



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

- **1.1 Product identifier**
- Trade name: **PEROXAN BP-Pulver 20 E**
- **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 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**
Org. Perox. G
Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
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 GB CLP regulation.
- **Hazard pictograms**
 
GHS07 GHS09
- **Signal word**
Warning
- **Hazard-determining components of labelling:**
dibenzoyl peroxide
- **Hazard statements**
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.
- **Precautionary statements**
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection / face 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.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **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 UK REACH, annex XIII.
- **vPvB:** The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH, annex XIII.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**

- **Dangerous components:**

| | | |
|----------------------------|---|--------|
| CAS: 94-36-0 | dibenzoyl peroxide | 20-25% |
| EINECS: 202-327-6 | Org. Perox. B, H241; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10); Eye Irrit. 2, H319; Skin Sens. 1, H317 | |
| Index number: 617-008-00-0 | | |
| Reg-No.: 01-2119511472-50 | | |

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| | | |
|---|---|-------|
| CAS: 112926-00-8 Reg-No.: 01-2119379499-16 | Silica gel, precipitated Alternative CAS number: 7631-86-9 Substance with a Community workplace exposure limit. Nanoform: Category: Nano moulds. | 5-10% |
|---|---|-------|

· **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:



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.
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 eye contact:

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

· After swallowing:

If symptoms persist consult doctor.

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

No further relevant information available.

· 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:** 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.

· 5.3 Advice for firefighters

· Protective equipment:

Do not inhale explosion gases or combustion gases.

· Additional information

Cool endangered receptacles with water spray.
Self-protection first!

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

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:



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

· 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.
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

Open and handle receptacle with care.
Prevent formation of dust.
Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.
Before break and at the end of work hands should be thoroughly washed.
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.

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- **Information about fire - and explosion protection:**
 - Avoid shock and friction.
 - Protect from heat.
 - Prevent impact and friction.
 - Dust can combine with air to form an explosive mixture.
 - Substance/product is oxidising when dry.
 -  Avoid open flames, sparks, direct sunlight and other sources of ignition.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:** Pay attention to the special requirements of your local authorities 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:** 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.: +30 °C
- **Storage class:** 5.2
- **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 peroxide

WEL (Great Britain) Long-term value: 5 mg/m³

112926-00-8 Silica gel, precipitated

WEL (Great Britain) Long-term value: 6 mg/m³

· 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/m ³ (Worker) |

112926-00-8 Silica gel, precipitated

| | | |
|------------|----------------------|------------------------------|
| Inhalative | DNEL Longterm System | 4 mg/m ³ (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.

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| | |
|---|--|
| · Respiratory protection: | <p>Use skin protection cream for skin protection. Be sure to clean skin thoroughly after work and before breaks. Not necessary if room is well-ventilated.</p> <p> Use suitable respiratory device when it exceed exposure limit and when insufficiently ventilated.</p> <p> Filter P2</p> |
| · Hand protection | <p>Only use chemical-protective gloves with CE-labelling of category III.</p> <p> Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation</p> |
| · Material of gloves | <p>Protective gloves</p> <p>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 Neoprene</p> |
| · Penetration time of glove material | <p>The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.</p> |
| · Eye/face protection | <p> Tightly sealed goggles</p> |
| · Body protection: | <p> Protective work clothing</p> |

* **SECTION 9: Physical and chemical properties**

| | |
|--|------------------------------|
| · 9.1 Information on basic physical and chemical properties | |
| · General Information | |
| · Colour: | Whitish |
| · Odour: | Characteristic |
| · Odour threshold: | Not determined. |
| · Melting point/freezing point: | Not applicable. |
| · Boiling point or initial boiling point and boiling range | Not applicable. |
| · Flammability | May cause fire. |
| · 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: | Not determined. |
| · Relative density | Not determined. |
| · Vapour density | Not applicable. |
| · 9.2 Other information | |
| · Appearance: | |
| · Form: | Solid |
| · Important information on protection of health and environment, and on safety. | |
| · Ignition temperature: | Product is not selfigniting. |
| · Explosive properties: | Not determined. |
| · Change in condition | |
| · Evaporation rate | Not applicable. |
| · Information with regard to physical hazard classes | |
| · Explosives | Void |

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GB

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| | |
|---|------|
| · 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 |
| · Substances and mixtures, which emit flammable gases in contact with water | Void |
| · Oxidising liquids | Void |
| · Oxidising solids | Void |
| · Organic peroxides | Void |
| · Corrosive to metals | Void |
| · Desensitised explosives | Void |

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 self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by decomposition at and above the temperature. Contact with incompatible substances can cause decomposition at or below the SADT. |
| · 10.3 Possibility of hazardous reactions | No decomposition if used and stored according to specifications. |
| · 10.4 Conditions to avoid | Self-accelerating decomposition at SADT. |
| · 10.5 Incompatible materials: | No further relevant information available. |
| · 10.6 Hazardous decomposition products: | Rapid decomposition by dirt, rust, chemicals in particular concentrated acids, alkalis and accelerators (e. g. heavy-metal compounds and amines). |
| · Additional information: | Hydrocarbons, carbon dioxide and -monoxid. No hazardous decomposition products if used and stored according to specifications. Emergency procedures will vary depending on conditions. The customer should have an emergency response plan 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 | Based on available data, the classification criteria are not met. |
| · Carcinogenicity | Based on available data, the classification criteria are not met. |
| · Reproductive toxicity | 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 | Based on available data, the classification criteria are not met. |
| · 11.2 Information on other hazards | |

Endocrine disrupting properties

None of the ingredients is listed.

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*** 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) |

· 12.2 Persistence and degradability**· Degree of elimination:****· Classification:****94-36-0 dibenzoyl peroxide**

Degradation (Readily biodegradable) (OECD 301 D)

112926-00-8 Silica gel, precipitated

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 UK REACH, annex XIII.

· vPvB:

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

· 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

· 12.7 Other adverse effects**· Additional ecological information:****· General notes:**

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**

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**

UN3077

· 14.2 UN proper shipping name**· ADR**

UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DIBENZOYL PEROXIDE)

· IMDG

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DIBENZOYL PEROXIDE), MARINE POLLUTANT

· IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DIBENZOYL PEROXIDE)


· 14.3 Transport hazard class(es)**· ADR****· Class**

9 (M7) Miscellaneous dangerous substances and articles.

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| | |
|---|--|
| · Label | 9 |
| · IMDG, IATA | |
|  | |
| · Class | 9 Miscellaneous dangerous substances and articles. |
| · Label | 9 |
| · 14.4 Packing group | III |
| · ADR, IMDG, IATA | |
| · 14.5 Environmental hazards: | Product contains environmentally hazardous substances: DIBENZOYL PEROXIDE |
| · Marine pollutant: | Yes Symbol (fish and tree) |
| · Special marking (ADR): | Symbol (fish and tree) |
| · Special marking (IATA): | Symbol (fish and tree) |
| · 14.6 Special precautions for user | Warning: Miscellaneous dangerous substances and articles. |
| · Stowage Category | A |
| · Stowage Code | SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9. |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| · Transport/Additional information: | Not subject to the requirement for Class 5.2. (exempt) |
| · ADR | |
| · Limited quantities (LQ) | 5 kg |
| · Excepted quantities (EQ) | Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g |
| · Transport category | 3 |
| · Tunnel restriction code | E |
| · RID / GGVSEB: | like ADR |
| · IMDG | |
| · Limited quantities (LQ) | 5 kg |
| · Excepted quantities (EQ) | Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g |

* SECTION 15: Regulatory information

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

· Poisons Act

· Regulated explosives precursors

None of the ingredients is listed.

· Regulated poisons

None of the ingredients is listed.

· Reportable explosives precursors

None of the ingredients is listed.

· Reportable poisons

None of the ingredients is listed.

· Directive 2012/18/EU

· Named dangerous substances

- ANNEX I None of the ingredients is listed.

· Seveso category E1 Hazardous to the Aquatic Environment

· Qualifying quantity (tonnes) for the application of lower-tier requirements 100 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 II

None of the ingredients is listed.

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Safety data sheet
 according to Regulation (EC) No 1907/2006, Article 31

Printing date 18.06.2024

Version: 7 (replaces version 6)

Revision: 20.12.2022

Trade name: **PEROXAN BP-Pulver 20 E**

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| | |
|---|--|
| · 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. | |
| · National regulations: | |
| · Other regulations, limitations and prohibitive regulations | |
| · Please note: | Take care of the respective local regulations. |

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 |
| · 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 ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (UK REACH) PNEC: Predicted No-Effect Concentration (UK REACH) LC50: Lethal concentration, 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. G: Organic peroxides – Type G 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.**