 17.00 GMT

For medical advice or information contact your GP or dial 111 for 24-hour health advice (England – NHS 111, Scotland – NHS 24 111, Wales – NHS 111 Wales, Northern Ireland – NHS 111 Northern Ireland).

**SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Org. Perox. D; H242; Skin Sens. 1, H317; Eye Irrit. 2, H319; Repr. 1B, H360D; Aquatic Acute 1, H400; Aquatic Chronic 1, H410

Additional information: For full text of Hazard and EU Hazard statements: see section 16

## 2.2 Label elements



Signal Word: Danger

## Hazard statements

H242 - Heating may cause a fire.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H360D - May damage the unborn child.

H410 - Very toxic to aquatic life with long lasting effects.

## SECTION 2: Hazards identification (....)

### Precautionary statements

- P201 - Obtain special instructions before use.
- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P234 - Keep only in original packaging.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P308+P313 - IF exposed or concerned: Get medical advice/attention.

### Supplemental Hazard information (EU)

Restricted to professional users

### 2.3 Other hazards

- May form explosible dust-air mixture if dispersed
- Dicyclohexyl phthalate has been identified as having endocrine disrupting properties for human health
- Not a PBT according to REACH Annex XIII
- Not a vPvB according to REACH Annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not applicable

### 3.2 Mixtures

Contains the following hazardous ingredients or ingredients with a workplace exposure limit:

Chemical Name	Conc.	CAS No.	EC No.	Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]	REACH Registration Number	SCL/ M-Factor/ ATE	WEL/ OEL
Dibenzoyl peroxide	49 – 52.5 %	94-36-0	202-327-6	Org. Perox. B, H241 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	01-2119511472 -50-XXXX	M factor (Acute) = 10 M factor (Chronic) = 10	Yes
Dicyclohexyl phthalate	47.5 - 51 %	84-61-7	201-545-9	Skin Sens. 1, H317 Repr. 1B, H360D	01-2119978223 -34-XXXX SVHC	-	Yes

## SECTION 4: First aid measures

No action shall be taken involving any personal risk or without suitable training

Rescuers should put on approved personal protective equipment (PPE) before administering first aid

### 4.1 Description of first aid measures

#### Contact with eyes

- If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes
- Irrigate eyes thoroughly whilst lifting eyelids
- Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.

**SECTION 4: First aid measures (....)**

## Contact with skin

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of soap and water  
Contaminated clothing should be laundered before reuse  
If skin irritation or rash occurs: Get medical advice/attention.

## Ingestion

Rinse mouth.  
Do not induce vomiting unless directed by medical personnel.  
If vomiting occurs turn patient on side  
Never give anything by mouth to an unconscious person  
Get medical advice/attention.

## Inhalation

Remove person to fresh air and keep comfortable for breathing.  
Keep warm and at rest, in a half upright position. Loosen clothing  
Apply artificial respiration only if patient is not breathing but do not use mouth to mouth resuscitation  
If breathing is difficult, oxygen should be given by a trained person  
Get medical advice/attention.

## 4.2 Most important symptoms and effects, both acute and delayed

## Contact with eyes

Causes redness and irritation

## Contact with skin

Dust may be irritating to skin  
May cause an allergic skin reaction.  
May cause skin sensitisation. Stop using product if skin sensitisation occurs.

## Ingestion

May irritate the mucous membranes  
May cause gastro-intestinal irritation  
May cause nausea/vomiting

## Inhalation

Dust may cause respiratory irritation.  
May damage the unborn child.

## 4.3 Indication of any immediate medical attention and special treatment needed

If medical advice is needed, have product container or label at hand.

Treat symptomatically and supportively.

Use of a glucocorticoid inhalation spray may be needed

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**SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

Suitable extinguishing media: Alcohol resistant foam; dry powder; carbon dioxide; sand/earth  
Unsuitable extinguishing media: Do not use halons; Do not use water jets

## 5.2 Special hazards arising from the substance or mixture

Risk of explosion by shock, friction, fire or other sources of ignition

Contact with combustible material may cause fire

**SECTION 5: Firefighting measures (....)**

May form explosive dust/air mixtures

Dust accumulations should be avoided to prevent potential for secondary dust explosions

Gives off irritating or toxic fumes (or gases) in a fire.

Decomposition products may include carbon oxides, oxygen, benzene, benzoic acid, phenyl benzoate, biphenyl

**5.3 Advice for firefighters**

Evacuate the area and keep personnel upwind

Fight fire from a distance (more than 15 m)

Keep container(s) exposed to fire cool, by spraying with water

Extinguish a small fire with powder or carbon dioxide then apply water to prevent re-ignition

After a fire, ventilate the area thoroughly and soak with water, clean the walls and metallic surfaces

Collect contaminated fire extinguishing water separately. This **MUST** not be discharged into drains. Prevent fire extinguishing water from contaminating surface or ground water.

Special protective equipment: Wear self-contained breathing apparatus (SCBA). Wear full protective clothing including chemical protection suit.

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**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Rescuers should take suitable precautions to avoid becoming casualties themselves

No action shall be taken involving any personal risk or without suitable training

Personal precautions for non-emergency personnel: Shut off all ignition sources; Avoid contact with skin and eyes; Do not breathe dust; Wear protective clothing as per section 8

Personal precautions for emergency responders: Evacuate the area and keep personnel upwind; Wear self-contained breathing apparatus (SCBA); Wear chemical protection suit

**6.2 Environmental precautions**

Do not allow to enter public sewers and watercourses

If polluted water reaches drainage systems or water courses, immediately inform appropriate authorities

**6.3 Methods and material for containment and cleaning up**

Stop leak if safe to do so.

Shut off all ignition sources

Use non-sparking tools.

Take action to prevent static discharges.

Damp down to avoid dust generation

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal

Keep contents moist

Wastes should not be confined

Remove contaminated material to safe location for subsequent disposal

To be disposed of as hazardous waste

Seek expert advice for removal and disposal of all contaminated materials and wastes

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**SECTION 6: Accidental release measures (....)**

Wash spill site with water and detergent

Wash thoroughly after dealing with spillage

6.4 Reference to other sections

See section(s): 7, 8 & 13

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**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not use this product.

Ensure adequate ventilation

Use local exhaust ventilation and/or enclosures.

Use non-sparking handtools

Use explosion-proof equipment.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition

Keep contents moist

Avoid confinement

Keep product and packaging clean and free from all contamination.

Wear protective clothing as per section 8

Use good personal hygiene practices

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Ensure eyewash stations and safety showers are nearby

Contaminated clothing should be laundered before reuse

**7.2 Conditions for safe storage, including any incompatibilities**

Store in a cool, dry well-ventilated place. Keep container tightly closed.

Keep only in the original container

Do not allow to dry out

Protect from sunlight.

Do not store above 30 °C

Take precautionary measures against static discharges

Equipment should be earthed

Ground and bond container and receiving equipment.

Use only appropriately classified electrical equipment

Keep in an area equipped with impermeable flooring.

Keep away from food, drink and animal feedingstuffs

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep away from combustible material

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**SECTION 7: Handling and storage (....)**

Keep product and packaging clean and free from all contamination.

Incompatible with acids, alkalis, strong oxidizing agents, reducing agents, amines, heavy metal compounds, heavy metals, rust ash, dusts (risk of self-accelerating exothermic decomposition)

### 7.3 Specific end use(s)

Chemical Curing Catalyst for MMA Markings / Surfacing Products

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**SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace exposure - Measurement of exposure by inhalation to chemical agents - Strategy for testing compliance with occupational exposure limit values). European Standard EN 14042 (Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents). European Standard EN 482 (Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

The UK HSE (EH40) recommends the following limits for dusts: 10 mg/m<sup>3</sup> (8hr TWA) total inhalable dust; 4 mg/m<sup>3</sup> (8hr TWA) total respirable dust

#### Dibenzoyl peroxide

WEL (long term) 5 mg/m<sup>3</sup> (UK)  
 DNEL (inhalational) 39 mg/m<sup>3</sup> Industry, Long Term, Systemic Effects  
 DNEL (dermal) 13.3 mg/kg bw/day Industry, Long Term, Systemic Effects  
 DNEL (dermal) 34 µg/cm<sup>2</sup> Industry, Long Term, Local Effects  
 DNEL (oral) 2 mg/kg bw/day Consumer, Long Term, Systemic Effects  
 PNEC aqua (freshwater) 20 ng/L  
 PNEC aqua (intermittent releases, freshwater) 602 ng/L  
 PNEC aqua (marine water) 2 ng/L  
 PNEC (STP) 350 µg/L  
 PNEC sediment (freshwater) 12.7 µg/kg  
 PNEC sediment (marine water) 1.27 µg/kg  
 PNEC terrestrial (soil) 2.5 µg/kg

#### Dicyclohexyl phthalate

WEL (long term) 5 mg/m<sup>3</sup> (UK)  
 DNEL (inhalational) 35.2 mg/m<sup>3</sup> Industry, Long Term, Systemic Effects  
 DNEL (inhalational) 35.2 mg/m<sup>3</sup> Industry, Acute/Short Term, Systemic Effects  
 DNEL (dermal) 500 µg/kg bw/day Industry, Long Term, Systemic Effects  
 DNEL (inhalational) 870 µg/m<sup>3</sup> Consumer, Long Term, Systemic Effects  
 DNEL (dermal) 250 µg/kg bw/day Consumer, Long Term, Systemic Effects  
 DNEL (oral) 250 µg/kg bw/day Consumer, Long Term, Systemic Effects  
 DNEL (oral) 250 µg/kg bw/day Consumer, Acute/Short Term, Systemic Effects  
 PNEC aqua (freshwater) 1.04 µg/L  
 PNEC aqua (intermittent releases, freshwater) 20 µg/L  
 PNEC aqua (marine water) 104 ng/L  
 PNEC aqua (intermittent releases, marine water) 20 µg/L  
 PNEC (STP) 10 mg/L  
 PNEC sediment (freshwater) 1.06 mg/kg  
 PNEC sediment (marine water) 110 µg/kg  
 PNEC terrestrial (soil) 310 µg/kg  
 PNEC secondary poisoning (food) 133 g/kg

### 8.2 Exposure controls

## SECTION 8: Exposure controls/personal protection (....)

Selection and use of personal protective equipment should be based on a risk assessment of exposure potential

### Engineering controls

Engineering controls should be provided to prevent the need for ventilation  
Provide appropriate exhaust ventilation at places where airborne dust is generated  
Use explosion-proof ventilating and lighting equipment.

### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment  
Use type FFP2 or FFP3 (EN 143) dust masks  
Where a reusable half mask respirator is required, use EN 140 mask and EN 143 particle filter, or EN 1827  
Where a full face mask respirator is required, use EN 136, with particle filter EN 143

### Skin protection

Wear suitable protective clothing  
Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.  
The selection of a suitable glove depends on work conditions and whether the product is present on its own or in combination with other substances. Breakthrough time is dependent on the characteristics of the brand of glove used and the supplier should be consulted.  
Neoprene or butyl rubber are recommended  
Glove material: neoprene/butyl rubber  
Thickness: 0.5 mm  
Breakthrough time: > 480 min  
Reference: Supplier SDS

### Eye/face protection

Wear goggles giving complete eye protection approved to standard EN 166.

### Thermal hazards

Not applicable

### Hygiene measures

Do not eat, drink or smoke when using this product.  
Contaminated clothing should be laundered before reuse  
Use good personal hygiene practices  
Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air)  
Wash thoroughly after handling.  
Ensure eyewash stations and safety showers are nearby

### Environmental exposure controls

Avoid release to the environment.  
Do not allow to penetrate the ground/soil.  
Do not empty into drains



## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state: Solid  
Colour: White

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**SECTION 9: Physical and chemical properties (....)**

Odour:	Faint
Melting point/freezing point:	Decomposes below the melting point
Boiling point or initial boiling point and boiling range:	Decomposes below the boiling point
Flammability:	Decomposition products may be flammable
Lower and upper explosion limit:	Does not apply to solids
Flash point:	Not applicable
Auto-ignition temperature:	Not determined
Decomposition temperature:	Self-Accelerating Decomposition Temperature (SADT) is 55 - 60 °C
pH:	Not determined
Kinematic viscosity:	Not applicable
Solubility:	Insoluble in water
Partition coefficient n-octanol/water (log value):	Dibenzoyl peroxide Log Pow 3.2 @ 22 °C and pH 7.02 Dicyclohexyl Phthalate Log Pow 4.82 @ 25 °C
Vapour pressure:	Dibenzoyl peroxide 0.009 Pa @ 25 °C Dicyclohexyl phthalate 0 Pa @ 25 °C
Density and/or relative density:	1.23 @ 20 °C
Relative vapour density:	Not applicable
Particle characteristics:	Dibenzoyl Peroxide, immediately after immersion in water, the particles present a mean diameter of 135 µm Dicyclohexyl phthalate, average size diameter: 442.14 µm

## 9.2 Other information

Bulk Density:	600 - 700 kg/m <sup>3</sup> @ 20 °C
Volatile Organic Compounds (VOC):	No information available
Active oxygen content:	3.24 – 3.47 %
Peroxide content:	ca. 50 % w/w

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**SECTION 10: Stability and reactivity**

## 10.1 Reactivity

Reacts with oxidizing substances

Sensitive to exothermic decomposition, decomposition is initiated by heat, contact with impurities (e.g. acids, heavy metal compounds, amines), friction or impact

## 10.2 Chemical stability

Stable under recommended storage conditions

Avoid overheating

Self-Accelerating Decomposition Temperature (SADT) is 55 - 60 °C.

SADT is the lowest temperature at which self accelerating decomposition may occur in a substance in the packaging as offered for carriage.

A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire, can be caused by thermal decomposition at and above 55 °C.

Contact with incompatible substances can cause decomposition at or below the SADT 55 °C

## 10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur under normal conditions of storage and use

May form explosive dust/air mixtures

## 10.4 Conditions to avoid

Do not allow to dry out

Avoid confinement



## SECTION 10: Stability and reactivity (....)

Keep product and packaging clean and free from all contamination.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep away from direct sunlight

Avoid extremes of temperature

### 10.5 Incompatible materials

Incompatible with acids, alkalis, strong oxidizing agents, reducing agents, amines, heavy metal compounds, heavy metals, rust ash, dusts (risk of self-accelerating exothermic decomposition)

### 10.6 Hazardous decomposition products

Decomposition products may include carbon oxides, oxygen, benzene, benzoic acid, phenyl benzoate, biphenyl

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute Toxicity

Based on available data, the classification criteria are not met

#### Substances

Chemical Name	LD <sub>50</sub> (oral, rat)	LC <sub>50</sub> (inhalation, rat)	LD <sub>50</sub> (dermal, rabbit)
Dibenzoyl peroxide	LD <sub>50</sub> 2 000 mg/kg (mouse)	LC <sub>50</sub> (4 h) 24.3 mg/L	No data available
Dicyclohexyl phthalate	2 000 mg/kg	No data available	2 000 mg/kg (rat)

#### Skin corrosion/irritation

Based on available data, the classification criteria are not met

#### Substances

Chemical Name	Irritation/corrosion
Dibenzoyl peroxide	No adverse effect observed (not irritating)
Dicyclohexyl phthalate	No adverse effect observed (not irritating)

#### Serious eye damage/irritation

Causes serious eye irritation.

Classification based on calculation and concentration thresholds

#### Substances

Chemical Name	Irritation/corrosion
Dibenzoyl peroxide	Adverse effect observed (irritating)
Dicyclohexyl phthalate	No adverse effect observed (not irritating)

#### Respiratory or skin sensitisation

May cause an allergic skin reaction.

Classification based on calculation and concentration thresholds

#### Substances

Chemical Name	Respiratory sensitisation	Skin sensitisation
Dibenzoyl peroxide	No study available	Adverse effect observed (sensitising)
Dicyclohexyl phthalate	No study available	Adverse effect observed (sensitising)

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**SECTION 11: Toxicological information (....)**

## Germ cell mutagenicity

Based on available data, the classification criteria are not met

## Substances

Chemical Name	Toxicity - In Vitro	Toxicity - In Vivo
Dibenzoyl peroxide	No adverse effect observed (negative)	No adverse effect observed (negative)
Dicyclohexyl phthalate	No adverse effect observed (negative)	No data available

## Carcinogenicity

Based on available data, the classification criteria are not met

Dibenzoyl peroxide is classified by IARC as Group 3 (Not classifiable as to its carcinogenicity to humans)

## Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Dibenzoyl peroxide	No data available	No data available	No data available
Dicyclohexyl phthalate	No data available	No data available	No data available

## Reproductive toxicity

May damage the unborn child.

Classification based on calculation and concentration thresholds

## Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Dibenzoyl peroxide	500 mg/kg bw/day	No data available	No data available
Dicyclohexyl phthalate	240 ppm (16 - 21 mg/kg bw/day)	No data available	No data available

## Specific target organ toxicity (STOT) - single exposure

Based on available data, the classification criteria are not met

## Substances

Chemical Name	Route	Remarks
Dibenzoyl peroxide	Respiratory	No adverse effect observed (not irritating)
Dicyclohexyl phthalate	Respiratory	No study available

## Specific target organ toxicity (STOT) - repeated exposure

Based on available data, the classification criteria are not met

## Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Dibenzoyl peroxide	190 - 1 000 mg/kg bw/day	No data available	100 - 150 mg/kg bw/day
Dicyclohexyl phthalate	50 mg/kg bw/day	No data available	No data available

## Aspiration hazard

Based on available data, the classification criteria are not met

## Contact with eyes

Causes redness and irritation

## SECTION 11: Toxicological information (....)

### Contact with skin

- Dust may be irritating to skin
- May cause an allergic skin reaction.
- May cause skin sensitisation. Stop using product if skin sensitisation occurs.

### Ingestion

- May irritate the mucous membranes
- May cause gastro-intestinal irritation
- May cause nausea/vomiting

### Inhalation

- Dust may cause respiratory irritation.
- May damage the unborn child.

### 11.2 Information on other hazards

Dicyclohexyl phthalate has been identified as having endocrine disrupting properties for human health

## SECTION 12: Ecological information

### 12.1 Toxicity

- Very toxic to aquatic life with long lasting effects.
- Classification based on calculation and concentration thresholds

#### Substances

Chemical Name	LC <sub>50</sub> (fish)	EC <sub>50</sub> (aquatic invertebrates)	EC <sub>50</sub> (aquatic algae)
Dibenzoyl peroxide	(4 days) 60.2 µg/L	No data available	(48 h) 110 µg/L
Dicyclohexyl phthalate	(4 days) 2 mg/L	(21 days) 679 µg/L	(72 h) 2 mg/L

### 12.2 Persistence and degradability

Expected to be biodegradable

#### Substances

Chemical Name	Biodegradation
Dibenzoyl peroxide	Readily biodegradable in water (100%)
Dicyclohexyl phthalate	Readily biodegradable in water (100%)

### 12.3 Bioaccumulative potential

#### Substances

Chemical Name	Bioconcentration Factor (BCF)	Log Kow
Dibenzoyl peroxide	No data available	3.2 @ 20 °C
Dicyclohexyl phthalate	85 dimensionless	4.82 @ 25 °C

### 12.4 Mobility in soil

#### Substances

Chemical Name	Adsorption/desorption
Dibenzoyl peroxide	Koc 6 310 @ 20°C
Dicyclohexyl phthalate	Koc 2 884 @ 20°C

### 12.5 Results of PBT and vPvB assessment

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**SECTION 12: Ecological information (....)**

Not a PBT according to REACH Annex XIII

Not a vPvB according to REACH Annex XIII

**12.6 Endocrine disrupting properties**

No information available

**12.7 Other adverse effects**

No information available

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**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

Disposal should be in accordance with local, state or national legislation

Dispose of contents/container to an authorised waste collection point

This material and/or its container must be disposed of as hazardous waste

Do not pierce or burn container, even after use

Avoid release to the environment.

**13.2 Classification**

The waste must be identified according to the List of Wastes (2000/532/EC)

Hazardous Property Code(s): HP 3 Flammable; HP 4 Irritant; HP 10 Toxic for reproduction; HP 13 Sensitising; HP 14 Ecotoxic

EWC Code: 16 09 03\* peroxides, for example hydrogen peroxide

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**SECTION 14: Transport information****14.1 UN number or ID number**

UN No.: 3106

**14.2 UN proper shipping name**

Proper Shipping Name: ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide)

**14.3 Transport hazard class(es)**

Hazard Class: 5.2

**14.4 Packing group**

Packing Group: Not applicable

**14.5 Environmental hazards**

MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS

**14.6 Special precautions for user**

No information available

**14.7 Maritime transport in bulk according to IMO instruments**

**SECTION 14: Transport information (...)**

Not applicable

**14.8 Road/Rail (ADR/RID)**

ADR UN No.: 3106  
Proper Shipping Name: ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide)  
ADR Hazard Class: 5.2  
ADR Packing Group: Not applicable  
Tunnel Code: D

**14.9 Sea (IMDG)**

IMDG UN No.: 3106  
Proper Shipping Name: ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide)  
IMDG Hazard Class: 5.2  
IMDG Packing Group.: Not applicable

**14.10 Air (ICAO/IATA)**

ICAO UN No.: 3106  
Proper Shipping Name: ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide)  
ICAO Hazard Class: 5.2  
ICAO Packing Group: Not applicable

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**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety data sheet is provided in compliance with REACH Regulation (EC) No 1907/2006 as amended by Regulation (EU) 2015/830

The GB Classification, Labelling and Packaging Regulation (GB CLP) applies in Great Britain

Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe

Restrictions on use according to Annex XVII to REACH Regulation: Not applicable

Seveso III Directive (2012/18/EU, Dangerous Substances in Annex I: Dibenzoyl peroxide

Dicyclohexyl phthalate is included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No.1907/2006 (REACH)

**15.2 Chemical safety assessment**

A REACH chemical safety assessment has not been carried out

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**SECTION 16: Other information**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Sources of data: Information from company data, published literature and supplier safety data sheets

Revision No. 1.3.0. Revised 4th May 2018.  
Changes made: Updated hazard statements

Revision No. 2.0.0. Revised June 2021.  
Changes made: Revised to conform to latest Annex II of REACH

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**SECTION 16: Other information (....)**

Revision No. 3.0.0. Revised July 2023.

Changes made: Removal of silicone dioxide. Identification of Dicyclohexyl phthalate as SVHC

Revision No. 3.1.0. Revised December 2023.

Changes made: Product rebranding

**Training advice**

Workers must be informed of the presence of hazardous ingredients and trained in the proper use and handling of this product as required under applicable regulations

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Org. Perox. D; H242: Classification based on test data  
Skin Sens. 1, H317: Classification based on calculation and concentration thresholds  
Eye Irrit. 2, H319: Classification based on calculation and concentration thresholds  
Aquatic Acute 1, H400: Classification based on calculation and concentration thresholds  
Aquatic Chronic 1, H410: Classification based on calculation and concentration thresholds

Text not given with phrase codes where they are used elsewhere in this safety data sheet:

H241: Heating may cause a fire or explosion

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H360D: May damage the unborn child.

H400: Very toxic to aquatic life

H410: Very toxic to aquatic life with long lasting effects

H412: Harmful to aquatic life with long lasting effects

**Acronyms**

ATE: Acute Toxicity Estimate

CAS: Chemical Abstracts Service

DNEL: Derived No-Effect Level

EC: European Community

EC<sub>50</sub>: Effective Concentration, 50%

EL<sub>50</sub>: Effective Loading Rate resulting in 50% effect.

GHS: Globally Harmonised System

LC<sub>50</sub>: Lethal Concentration, 50%

LD<sub>50</sub>: Lethal Dose, 50%

LOAEC: Lowest Observed Adverse Effect Concentration

LOAEL: Lowest Observed Adverse Effect Level

NOAEC: No Observed Adverse Effect Concentration

NOAEL: No Observed Adverse Effect Level

OEL: Occupational Exposure Limit

PBT: Persistent, Bioaccumulative and Toxic

PNEC: Predicted No-Effect Concentration

**SECTION 16: Other information (....)**

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

SCL: Specific Concentration Limit

STOT RE: Specific Target Organ Toxicity Repeated Exposure

STOT SE: Specific Target Organ Toxicity Single Exposure

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

WEL: Workplace Exposure Limit