

Printing date 02.04.2024 Version: 16 (replaces version 15) Revision: 20.02.2024

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

· 1.1 Product identifier

PEROXAN BP-40 LV · 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

Environment protection / Security of labour from:

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. E H242 Heating may cause a fire. Eye Irrit. 2 H319 Causes serious eye 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

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



Warning · Signal word

· 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

smoking.

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

regulations

· Additional information: * The product is a suspension with low viscosity and can separate easily. Stirring before use is absolutely essential.

· 2.3 Other hazards

Results of PBT and vPvB assessment

· PRT· 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.



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SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

| · Dangerous components: | | |
|--|--|--------|
| CAS: 94-36-0 EINECS: 202-327-6 Index number: 617-008-00-0 Reg-No.: 01-2119511472-50 | | 30-40% |
| CAS: 68909-20-6 EINECS: 272-697-1 Index number: 014-052-00-7 | Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products withsilica STOT RE 2, H373, EUH066 Nanoform: Number-based particle size distribution - d10: 9 - 62 nm - d50: 11 - 100 nm - d90: 14 - 100 nm Surface treated: [(trimethylsilyl)oxy]groups Shape: Spheroidal, Synthetic amorphous silica exists as a Structure: amorphous forms Crystallinity: amorphous nanoform | 1-2.5% |
| CAS: 68439-51-0 Polymer | Alcohols C12-14, Ethoxylated propoxylated Aquatic Chronic 3, H412 | 1-2.5% |
| · 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. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: 4.2 Most important symptoms

If symptoms persist consult doctor.

and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special

treatment needed

· After eye contact:

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.

Inform respective authorities in case of seepage into water course or sewage system.

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.

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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.

Soak up with absorbant material (e. g. Vermiculit) and dispose of 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 aerosols.

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. Fumes can combine with air to form an explosive mixture.



Wear shoes with conductive soles.

Formation of flammable or explosive gas/air-mixtures is 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.

Recommended storage temperature (To maintain quality):

+5 +30 °C

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

· Ingredients with limit values that require monitoring at the workplace:

94-36-0 dibenzoyl peroxide

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

·PNECs

94-36-0 dibenzoyl peroxide

PNEC Marinewater sed PNEC Freshwater PNEC Freshwater PNEC Freshwater sed PNEC STP 0.001 mg/kg sed dw 0.00002 mg/l (AF 50) 0.013 mg/kg sed dw 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 A2

· 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

quality and varies from manufacturer to manufacturer.

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:



Protective work clothing

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- · General Information
- · Colour: White

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|--|--|
| · Odour: | Characteristic |
| · Odour threshold: | Not determined. |
| · Melting point/freezing point: | Not applicable. |
| Boiling point or initial boiling point and boiling range | Not applicable. |
| Flammability | Not applicable. |
| Lower and upper explosion limit | |
| Lower: | Not determined. |
| · Upper: | Not determined. |
| Flash point: | Not determined. |
| Decomposition temperature: | > +45 °C (SADT) |
| pH | Not determined. |
| · Viscosity: | |
| · Kinematic viscosity | Not determined. |
| · Dynamic: | Not determined. |
| · Solubility | |
| · water: | Undetermined. |
| · Partition coefficient n-octanol/water (log value) | not determined |
| · Vapour pressure: | Not determined. |
| Density and/or relative density | |
| Density: | Not determined. |
| Relative density | Not determined. |
| Vapour density | Not determined. |
| · 9.2 Other information | |
| · Appearance: | |
| · Form: | Suspension |
| Important information on protection of health and environm | • |
| and on safety. | , |
| Ignition temperature: | Product is not selfigniting. |
| Explosive properties: | Product is not explosive. However, formation of explosive air/vapour |
| Free a Free and a second | mixtures are possible. |
| Change in condition | ' |
| · Evaporation rate | Not determined. |
| Information with regard to physical hazard alasses | |
| · 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 |
| Substances and mixtures, which emit flammable gases in | v Olu |
| contact with water | Void |
| Oxidising liquids | Void |
| Oxidising solids | Void |
| Omenia navavidas | V OIU |

SECTION 10: Stability and reactivity

· 10.1 Reactivity

10.2 Chemical stability

· Organic peroxides

Corrosive to metals

· Desensitised explosives

Thermal decomposition / conditions to be avoided: No further relevant information available.

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

Heating may cause a fire.

Void

Void

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.

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• 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:

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

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)

· 12.3 Bioaccumulative potential

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

94-36-0 dibenzoyl peroxide

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

propertiesThe product does not contain substances with endocrine disrupting properties.

· 12.7 Other adverse effects

· 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.

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3,2 (20 °C)

- GB



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SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation



After diluting with a suitable desentisation agent to 10 %, the solution 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

systen

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

number.

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

· Uncleaned packaging:

· Stowage Code

Segregation Code

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

| · Recommendation: T | This material and its container must be disposed of as hazardous waste. | |
|--|---|--|
| SECTION 14: Transport informa | ation | |
| 14.1 UN number or ID number ADR, IMDG, IATA | UN3107 | |
| 14.2 UN proper shipping name ADR | UN3107 ORGANIC PEROXIDE TYPE E, LIQUID (DIBENZOYL | |
| IMDG | PEROXIDE), ENVIRONMENTALLY HAZARDOUS ORGANIC PEROXIDE TYPE E, LIQUID (DIBENZOYL PEROXIDE), MARINE POLLUTANT | |
| IATA | ORGANIC PEROXIDE TYPE E, LIQUID (DIBENZOYL PEROXIDE) | |
| 14.3 Transport hazard class(es) | | |
| ADR | | |
| 1 1 1 1 1 1 1 1 1 1 | | |
| · Class · Label | 5.2 (P1) Organic peroxides. 5.2 | |
| 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: | Yes | |
| Special marking (ADR): | Symbol (fish and tree) Symbol (fish and tree) | |
| 14.6 Special precautions for user | Warning: Organic peroxides. | |
| Hazard identification number (Ke | mler code): | |
| Stowage Category | D CW4 Dretacted from courses of boot | |

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

SG72 See 7.2.6.3.2.



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· Transport/Additional information:

· ADR

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

Not permitted as Excepted Quantity

· Transport category Tunnel restriction code

· RID / GGVSEB: like ADR

· IMDG

· Limited quantities (LQ) 125 ml Code: E0 · 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
- · 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
- · 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 Ш

None of the ingredients is listed.

· 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.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

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

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EUH066 Repeated exposure may cause skin dryness or cracking.

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Environment protection / Security of labour Tel: +49 2871 9902-0 Department issuing SDS:

Contact:

E-mail: mail@pergan.com
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the · Abbreviations and acronyms:

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

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 Lovel (UK REACH)
PNEC: Predicted No-Effect Concentration (UK REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent. Bioaccumulative and Toxic

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Org. Perox. B: Organic peroxides – Type B
Org. Perox. E: Organic peroxides – Type E/F
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

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.

GB