

Printing date 02.04.2024 Version: 13 (replaces version 12) Revision: 15.02.2023

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

· 1.1 Product identifier

PEROXAN BP-Pulver 50 W-F · Trade name:

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

No further relevant information available.

· Application of the substance /

the mixture

Reaction initiator For industrial use

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier: PERGAN GmbH

Hilfsstoffe für industrielle Prozesse

Schlavenhorst 71 D-46395 Bocholt Tel: +49 2871 9902-0 Fax: +49 2871 9902-50

· Further information obtainable

from:

Environment protection / Security of labour Qualified person: E-mail: msds@pergan.com

1.4 Emergency telephone

- Tel: +49 2871 9902-0 number:

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008

Org. Perox. D H242 Heating may cause a fire. Eye Irrit. 2 H319 Causes serious eye irritation. Skin Sens. 1 H317 May cause an allergic skin reaction. Repr. 1B H360D May damage the unborn child. Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

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









· 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. H317 May cause an allergic skin reaction. H360D May damage the unborn child.

H410 Very toxic to aquatic life with long lasting effects.

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

smokina.

P220 Keep away from dirt, rust, chemicals in particular concentrated acids, alkalis and accelerators (e. g. heavy metal compounds and amines).

Keep only in original packaging. P234 P264 Wash thoroughly after handling. P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P410 Protect from sunlight.

P411+P235 Store at temperatures not exceeding +30°C. Keep cool.

P420 Store separately.

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

regulations.

· Additional information: Restricted to professional users.

2.3 Other hazards

Results of PBT and vPvB assessment

· PBT: The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. · vPvB: The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

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(Contd. of page 1) · Determination of endocrine-disrupting properties 84-61-7 dicyclohexyl phthalate List I; II

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Dangerous components:					
CAS: 84-61-7 EINECS: 201-545-9 Index number: 607-719-00-4 Reg-No.: 01-2119978223-34	dicyclohexyl phthalate Repr. 1B, H360D; Skin Sens. 1, H317; Aquatic Chronic 3, H412	40-50%			
CAS: 94-36-0 EINECS: 202-327-6 Index number: 617-008-00-0 Reg-No.: 01-2119511472-50		40-50%			
· SVHC 84-61-7 dicyclohexyl phthala	te				

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Additional information:

Take care of personal protection for the first aider.

For the wording of the listed hazard phrases refer to section 16.

· After inhalation: Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

Take affected persons into fresh air and keep guiet.

· After skin contact: Immediately wash with water and soap and rinse thoroughly.

Immediately remove contaminated clothing.

· After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

If symptoms persist consult doctor. After swallowing:

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate

medical attention and special

treatment needed

No further relevant information available.

No further relevant information available

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from

the substance or mixture

Under certain fire conditions, traces of other toxic gases cannot be excluded.

Hydrocarbons, carbondioxide and -monoxid.

5.3 Advice for firefighters

· Protective equipment: Additional information

Do not inhale explosion gases or combustion gases. Cool endangered receptacles with water spray.

Self-protection first!

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from ignition sources.

In case of further temperature should be cooled with waterspray from a safe distance.

Wear breathing apparatus with filter A during decomposition of materials.

Wear protective equipment. Keep unprotected persons away.

· 6.2 Environmental precautions: Inform respective authorities in case of seepage into water course or sewage system.



Do not allow to enter sewers/ surface or ground water.

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6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Large quantities should be diluted with suitable desensitation agent to a concentration below 10 % before

disposal.

Pick up mechanically, collect in a suitable receptacle and dispose in accordance with government

regulations.

· 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.

In case of large spillage the environmental authority should be informed.

SECTION 7: Handling and storage

· 7.1 Precautions for safe

handling Keep away from heat and direct sunlight.

Open and handle receptacle with care.

Prevent formation of dust.

Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.

Do not refill residue into storage receptacles. Restrict the quantity stored at the work place.

Before break and at the end of work hands should be thoroughly washed.

Only use tools made of suitable materials (e. g. polyethylene or stainless steel).

Keep away from dirt, rust, chemicals in particular concentrated acids, alkalis and accelerators (e. g. heavy-

metal compounds and amines). While using do not eat, drink or smoke. Do not generate flames or sparks.

Keep product and emptied container away from heat and sources of ignition.

Avoid shock and friction.

Take precautionary measures against static discharges.



Do not smoke.

Information about fire - and explosion protection:

Protect from heat.

Protect against electrostatic charges.

Prevent impact and friction.

Use explosion-proof apparatus / fittings and spark-proof tools.

Dust can combine with air to form an explosive mixture.

Substance/product is oxidising when dry.

Product is not explosive. However, formation of explosive air/dust mixtures are possible.



Avoid open flames, sparks, direct sunlight and other sources of ignition.

Keep ignition sources away - Do not smoke.

 \cdot 7.2 Conditions for safe storage, including any incompatibilities

· Storage: · Requirements to be met by Pay attention to the special requirements of your local autorithies for storing dangerous goods.

storerooms and receptacles:

Store only in the original receptacle. Prevent any seepage into the ground.

Use only receptacles specifically permitted for this substance/product.

 Information about storage in one common storage facility:

Do not store or park organic peroxide together with heavy metal compounds and amines.

Store away from foodstuffs, drinks and feeding stuffs.

Further information about storage conditions:

Keep container tightly sealed.
Protect from heat and direct sunlight.

Protect from contamination.

Storage in a collecting room is required.

Recommended storage temperature (To maintain quality):

0 +30 °C

Storage class:

· 7.3 Specific end use(s)

No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

o. i Contro	· 6.1 Control parameters					
Ingredients with limit values that require monitoring at the workplace:						
84-61-7 di	84-61-7 dicyclohexyl phthalate					
OEL (Irela	OEL (Ireland) Long-term value: 5 mg/m³					
WEL (Gre	WEL (Great Britain) Long-term value: 5 mg/m³					
94-36-0 di	94-36-0 dibenzoyl peroxide					
OEL (Ireland) Long-term valu Sens		ng-term value: 5 mg/m³ ens				
WEL (Gre	WEL (Great Britain) Long-term value: 5 mg/m³					
· DNELs	DNELs					
84-61-7 dicyclohexyl phthalate						
Dermal	mal DNEL Longterm System 0,5 mg/kg bw/day (Worker)					
Inhalative	Inhalative DNEL Longterm System 35,2 mg/m3 (Worker)					
94-36-0 di	94-36-0 dibenzoyl peroxide					
Oral	DNEL Longte	erm System 2 mg/kg bw/day (General population)				
Dermal	DNEL Longte	erm System 13,3 mg/kg bw/day (Worker)				
Inhalative	DNEL Longte	erm System 39 mg/m3 (Worker)				
·PNECs	PNECs					
84-61-7 dicyclohexyl phthalate						
PNEC Marinewater sed 0,106 mg/kg sed dw						
PNEC Fre	shwater	0,004 mg/l (AF 50)				
PNEC Fre	PNEC Freshwater sed 1,06 mg/kg sed dw					
PNEC Soi	I	0,21 mg/kg soil dw				
PNEC STI	>	10 mg/l (AF 10)				

94-36-0 dibenzoyl peroxide

PNEC Marinewater

PNEC Marinewater sed | 0,001 mg/kg sed dw | PNEC Freshwater | 0,00002 mg/l (AF 50) | PNEC Freshwater sed | 0,013 mg/kg sed dw | PNEC STP | 0,35 mg/l

PNEC Marinewater 0,000002 mg/l (AF 500)

Additional information:

8.2 Exposure controls
Appropriate engineering

controls No further data; see section 7.

0 mg/l (AF 500)

· Individual protection measures, such as personal protective equipment

· General protective and

hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals.

The lists valid during the making were used as basis.

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid close or long term contact with the skin.

Avoid contact with the eyes and skin.

Do not eat, drink, smoke or sniff while working. Use skin protection cream for skin protection.

Be sure to clean skin thoroughly after work and before breaks.

• Respiratory protection: Not necessary if room is well-ventilated.



Use suitable respiratory device when it exceed exposure limit and when insufficiently ventilated.

Filter P2

• Hand protection Only use chemical-protective gloves with CE-labelling of category III.



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

Protective gloves

• 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.

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Butyl rubber, BR

Fluorocarbon rubber (Viton) Nitrile rubber, NBR

Neoprene

· Penetration time of glove

material

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

· Eye/face protection



Tightly sealed goggles

· Body protection:



SECTION 9: Physical and chemical properties

· 9.1 Information on	basic physical	and chemical	properties
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General Information

· Colour: · Odour: · Odour threshold:

· Melting point/freezing point: Boiling point or initial boiling point and boiling range

· Flammability

Lower and upper explosion limit

· Lower: · Upper: · Flash point:

· Decomposition temperature:

· pH

· Viscosity:

Kinematic viscosity

· Dynamic: · Solubility water:

· Partition coefficient n-octanol/water (log value)

· Vapour pressure:

Density and/or relative density

Density at 20 °C: · Relative density Vapour density Particle characteristics

See section 3.

Whitish

Characteristic Not determined. Not applicable.

Not applicable. May cause fire.

Not determined. Not determined. Not applicable. +60 °C (SADT) Not applicable.

Not applicable. Not applicable.

Undetermined. not determined Not applicable.

1,12 g/cm³ Not determined. Not applicable.

· 9.2 Other information

Appearance:

· Form:

· Important information on protection of health and environment,

and on safety.

· Ignition temperature:

· Explosive properties:

Product is not selfigniting.

Product is not explosive. However, formation of explosive air/dust

mixtures are possible.

· Change in condition

· Evaporation rate

Not applicable.

Solid

· Information with regard to physical hazard classes · Explosives Void Flammable gases Void · Aerosols Void · Oxidising gases Void · Gases under pressure Void · Flammable liquids Void Flammable solids Void · Self-reactive substances and mixtures Void · Pyrophoric liquids Void · Pyrophoric solids Void Self-heating substances and mixtures Void

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· Substances and mixtures, which emit flammable gases in

contact with water Void Oxidising liquids Void · Oxidising solids Void

· Organic peroxides Heating may cause a fire.

Corrosive to metals Void · Desensitised explosives Void

Other safety characteristics

Active oxygen 3,2 - 3,5 %

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

10.2 Chemical stability Thermal decomposition /

conditions to be avoided: SADT (Self Accelerating Decomposition Temperature) is the lowest temperature at which self accelerating

decomposition may occur with substance in the packaging as used in transport. A dangerous selfaccelerating decomposition reaction and, under certain circumstances, explosion or fire can be cause decomposition at and above the temperature. Contact with incompatible substances can cause

decomposition at or below the SADT

No decomposition if used and stored according to specifications.

To avoid thermal decomposition do not overheat.

· 10.3 Possibility of hazardous reactions

10.4 Conditions to avoid

Self-accelerating decomposition at SADT. No further relevant information available.

· 10.5 Incompatible materials:

Rapid decomposition by dirt, rust, chemicals in particular concentrated acids, alkalis and accelerators (e. g.

heavy-metal compounds and amines).

· 10.6 Hazardous decomposition

products:

Hydrocarbons, carbondioxide and -monoxid.

No hazardous decomposition products if used and stored according to specifications. · Additional information:

Emergency procedures will vary depending on conditions. The customer should have an emergency

response plane in place.

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.

· LD/LC50 values relevant for classification:

84-61-7 dicyclohexyl phthalate

Oral LD50 >2.000 mg/kg (rattus)

94-36-0 dibenzoyl peroxide

Oral LD50 >5.000 mg/kg (rattus)

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Causes serious eye irritation.

· Respiratory or skin sensitisation

May cause an allergic skin reaction.

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.

Based on available data, the classification criteria are not met. 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

11.2 Information on other hazards

· Endocrine disrupting properties

84-61-7 dicyclohexyl phthalate List I; II

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

94-36-0 dibenzoyl peroxide

EC50 / 72h | 0,0711 mg/l (pseudokirchneriella subcapitata)

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(Contd. of page 6) LC50 / 96h 0,0602 mg/l (oncorhynchus mykiss) EC50 / 48h 110 mg/l (daphnia)

- 12.2 Persistence and degradability
- · Degree of elimination:
- · Classification:

84-61-7 dicyclohexyl phthalate

Degradation (Readily biodegradable)

94-36-0 dibenzoyl peroxide

Degradation (Readily biodegradable) (OECD 301 D)

12.3 Bioaccumulative potential

· Partition coefficient: nOctanol/water: [Log Kow]

84-61-7 dicyclohexyl phthalate 4,82 (25 °C) 3,2 (20 °C) 94-36-0 dibenzoyl peroxide

· Bioconcentration factor (BCF)

84-61-7 dicyclohexyl phthalate

BCF 85

12.4 Mobility in soil No further relevant information available.

· 12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. · PBT: · vPvB: The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

· 12.6 Endocrine disrupting properties

12.7 Other adverse effects

For information on endocrine disrupting properties see section 11.

· Remark:

Very toxic for fish

· Additional ecological information:

· General notes: Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

Recommendation



After diluting with a suitable inert solid material to 10 %, the product must be supplied to a special treatment (e. g. thermal utilization) under observance of all official regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· Waste disposal key: Please contact your hazardous waste disposers to assign the right EWC-(European waste catalog)-

number

· Uncleaned packaging:

· Recommendation: This material and its container must be disposed of as hazardous waste.

SECTION 14: Transport information

· 14.1 UN number or ID number · ADR, IMDG, IATA UN3106

· 14.2 UN proper shipping name

UN3106 ORGANIC PEROXIDE TYPE D, SOLID (DIBENZOYL · ADR

PEROXIDE), ENVIRONMENTALLY HAZARDOUS

ORGANIC PEROXIDE TYPE D, SOLID (DIBENZOYL PEROXIDE),

MARINE POLLUTANT

ORGANIC PEROXIDE TYPE D, SOLID (DIBENZOYL PEROXIDE)

· 14.3 Transport hazard class(es)

· ADR

·IMDG

· IATA





· Class 5.2 (P1) Organic peroxides.

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· Label 5.2

· IMDG



Class 5.2 Organic peroxides.

· Label

· IATA



Class 5.2 Organic peroxides.

· Label 5.2

· 14.4 Packing group · ADR, IMDG, IATA Void

· 14.5 Environmental hazards: Product contains environmentally hazardous substances: DIBENZOYL

PEROXIDE Yes

· Marine pollutant:

Symbol (fish and tree) · Special marking (ADR): Symbol (fish and tree)

· 14.6 Special precautions for user Warning: Organic peroxides.

 Hazard identification number (Kemler code): · Stowage Category

· Stowage Code SW1 Protected from sources of heat. · Segregation Code SG35 Stow "separated from" SGG1-acids SG36 Stow "separated from" SGG18-alkalis.

· 14.7 Maritime transport in bulk according to IMO instruments Not applicable.

· Transport/Additional information:

500 g · Limited quantities (LQ)

Code: E0 · Excepted quantities (EQ) Not permitted as Excepted Quantity

· Transport category Tunnel restriction code

· RID / GGVSEB: like ADR

·IMDG

500 g · Limited quantities (LQ) Excepted quantities (EQ) Code: E0

Not permitted as Excepted Quantity

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

E1 Hazardous to the Aquatic Environment

· 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

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment - Annex

None of the ingredients is listed.

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· REGULATION (EU) 2019/1148

· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

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

dicyclohexyl phthalate

SECTION 16: Other information

This information is based on our present knowledge. 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. H400 Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects. H410 H412 Harmful to aquatic life with long lasting effects.

Environment protection / Security of labour · Department issuing SDS:

· Contact: Tel: +49 2871 9902-0 E-mail: mail@pergan.com

· Version number of previous

version:

· Abbreviations and acronyms:

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RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation
ADR: Accord relatif au transport international 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)
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

vPvB: very Persistent and very Bloaccumulative
Org. Perox. B: Organic peroxides – Type B
Org. Perox. D: 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
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

* Data compared to the previous version altered.