





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

- 1.1 Product identifier
PEROXAN BP-Paste 20 weiss
- Trade name: EM44-COQQ-G00F-R833
- UFI: EM44-COQQ-G00F-R833
- 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. 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.
STOT RE 2 H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.
Aquatic Acute 1 H400 Very toxic to aquatic life.
Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.
- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.
- Hazard pictograms
   
GHS02 GHS07 GHS08 GHS09
- Signal word
Warning
- Hazard-determining components of labelling:
dibenzoyl peroxide
ethanediol
- Hazard statements
H242 Heating may cause a fire.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.
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.
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.
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.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- Additional information:
The synthetic polymer microparticles supplied are subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council.
- 2.3 Other hazards
- Results of PBT and vPvB assessment
- PBT: The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
- vPvB: The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
- Determination of endocrine-disrupting properties
The product does not contain substances with endocrine disrupting properties.

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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	dibenzoyl peroxide Org. Perox. B, H241; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10); Eye Irrit. 2, H319; Skin Sens. 1, H317	20-25%
CAS: 56-81-5 EINECS: 200-289-5 Reg-No.: 01-2119471987-18	glycerol substance with a Community workplace exposure limit	10-20%
CAS: 107-21-1 EINECS: 203-473-3 Index number: 603-027-00-1 Reg-No.: 01-2119456816-28	ethanediol STOT RE 2, H373; Acute Tox. 4, H302	10-20%
CAS: 13463-67-7 EINECS: 236-675-5 Index number: 022-006-00-2	titanium dioxide Carc. 2, H351	0,1-1%

· 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:

Induce vomiting and call for medical help.
A person vomiting while laying on their back should be turned onto their side.

· 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

Treatment: Symptomatic treatment
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, carbon dioxide and -monoxid.

· 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

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:

Do not allow product to reach sewage system or any water course.



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 desensitization agent to a concentration below 10 % before disposal.
Soak up with absorbant material (e. g. Vermiculit) and dispose of in accordance with government regulations.
See Section 7 for information on safe handling.

· 6.4 Reference to other sections




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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 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.
- **Information about fire - and explosion protection:**
 -  Do not smoke.
 - 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.
- **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:**
 - 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):** +5 ... +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

56-81-5 glycerol

WEL (Great Britain) Long-term value: 10 mg/m³

107-21-1 ethanediol

IOELV (EU) Short-term value: 104 mg/m³, 40 ppm
Long-term value: 52 mg/m³, 20 ppm
Skin

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WEL (Great Britain)	Short-term value: 104** mg/m ³ , 40** ppm Long-term value: 10* 52** mg/m ³ , 20** ppm Sk *particulate **vapour	
· DNELs		
94-36-0 dibenzoyl peroxide		
Dermal	DNEL Longterm System	34,3 mg/kg bw/day (Worker)
Inhalative	DNEL Longterm System	39 mg/m ³ (Worker)
107-21-1 ethanediol		
Dermal	DNEL Longterm System	106 mg/kg bw/day (Worker)
Inhalative	DNEL Longterm Local	35 mg/m ³ (Worker)
13463-67-7 titanium dioxide		
Inhalative	DNEL Longterm Local	1,25 mg/m ³ (Worker)
· PNECs		
94-36-0 dibenzoyl peroxide		
PNEC Marinewater sediment	0,001 mg/kg sed dw	
PNEC Freshwater	0,00002 mg/l (AF 50)	
PNEC Freshwater sediment	0,013 mg/kg sed dw	
PNEC Soil	0,003 mg/kg soil dw	
PNEC Sewage treatment plant	0,35 mg/l (AF 100)	
PNEC Marinewater	0,000002 mg/l (AF 500)	
107-21-1 ethanediol		
PNEC Soil	5 mg/kg soil dw (AF 50)	

· **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.
Not necessary if room is well-ventilated.

· **Respiratory protection:**



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

· **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 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

· **Odour:**

Characteristic

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· 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:	+50 °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:	Pasty
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Change in condition	
· Evaporation rate	Not determined
· Information with regard to physical hazard classes	Void
· Organic peroxides	Heating may cause a fire.

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. To avoid thermal decomposition do not overheat.
· 10.3 Possibility of hazardous reactions	Self-accelerating decomposition at SADT.
· 10.4 Conditions to avoid	No further relevant information available.
· 10.5 Incompatible materials:	Rapid decomposition by dirt, rust, chemicals in particular concentrated acids, alkalis and accelerators (e. g. heavy-metal compounds and amines).
· 10.6 Hazardous decomposition products:	Hydrocarbons, carbon dioxide and -monoxid. Fire and decomposition may produce irritating, corrosive, flammable, harmful or toxic gases and vapours.
· 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 (Rat)
56-81-5 glycerol		
Oral	LD50	12.600 mg/kg (Rat)
Dermal	LD50	>18.700 mg/kg (rabbit)
107-21-1 ethanediol		
Oral	LD50	4.000 mg/kg (Rat)

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Dermal	LD50	~10.600 mg/kg (rabbit)
13463-67-7 titanium dioxide		
Oral	LD50	>20.000 mg/kg (Rat)
Dermal	LD50	>10.000 mg/kg (rabbit)
Inhalative	LC50 / 4h	>6,82 mg/l (Rat)
<ul style="list-style-type: none"> · Primary irritant effect: · 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 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral. · Aspiration hazard Based on available data, the classification criteria are not met. · 11.2 Information on other hazards 		
<ul style="list-style-type: none"> · 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)

107-21-1 ethanediol

LC50 / 96h	18.500 mg/l (oncorhynchus mykiss)
EC50 / 48h	>10.000 mg/l (daphnia)
EC50 / 96h	6.500-7.500 mg/l (pseudokirchneriella subcapitata)
NOEL / 48h	10 mg/l

· 12.2 Persistence and degradability

· Degree of elimination:

· Classification:

94-36-0 dibenzoyl peroxide

Degradation (Readily biodegradable) (OECD 301 D)

56-81-5 glycerol

Degradation (Readily biodegradable)

107-21-1 ethanediol

Degradation (Readily biodegradable) (OECD 301 C)

13463-67-7 titanium dioxide

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)
56-81-5	glycerol	-1,75 (25°C)
107-21-1	ethanediol	-1,36 (25°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 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.

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SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation



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

· Waste disposal key:

Must not be disposed together with household garbage. Do not allow product to reach sewage system. 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	UN3108
· 14.2 UN proper shipping name · ADR · IMDG · IATA	UN3108 ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE), ENVIRONMENTALLY HAZARDOUS ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE), MARINE POLLUTANT ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)
· 14.3 Transport hazard class(es) · ADR	
· Class · Label	5.2 (P1) Organic peroxides. 5.2
· IMDG	
· Class · Label	5.2 Organic peroxides. 5.2
· IATA	
· Class · Label	5.2 Organic peroxides. 5.2
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR):	Product contains environmentally hazardous substances: DIBENZOYL PEROXIDE Yes Symbol (fish and tree) Symbol (fish and tree)
· 14.6 Special precautions for user · Hazard identification number (Kemler code): · Stowage Category · Stowage Code · Segregation Code	Warning: Organic peroxides. - D SW1 Protected from sources of heat. SG35 Stow "separated from" SGG1-acids SG36 Stow "separated from" SGG18-alkalis.
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ)	500 g Code: E0 Not permitted as Excepted Quantity
· Transport category · Tunnel restriction code	2 D
· RID / GGVSEB:	like ADR
· IMDG · Limited quantities (LQ)	500 g

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Skin Sens. 1: Skin sensitisation – Category 1
Carc. 2: Carcinogenicity – Category 2
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

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