

# Safety data sheet

according to 1907/2006/EC, Article 31

Date Printed 27.02.2019

Version number 1

Revision Date 27.02.2019

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

- **1.1 Product identifier**
- **Trade name:** Benzoyl Peroxide Catalyst
- **Article number:** AGR1131B
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
Hardener/catalyst.
- **Application of the substance / the preparation:** No further relevant information.
- **1.3 Details of the supplier of the safety data sheet**
- **Supplier.**  
Agar Scientific Ltd  
Parsonage Lane  
Stansted CM24 8GF  
United Kingdom  
sales@agarscientific.com  
Tel: +44 (0) 1279 813 519
- **Further information obtainable from:** Technical Support
- **1.4 Emergency telephone number:** 24 hours: +44 (0)1856 407333

## SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Org. Perox. C H242 Heating may cause a fire.



GHS08 health hazard

Repr. 1B H360D May damage the unborn child.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02 GHS07 GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
dicyclohexyl phthalate  
dibenzoyl peroxide
- **Hazard statements**  
H242 Heating may cause a fire.  
H319 Causes serious eye irritation.

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H317 May cause an allergic skin reaction.

H360D May damage the unborn child.

## Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

P410 Protect from sunlight.

P411 Store at temperatures not exceeding 25°C.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

## 2.3 Other hazards

## Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

## SECTION 3: Composition/information on ingredients

Description: Mixture of substances listed below with nonhazardous additions.

### Dangerous components:

CAS: 94-36-0	dibenzoyl peroxide	53.0%
EINECS: 202-327-6	Org. Perox. B, H241; Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 84-61-7	dicyclohexyl phthalate	47.0%
EINECS: 201-545-9	Repr. 1B, H360D; Skin Sens. 1, H317	

### SVHC

84-61-7	dicyclohexyl phthalate
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Additional information: For the wording of the listed hazard phrases refer to section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information:

Immediately remove any clothing soiled by the product.

Take off all contaminated clothing immediately. Never give anything by mouth to an unconscious person. Remove from exposure, lie down. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

#### After inhalation:

Supply fresh air.

No adverse effects are anticipated from inhalation.

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Call a physician immediately.

#### After skin contact: Wash with water and soap and rinse thoroughly.

#### After eye contact: Rinse opened eye under running water. If symptoms persist, consult a doctor.

#### After swallowing:

Clean mouth with water and drink afterwards plenty of water. If a person vomits when lying on his back, place him in the recovery position. Do NOT induce vomiting. If swallowed, seek medical advice immediately and show this container or label.

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

No further relevant information available.

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- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
Use fire extinguishing methods suitable to surrounding conditions.  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- **For safety reasons unsuitable extinguishing agents:** High volume water jet.
- **5.2 Special hazards arising from the substance or mixture**  
Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.
- **5.3 Advice for firefighters**
- **Protective equipment:** Use personal protective equipment.
- **Additional information**  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective gloves and glasses.  
Wear respiratory protection. Wear personal protective equipment.
- **6.2 Environmental precautions:**  
Do not allow to enter sewers/ surface or ground water.  
Avoid subsoil penetration. Do not allow material to contaminate ground water system. Do not contaminate water. If the product contaminates rivers and lakes or drains inform respective authorities. Do not let product enter drains.
- **6.3 Methods and material for containment and cleaning up:**  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.  
Remove mechanically and with care (e.g. with clean polyethylene plastic shovel). Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Never add other substances or waste material to product residue. Offer surplus and non-recyclable solutions to a licensed disposal company.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**  
The dried resin is combustible, similar to wood. Burning dry resin emits dense, black smoke. As latex, material is not combustible.  
Protect against electrostatic charges.  
Extinguishing media: Water fog - dried resin only.  
No data available.
- **7.2 Conditions for safe storage, including any incompatibilities**  
Avoid impurities (e.g. rust, dust, ash), risk of decomposition.

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- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Electrical installations/ working materials must comply with technological safety standards. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep container tightly closed. No smoking.  
Storage temperature: < 30 °C.
- **Information about storage in one common storage facility:**  
Store apart from other dangerous and incompatible substances.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

### 8.1 Control parameters

- **Ingredients with limit values that require monitoring at the workplace:**

#### 94-36-0 dibenzoyl peroxide

WEL Long-term value: 5 mg/m<sup>3</sup>

#### 84-61-7 dicyclohexyl phthalate

WEL Long-term value: 5 mg/m<sup>3</sup>

### · DNELs

dibenzoyl peroxide:  
End Use: Professional use.  
Exposure routes: Inhalation.  
Potential health effects: Long-term systemic effects.  
Value: 11.75 mg/m<sup>3</sup>.

dicyclohexyl phthalate:  
End Use: Professional use.  
Exposure routes: Skin contact.  
Potential health effects: Long-term systemic effects.  
Value: 6.6 mg/kg.

### · PNECs

dibenzoyl peroxide:  
Fresh water: 0.602 µg/l  
Marine water: 0.0602 µg/l  
Intermittent use/release: 0.602 µg/l  
Sewage treatment plant: 0.35 mg/l  
Fresh water sediment: 0.338 mg/kg  
Soil value: 0.0758 mg/kg.

dicyclohexyl phthalate:  
Fresh water: 3.62 µg/l  
Marine sediment: 0.362 µg/l  
Intermittent use/release: 36.2 µg/l  
Sewage treatment plant: 10 mg/l  
Fresh water sediment: 1.06 mg/kg  
Marine sediment: 0.106 mg/kg  
Soil: 0.21 mg/kg  
Oral value: 133 g/kg.

- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls** Provide adequate ventilation.

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

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Remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Store protective clothing separately.  
Avoid contact with the eyes.  
Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.  
Short duration filter unit: Filter A.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Material: butyl rubber.

Glove thickness: 0.5 mm

Breakthrough time:  $\geq 8$  h

Remark: Skin should be washed after contact.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Protective suit. Remove and wash contaminated clothing before re-use.

· **Limitation and supervision of exposure into the environment**

Avoid subsoil penetration. Do not allow material to contaminate ground water system. Do not contaminate water. If the product contaminates rivers and lakes or drains inform respective authorities. Do not let product enter drains.

## SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:

Solid

Colour:

White

· **Odour:**

Aromatic

· **Odour threshold:**

Not determined.

· **pH-value:**

Not applicable.

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· <b>Change in condition</b>	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.
· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gas):</b>	May cause fire.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
Lower:	Not determined.
Upper:	Not determined.
· <b>Vapour pressure:</b>	Not applicable.
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not applicable.
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with water:</b>	Insoluble.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· <b>Solvent content:</b>	
VOC (EC)	0.00 %
· <b>9.2 Other information</b>	No further relevant information available.

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

## SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**
**94-36-0 dibenzoyl peroxide**

Oral	LD50	7,710 mg/kg (rat)
Inhalative	LC50/4 h	24.3 mg/l (rat)

- **Skin corrosion/irritation** No data available.

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- **Serious eye damage/irritation**  
Causes serious eye irritation.  
No data available.
- **Respiratory or skin sensitisation**  
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity**  
May damage the unborn child.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### · 12.1 Toxicity

#### · **Aquatic toxicity:**

##### **94-36-0 dibenzoyl peroxide**

EC50 2.91 mg/kg (Daphnia magna) ((48h))

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Recommendation:** Disposal must be made according to official regulations.

## SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, ADN, IMDG, IATA** UN3104
- **14.2 UN proper shipping name**
- **ADR** 3104 ORGANIC PEROXIDE TYPE C, SOLID, ENVIRONMENTALLY HAZARDOUS
- **ADN** 3104
- **IMDG, IATA** ORGANIC PEROXIDE TYPE C, SOLID

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## 14.3 Transport hazard class(es)

### ADR



### Class

5.2 Organic peroxides.

## IMDG, IATA



### Class

5.2 Organic peroxides.

### Label

5.2

## 14.4 Packing group

### ADR, IMDG, IATA

II

## 14.5 Environmental hazards:

Not applicable.

### Marine pollutant:

Yes

## 14.6 Special precautions for user

Warning: Organic peroxides.

### EMS Number:

F-J,S-R

### Stowage Category

D

### Stowage Code

SW1 Protected from sources of heat.

### Segregation Code

SG35 Stow "separated from" acids.

SG36 Stow "separated from" alkalis.

## 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

## Transport/Additional information:

### IMDG

### Limited quantities (LQ)

100 g

### Excepted quantities (EQ)

Code: E0

Not permitted as Excepted Quantity

## UN "Model Regulation":

UN 3104 ORGANIC PEROXIDE TYPE C, SOLID, 5.2, II, ENVIRONMENTALLY HAZARDOUS

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

#### Seveso category

P6b SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES

Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 30

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· **National regulations:**

· **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**

84-61-7 dicyclohexyl phthalate

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

This information is based on our present knowledge and should assist the user with the safe handling of this material when properly applied. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

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.

· **Department issuing SDS:** Sales department

· **Contact:**

sales@agarscientific.com

Tel: +44 (0) 1279 813 519

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Org. Perox. B: Organic peroxides – Type B

Org. Perox. C: Organic peroxides – Type C/D

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Repr. 1B: Reproductive toxicity – Category 1B

· **\* Data compared to the previous version altered.**

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