

Printing date 02.10.2023 Version: 11 (replaces version 10) Revision: 16.02.2023

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

· 1.1 Product identifier

PEROXAN BP-Pulver 50 SE · 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

Competent person:

* Sales Manager Germany: Mr. Ansgar Pappenheim, e-mail: a.pappenheim@pergan.com * Export Sales Manager: Mr. Dr. Thomas Philipps, e-mail: dr.philipps@pergan.com * Environment protection / : Mr. Christoph Wilting, e-mail: c.wilting@pergan.com

Security of labour

· 1.4 Emergency telephone

number:

- Tel: +49 2871 9902-0

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

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

H242 Heating may cause a fire. Ora, Perox, D Eve Irrit. 2 H319 Causes serious eve irritation. Skin Sens. 1 H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life. Aquatic Acute 1

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 Hazard pictograms

The product is classified and labelled according to the CLP regulation.







· Signal word Danger

· Hazard-determining

components of labelling:

dibenzoyl peroxide **Hazard statements**

H242 Heating may cause a fire. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects. · Precautionary statements P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

> P220 Keep away from dirt, rust, chemicals in particular concentrated acids, alkalis and

accelerators (e. g. heavy metal compounds and amines).

P234 Keep only in original packaging. 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

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.

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

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

	 Dangerous components: 		
CAS: 94-36-0		dibenzoyl peroxide	40-50%
	EINECS: 202-327-6	Org. Perox. B, H241; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10); Eye Irrit. 2,	1
	Index number: 617-008-00-0		
	Reg-No.: 01-2119511472-50		
	CAS: 7778-18-9	calcium sulfate	10-20%
	EINECS: 231-900-3	substance with a Community workplace exposure limit	
	Reg-No.: 01-2119444918-26		
	· 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:

· After eye contact:

Take care of personal protection for the first aider.

· 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.

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

Take affected persons into fresh air and keep quiet.

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

Immediately remove contaminated clothing.

· After swallowing: If symptoms persist consult doctor.

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.

· 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.

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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.

· 7.2 Conditions for safe storage, including any incompatibilities

Storage:

Pay attention to the special requirements of your local autorithies for storing dangerous goods.

 Requirements to be met by 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): max Storage class: 5.2

max.: +30 °C

• 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:				
94-36-0 dibenzoyl p	peroxide			
OEL (Ireland)	Long-term value: 5 mg/m³ Sens			
WEL (Great Britain)	Long-term value: 5 mg/m³			
7778-18-9 calcium s	sulfate			
OEL (Ireland)	Long-term value: 10 mg/m³			

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· DNELs

94-36-0 dibenzoyl peroxide

Oral DNEL Longterm System 2 mg/kg bw/day (General population)

Dermal DNEL Longterm System 13,3 mg/kg bw/day (Worker)

Inhalative DNEL Longterm System 39 mg/m3 (Worker)

· PNECs

94-36-0 dibenzoyl peroxide

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: The lists valid during the making were used as basis.

8.2 Exposure controls

Appropriate engineering

controls No further data; see section 7.

· 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.

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

dogradation

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.

Butyl rubber, BR

Fluorocarbon rubber (Viton) Nitrile rubber, NBR

NITTIE TUDDET, INBR

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:



Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

· General Information · Colour:

· Odour: · Odour threshold:

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

· Boiling point or initial boiling point and boiling range · Flammability

Whitish

Characteristic

Not determined. Not applicable.

Not applicable. May cause fire.

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· Lower and upper explosion limit						
· Lower:	Not determined.					
· Upper:	Not determined.					
· Flash point:	Not applicable.					
Decomposition temperature:	+60 °C (SADT)					
· pH	Not applicable.					
· Viscosity:	**					
· Kinematic viscosity	Not applicable.					
· Dynamic:	Not applicable.					
· Solubility						
water:	Undetermined.					
Partition coefficient n-octanol/water (log value)	not determined					
· Vapour pressure:	Not applicable.					
Density and/or relative density						
Density at 20 °C:	1,4 g/cm ³					
Relative density	Not determined.					
· Bulk density at 20 °C:	630 kg/m³					
· Vapour density	Not applicable.					
· Particle characteristics	Ttot applicable.					
Tartiole characteriotics						
See section 3.						
· 9.2 Other information	No further relevant information available.					
· Appearance:						
Form:	Like powder					
Important information on protection of health and environment						
and on safety.	,					
Ignition temperature:	Product is not selfigniting.					
Explosive properties:	Product is not explosive. However, formation of explosive air/dust					
	mixtures are possible.					
Change in condition	·					
· Evaporation rate	Not applicable.					
Information with regard to physical hazard classes						
· Explosives	Void					
· Flammable gases	Void					
· Aerosols	Void					
	Void					
Oxidising gases	1 - 1 -					
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					
Substances and mixtures, which emit flammable gases in	V · · ·					
contact with water						
A	Void					
Oxidising liquids	void Void					

SECTION 10: Stability and reactivity

· 10.1 Reactivity

· Oxidising solids

· Active oxygen

Organic peroxides

Corrosive to metals

· Desensitised explosives

Other safety characteristics

· 10.2 Chemical stability

No further relevant information available.

· 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.

Void

Void

Void

3,2 - 3,4 %

Heating may cause a fire.

To avoid thermal decomposition do not overheat.

· 10.3 Possibility of hazardous reactions

Self-accelerating decomposition at SADT.

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10.4 Conditions to avoid
 10.5 Incompatible materials:
 No further relevant information available.
 Rapid decomposition by dirt, rust, chemi

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:

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
 Carcinogenicity
 Reproductive toxicity
 STOT-single exposure
 STOT-repeated exposure
 Aspiration hazard
 Based on available data, the classification criteria are not met.
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11.2 Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

94-36-0 dibenzoyl peroxide

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

LC50 / 96h 0,0602 mg/l (oncorhynchus mykiss)

EC50 / 48h 110 mg/l (daphnia magna)

12.2 Persistence and degradability

Degree of elimination:

· Classification:

94-36-0 dibenzoyl peroxide

Degradation (Readily biodegradable) (OECD 301 D)

7778-18-9 calcium sulfate

Degradation (The study does not need to be conducted)

12.3 Bioaccumulative potential

Partition coefficient: nOctanol/water: [Log Kow]

94-36-0 dibenzoyl peroxide

3,2 (20 °C)

• 12.4 Mobility in soil No further relevant information available.

12.5 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.

· 12.6 Endocrine disrupting

propertiesThe product does not contain substances with endocrine disrupting properties.

• 12.7 Other adverse effects No further relevant information available.

· Remark: Very toxic for fish

· Additional ecological information:

• General notes: Very toxic for aquatic organisms

Also poisonous for fish and plankton in water bodies.

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system.

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Danger to drinking water if even small quantities leak into the ground.

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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

· 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.

SECI	ION 14	: ranspo	ort intorm	iation

mber
mber

· ADR, IMDG, IATA

UN3106

· 14.2 UN proper shipping name

· ADR

UN3106 ORGANIC PEROXIDE TYPE D. SOLID (DIBENZOYL

PEROXIDE), ENVIRONMENTALLY HAZARDOUS ORGANIC PEROXIDE TYPE D, SOLID (DIBENZOYL PEROXIDE),

·IMDG MARINE POLLUTANT

ORGANIC PEROXIDE TYPE D, SOLID (DIBENZOYL PEROXIDE)

· 14.3 Transport hazard class(es)

· ADR

· IATA





5.2 (P1) Organic peroxides. · Class

· Label

· IMDG





· Class 5.2 Organic peroxides. · Label 5.2

· 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

· Marine pollutant:

Symbol (fish and tree) Symbol (fish and tree)

· Special marking (ADR):

Warning: Organic peroxides.

· 14.6 Special precautions for user · Hazard identification number (Kemler code):

D

· Stowage Category

SW1 Protected from sources of heat.

· Stowage Code 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.

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· Transport/Additional information:

· ADR

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

Not permitted as Excepted Quantity

· Transport category Tunnel restriction code

· RID / GGVSEB: like ADR

500 g Limited quantities (LQ) Code: F0 Excepted quantities (EQ)

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. P6b SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES Seveso category

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

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.

· 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.

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. H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Department issuing SDS: Environment protection / Security of labour

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

· Version number of previous version:

· Abbreviations and acronyms: 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

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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

LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
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
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

·* Data compared to the previous version altered.

IE -