

Printing date 04.04.2024 Version: 13 (replaces version 12) Revision: 14.12.2023

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

· 1.1 Product identifier

PEROXAN DC-40 PK · 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

Flam. Sol. 1 H228 Flammable solid.

Org. Perox. G

Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2 H319 Causes serious eye irritation. Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 2 H411 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







· Signal word Danger

· Hazard-determining

components of labelling:

bis(a,a-dimethylbenzyl) peroxide **Hazard statements** H228 Flammable solid. H315 Causes skin irritation.

H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. H411 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

P240 Ground and bond container and receiving equipment. P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

P264 Wash thoroughly after handling. P273 Avoid release to the environment. P280 Wear 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.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P391 Collect spillage.

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

regulations.

· Additional information: 2.3 Other hazards

Restricted to professional users.

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

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SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

Dangerous components:

CAS: 80-43-3

EINECS: 201-279-3
Index number: 617-006-00-X
Reg-No.: 01-2119541688-27

| CAS: 80-43-3
| Dis(a,a-dimethylbenzyl) peroxide | 40-50% |
| CAS: 80-43-3
| Dis(a,a-dimethylbenzyl) peroxide | 40-50% |
| CAS: 80-43-3

· 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: 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

4.3 Indication of any immediate medical attention and special

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
5.3 Advice for firefighters

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

• 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: 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.

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

regulations.

· 6.4 Reference to other sections See

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.

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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.

Avoid shock and friction.

· Information about fire - and explosion protection:

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 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:

Further information about storage conditions:

Store away from foodstuffs, drinks and feeding stuffs.

Keep container tightly sealed.

Protect from heat and direct sunlight.

Protect from contamination.

· Recommended storage temperature (To maintain

quality):

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:

The product does not contain any relevant quantities of materials with critical values that have to be

monitored at the workplace.

DNELs						
80-43-3 bis(a,a-dimethylbenzyl) peroxide						
Oral	DNEL Longterm System	0.4 mg/kg bw/day (General population)				
Dermal	DNEL Longterm System	0.8 mg/kg bw/day (Worker)				
		0.4 mg/kg bw/day (General population)				
Inhalative	DNEL Longterm System	5.6 mg/m3 (Worker)				
		1.4 mg/m3 (General population)				
·PNECs						
80-43-3 bi	s(a,a-dimethylbenzyl) pe	eroxide				

0.00234 mg/l (AF 50) PNEC Freshwater PNEC Freshwater sed | 2.24 mg/kg sed dw (-) PNEC Soil 0.447 mg/kg soil dw (-) PNEC STP 100 mg/l (AF 10)

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

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

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.

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· Respiratory protection: Not necessary if room is well-ventilated. (Contd. of page 3)

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

Filter P2

only use chemical-protective gloves with CE-labelling of category III. · Hand protection

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.

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

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 - yellowish · Odour: Characteristic

· Odour threshold: Not determined. Melting point/freezing point: Not applicable. Not applicable.

Boiling point or initial boiling point and boiling range · Flammability May cause fire.

Lower and upper explosion limit

· Lower: Not determined. · Upper: Not determined.

· Flash point: Not applicable. +80 °C (SADT) Decomposition temperature: · 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. · Bulk density at 20 °C: 400 kg/m³ · Vapour density Not applicable.

· 9.2 Other information

No further relevant information available.

Appearance:

· Form: Solid Powder

· Important information on protection of health and environment,

and on safety.

Ignition temperature: Product is not selfigniting Not determined.

Explosive properties:

Change in condition

Not applicable. Evaporation rate

· Information with regard to physical hazard classes

· Explosives Void

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Void

Void

Trade name: PEROXAN DC-40 PK

· Flammable gases Void
· Aerosols Void
· Oxidising gases Void
· Gases under pressure Void

Flammable liquidsFlammable solidsFlammable solid.

Self-reactive substances and mixtures
 Pyrophoric liquids
 Pyrophoric solids
 Self-heating substances and mixtures
 Void

Substances and mixtures, which emit flammable gases in

Contact with water
Oxidising liquids
Oxidising solids

Oxidising solids Void
Organic peroxides Void
Corrosive to metals Void
Desensitised explosives Void

Other safety characteristics

Active oxygen 2.3 - 2.4 %

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 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.

· 10.3 Possibility of hazardous

reactions

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

· 10.4 Conditions to avoid · 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:

80-43-3 bis(a,a-dimethylbenzyl) peroxide

Oral LD50 >2,000 mg/kg (rattus) Dermal LD50 >2,000 mg/kg (rattus)

• Skin corrosion/irritation Causes skin irritation.
• 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:

80-43-3 bis(a,a-dimethylbenzyl) peroxide

EC50 / 72h | >20 mg/l (algae)

EC50 >1,000 mg/l (activa sludge)

12.2 Persistence and degradability

Degree of elimination:

· Classification:

80-43-3 bis(a,a-dimethylbenzyl) peroxide

Degradation (Not readily biodegradable) (OECD 301 F)

12.3 Bioaccumulative potential

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

80-43-3 bis(a,a-dimethylbenzyl) peroxide

5,6 (25°C)

· Bioconcentration factor (BCF)

80-43-3 bis(a,a-dimethylbenzyl) peroxide

BCF | 747

• 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 No further relevant information available.

· Remark: Toxic for fish

Additional ecological information:

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

Toxic for aquatic organisms

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water Do not allow product to reach ground water, water course or sewage system, even in small quantities.

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

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

X

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 UN1325

14.2 UN proper shipping name

· ADR UN1325 FLAMMABLE SOLID, ORGANIC, N.O.S. (DICUMYL PEROXIDE),

ENVIRONMENTALLY HAZARDOUS

· IMDG FLAMMABLE SOLID, ORGANIC, N.O.S. (DICUMYL PEROXIDE),

MARINE POLLUTANT

· IATA FLAMMABLE SOLID, ORGANIC, N.O.S. (DICUMYL PEROXIDE)

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· 14.3 Transport	t hazard	class	(es)	
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· ADR



4.1 (F1) Flammable solids, self-reactive substances, polymerizing

substances and solid desensitized explosives · Label 4.1

· IMDG



· Class 4.1 Flammable solids, self-reactive substances, polymerizing substances

and solid desensitized explosives

· Label

·IATA

4.1 Flammable solids, self-reactive substances, polymerizing substances · Class

and solid desensitized explosives · Label 4.1

· 14.4 Packing group · ADR, IMDG, IATA Ш

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

PEROXIDE · Marine pollutant:

Yes

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

· 14.6 Special precautions for user Warning: Flammable solids, self-reactive substances, polymerizing

substances and solid desensitized explosives

· EMS Number: F-A,S-G

· Stowage Category В

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

· Transport/Additional information:

· Limited quantities (LQ)

1 kg Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

· Transport category · Tunnel restriction code

Ε like ADR

· RID / GGVSEB:

· ADR

· Limited quantities (LQ) 1 kg

Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 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.

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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 200 t

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

requirements

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 (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 H242 Heating may cause a fire.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

Department issuing SDS: Environment protection / Security of labour

Tel: +49 2871 9902-0 · Contact:

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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) · Abbreviations and acronyms:

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

PB1: Persistent, Bloaccumulative and 10xic VPVB: very Persistent and very Bioaccumulative Flam. Sol. 1: Flammable solids – Category 1 Org. Perox. F: Organic peroxides – Type E/F Org. Perox. G: Organic peroxides – Type G Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1B: Skin sensitisation – Category 1
Skin Sens. 1B: Skin sensitisation – Category 1B
Autotic Chemic 3: Heart days to the category in property

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

* * Data compared to the previous version altered.

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