

Safety Data Sheet

according to UK REACH Regulation

BENZOCLEAN 50 SE

Revision date: 20.11.2024

Product code: 86064

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

1.1. Product identifier

BENZOCLEAN 50 SE

Further trade names

DURC POLYPER BENZOCLEAN 50 SE

UFI: V800-F0JP-U00J-NPDK

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Hardener (Crosslinker)

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name: DINOL GmbH
Street: Pyrmonter Strasse 76
Place: D-32676 Luegde
Telephone: + 49 (0) 5281 982980
E-mail: msds@dinol.com
Contact person: Labor
Responsible Department: msds@dinol.com

Telefax: + 49 (0) 5281 9829860

Supplier

Company name: Leading Solvent Supplies Limited
Street: Marston Business Park, Rudgate
Place: GB Tockwith, York YO26 7QF
E-mail: enquiries@leading-solvents.co.uk
Internet: www.leading-solvents.co.uk

1.4. Emergency telephone number:

Giftnotruf Berlin: +49 30 30686 700 (Beratung in Deutsch und Englisch)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Org. Perox. D; H242
Eye Irrit. 2; H319
Skin Sens. 1; H317
Aquatic Acute 1; H400
Aquatic Chronic 1; H410

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

dibenzoyl peroxide; benzoyl peroxide

Signal word: Danger

Pictograms:



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Hazard statements

H242	Heating may cause a fire.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P235	Store in a well-ventilated place. Keep cool.

Special labelling of certain mixtures

Restricted to professional users.

Labelling of packages where the contents do not exceed 125 ml

Signal word:

Danger

Pictograms:



Precautionary statements

P280-P302+P352

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
94-36-0	dibenzoyl peroxide; benzoyl peroxide			45 -52 %
	202-327-6	617-008-00-0	01-2119511472-50	
	Org. Perox. B, Eye Irrit. 2, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H241 H319 H317 H400 H410			
107-21-1	ethanediol; ethylene glycol			5-9,9 %
	203-473-3	603-027-00-1	01-2119456816-28	
	Acute Tox. 4, STOT RE 2; H302 H373			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
94-36-0	202-327-6	dibenzoyl peroxide; benzoyl peroxide	45 -52 %
		oral: LD50 = 7710 mg/kg Aquatic Acute 1; H400: M=10 Aquatic Chronic 1; H410: M=10	
107-21-1	203-473-3	ethanediol; ethylene glycol	5-9,9 %
		dermal: LD50 = > 3500 mg/kg; oral: LD50 = 7712 mg/kg	

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Further Information

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In all cases of doubt, or when symptoms persist, seek medical advice.

Never give anything by mouth to an unconscious person or a person with cramps.

If unconscious but breathing normally, place in recovery position and seek medical advice.

After inhalation

Remove casualty to fresh air and keep warm and at rest.

In all cases of doubt, or when symptoms persist, seek medical advice.

If unconscious but breathing normally, place in recovery position and seek medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

Change contaminated clothing.

After contact with eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious).

Do NOT induce vomiting.

Call a physician immediately.

Put victim at rest, cover with a blanket and keep warm.

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

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**alcohol resistant foam, Carbon dioxide (CO₂), Extinguishing powder, Water fog.

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated:

Carbon dioxide.

Carbon monoxide

5.3. Advice for firefighters

Do not inhale explosion and combustion gases.

Use water spray jet to protect personnel and to cool endangered containers.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

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General advice

- Provide adequate ventilation.
- Wear personal protection equipment.
- Avoid contact with skin, eyes and clothes.
- Avoid breathing dust/fume/gas/mist/vapours/spray.

For emergency responders

- For further specification, refer to section 8 of the SDS.

6.2. Environmental precautions

- Do not allow to enter into surface water or drains.
- In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up**For containment**

- Prevent spread over a wide area (e.g. by containment or oil barriers).
- Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).
- Treat the recovered material as prescribed in the section on waste disposal.

For cleaning up

- Provide adequate ventilation.
- Clear contaminated areas thoroughly.
- Do not rinse down with water.

Other information

- No information available.

6.4. Reference to other sections

- Safe handling: see section 7
- Personal protection equipment: see section 8
- Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

- Keep away from heat. Protect from direct sunlight.
- If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.
- Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.
- When using do not eat, drink or smoke.
- Wash hands before breaks and after work.
- Handle and open container with care.

Advice on protection against fire and explosion

- Keep away from sources of ignition - No smoking.
- Take precautionary measures against static discharges.
- Handle with care - avoid bumps, friction and impact.
- Use explosion-proof machinery, apparatus, ventilation facilities, tools etc.
- Use non-sparking tools.
- Vapours can form explosive mixtures with air.
- Wear anti-static footwear and clothing
- In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

Advice on general occupational hygiene

- Keep away from food, drink and animal feedingstuffs.
- Remove contaminated, saturated clothing immediately.
- Wash hands before breaks and after work.
- Avoid contact with skin and eyes.
- When using do not eat, drink or smoke.
- Protect skin by using skin protective cream.

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Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in the original container in a cool, well-ventilated place.

Only use containers specifically approved for the substance/product.

Hints on joint storage

Do not store together with: Heavy metals., Reducing agent, Acids, Alkalis (alkalis).

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Keep container tightly closed.

Keep away from heat. Protect from direct sunlight.

storage temperature: +5 / +25 °C

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
94-36-0	Dibenzoyl peroxide	-	5		TWA (8 h)	WEL
107-21-1	Ethane-1,2-diol, particulate	-	10		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
94-36-0	dibenzoyl peroxide; benzoyl peroxide			
Worker DNEL, long-term		inhalation	systemic	39 mg/m ³
Worker DNEL, long-term		dermal	systemic	13,3 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2 mg/kg bw/day

PNEC values

CAS No	Substance	Value
94-36-0	dibenzoyl peroxide; benzoyl peroxide	
Freshwater		0,00002 mg/l
Marine water		0,0000602 mg/l
Freshwater sediment		0,338 mg/kg
Marine sediment		0,0338 mg/kg
Secondary poisoning		6,67 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,35 mg/l
Soil		0,0758 mg/kg

8.2. Exposure controls

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Appropriate engineering controls

Provide adequate ventilation.

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Individual protection measures, such as personal protective equipment

Eye/face protection

Eye glasses with side protection (EN 166)

Hand protection

Tested protective gloves must be worn (EN ISO 374):

FKM (fluoro rubber) penetration time (maximum wearing period): 480 min.

NBR (Nitrile rubber) penetration time (maximum wearing period): 480 min.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Protective gloves have to be replaced at the first sign of deterioration.

Protect skin by using skin protective cream.

Skin protection

Protective clothing

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

gas filtering equipment (EN 141)., Filter material/medium: A2

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Paste
Colour:	red
Odour:	characteristic
Odour threshold:	not determined
Melting point/freezing point:	0 °C
Boiling point or initial boiling point and boiling range:	not applicable
Flammability:	not applicable
Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Flash point:	not applicable
Decomposition temperature:	SADT (°C): 50 °C
pH-Value (at 20 °C):	4 - 5
Viscosity / kinematic: (at 20 °C)	166667 - 833333 mm²/s
Water solubility:	Immiscible
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density (at 20 °C):	1,2 g/cm³

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Relative vapour density:

not determined

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

not explosive.

Self-ignition temperature

Solid:

not determined

Gas:

not determined

Oxidizing properties

Oxidizing

Other safety characteristics

Evaporation rate:

not determined

Solid content:

50,00 %

Viscosity / dynamic:

200000 - 1000000 mPa·s

(at 20 °C)

Further Information

Available oxygen content: 3,2-3,4 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

Thermal decomposition, Danger of spontaneous combustion

SADT (°C): 50

10.3. Possibility of hazardous reactions

Reacts with : Reducing agent; Heavy metals; Alkali (lye); Amines; Strong acid

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

benzoic acid

Benzene

biphenyl; diphenyl

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

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

ATEmix calculated

ATE (oral) > 5000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
94-36-0	dibenzoyl peroxide; benzoyl peroxide				
	oral	LD50 mg/kg 7710	Rat		
107-21-1	ethanediol; ethylene glycol				
	oral	LD50 mg/kg 7712	Rat		
	dermal	LD50 mg/kg > 3500	Rabbit		

Irritation and corrosivity

Serious eye damage/eye irritation: Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

May cause an allergic skin reaction. (dibenzoyl peroxide; benzoyl peroxide)

Carcinogenic/mutagenic/toxic effects for reproduction

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

Endocrine disrupting potential No information available.

Further information

There are no data available on the preparation/mixture itself.

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
94-36-0	dibenzoyl peroxide; benzoyl peroxide					
	Acute fish toxicity	LC50 mg/l	0,0602	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50 mg/l	0,0711	72 h	Pseudokirchneriella subcapitata	
	Acute crustacea toxicity	EC50 mg/l	0,110	48 h	Daphnia magna (Big water flea)	
107-21-1	ethanediol; ethylene glycol					
	Acute fish toxicity	LC50 mg/l	72860	96 h		
	Acute algae toxicity	ErC50 mg/l	> 100	96 h		
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h	Daphnia magna (Big water flea)	

12.2. Persistence and degradability

There are no data available on the mixture itself.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
94-36-0	dibenzoyl peroxide; benzoyl peroxide			
	OECD 301D	71 %	28	

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
94-36-0	dibenzoyl peroxide; benzoyl peroxide	3,2
107-21-1	ethanediol; ethylene glycol	-1,36

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

There are no data available on the mixture itself.

Further information

There are no data available on the preparation/mixture itself.

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation. Do not mix with other wastes.

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Contaminated packaging

Do not allow to enter into surface water or drains.
Remove according to the regulations.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: UN 3108
14.2. UN proper shipping name: ORGANIC PEROXIDE TYPE E, SOLID (dibenzoyl peroxide; benzoyl peroxide)
 ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es): 5.2
14.4. Packing group: -
 Hazard label: 5.2



Classification code: P1
 Special Provisions: 122 274
 Limited quantity: 500 g
 Excepted quantity: E0
 Transport category: 2
 Tunnel restriction code: D

Other applicable information (land transport)
 E0

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 3108
14.2. UN proper shipping name: ORGANIC PEROXIDE TYPE E, SOLID (dibenzoyl peroxide; benzoyl peroxide)
 ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es): 5.2
14.4. Packing group: -
 Hazard label: 5.2



Classification code: P1
 Special Provisions: 122 274
 Limited quantity: 500 g
 Excepted quantity: E0

Marine transport (IMDG)

14.1. UN number or ID number: UN 3108
14.2. UN proper shipping name: ORGANIC PEROXIDE TYPE E, SOLID (dibenzoyl peroxide; benzoyl peroxide)
 MARINE POLLUTANT
14.3. Transport hazard class(es): 5.2
14.4. Packing group: -
 Hazard label: 5.2



Marine pollutant: yes

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Special Provisions: 122, 274
 Limited quantity: 500 g
 Excepted quantity: E0
 EmS: F-J, S-R

Other applicable information (marine transport)
 E0

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 3108
14.2. UN proper shipping name: ORGANIC PEROXIDE TYPE E, SOLID (dibenzoyl peroxide; benzoyl peroxide)
14.3. Transport hazard class(es): 5.2
14.4. Packing group: -
 Hazard label: 5.2



Special Provisions: A20 A802
 Limited quantity Passenger: Forbidden
 Passenger LQ: Forbidden
 Excepted quantity: E0
 IATA-packing instructions - Passenger: 570
 IATA-max. quantity - Passenger: 10 kg
 IATA-packing instructions - Cargo: 570
 IATA-max. quantity - Cargo: 25 kg

Other applicable information (air transport)
 E0
 Passenger-LQ: Forbidden

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: dibenzoyl peroxide; benzoyl peroxide

14.6. Special precautions for user

Warning: Organic peroxides

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Information according to Directive 2012/18/EU (SEVESO III): P6b SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES

Additional information: E1

Additional information

Observe in addition any national regulations!

Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work

National regulatory information

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Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D):

2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

Org. Perox

Acute Tox: Acute toxicity

Eye Irrit: Eye irritation

Skin Sens: Skin sensitisation

STOT RE: Specific target organ toxicity - repeated exposure

Aquatic Acute: Acute aquatic hazard

Aquatic Chronic: Chronic aquatic hazard

ADR: Accord européen sur le transport 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 Harmonized 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

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Org. Perox. D; H242	On basis of test data
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 1; H410	Calculation method

Relevant H and EUH statements (number and full text)

H241	Heating may cause a fire or explosion.
H242	Heating may cause a fire.
H302	Harmful if swallowed.
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.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)