

ESKANOL PO HARDENER POWDER

Revision date: 20.07.2017

Product code: 00359-1313

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

1.1. Product identifier

ESKANOL PO HARDENER POWDER

Art.-No.

10085, 10086

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

Use of the substance/mixture

Hardener

1.3. Details of the supplier of the safety data sheet

Company name: TIP TOP Oberflächenschutz Elbe GmbH
 Street: Heuweg 4
 Place: D-06886 Wittenberg
 Telephone: +49(0)3491/635-50
 Responsible Department: Responsible for the safety data sheet: sds@gbk-ingelheim.de
 Telefax: +49(0)3491/635-552

1.4. Emergency telephone

number: INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)
 England and Wales: NHS Direct - 0845 4647; Scotland: NHS 24 - 08454 24 24
 24

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
 Organic peroxide: Org. Perox. CD
 Serious eye damage/eye irritation: Eye Irrit. 2
 Respiratory or skin sensitisation: Skin Sens. 1
 Reproductive toxicity: Repr. 2
 Hazardous to the aquatic environment: Aquatic Acute 1
 Hazardous to the aquatic environment: Aquatic Chronic 3
 Hazard Statements:
 Heating may cause a fire.
 Causes serious eye irritation.
 May cause an allergic skin reaction.
 Suspected of damaging fertility.
 Very toxic to aquatic life.
 Harmful to aquatic life with long lasting effects.

2.2. Label elements

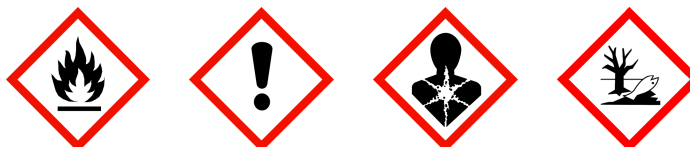
Regulation (EC) No. 1272/2008

Hazard components for labelling

Dicyclohexyl phthalate
 Dibenzoyl peroxide

Signal word: Danger

Pictograms:





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Hazard statements

H242	Heating may cause a fire.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H412	Harmful 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/Store away from Soil, rust, chemicals, strong acids and bases and accelerators (heavy metal salts, amines).
P234	Keep only in original container.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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/86 °F. Keep cool.
P420	Store away from other materials.
P273	Avoid release to the environment.

2.3. Other hazards

Dust may form explosive mixtures with air.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Hardener based on dibenzoyl peroxide

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
84-61-7	Dicyclohexyl phthalate			40 - 50 %
	201-545-9		01-2119978223-34	
	Repr. 2, Skin Sens. 1, Aquatic Chronic 3; H361f H317 H412			
94-36-0	Dibenzoyl peroxide			40 - 50 %
	202-327-6	617-008-00-0	01-2119511472-50	
	Org. Perox. B, Eye Irrit. 2, Skin Sens. 1, Aquatic Acute 1 (M-Factor = 10); H241 H319 H317 H400			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.
Adhere to personal protective measures when giving first aid.
Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48



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hours.

After inhalation

Supply fresh air, if required oxygen, consult a physician.
If patient is not breathing, apply artificial respiration.
Remove the casualty into fresh air and keep him immobile.
In case of the person being unconscious put him/her in a stable side position.

After contact with skin

Wash off immediately with soap and plenty of water.
Consult a doctor if skin irritation persists.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Seek medical treatment by eye specialist.

After ingestion

Summon a doctor immediately.
Rinse out mouth and give plenty of water to drink.
Never give anything by mouth to an unconscious person.
Induce vomiting only upon the advice of a physician.

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

Causes serious eye irritation.
May cause an allergic skin reaction.
Suspected of damaging fertility.

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

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, dry chemical, carbon dioxide (CO₂), water-spray.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Fire may produce:
carbon monoxide and carbon dioxide
Hydrocarbons

5.3. Advice for firefighters

Use breathing apparatus with independent air supply.
Protective suit.

Additional information

Cool containers at risk with water spray jet.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

In case of vapour formation use respirator.
Ensure adequate ventilation.
Use personal protective clothing.
Keep away sources of ignition.



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6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water.

6.3. Methods and material for containment and cleaning up

Shovel into suitable container for disposal.

Soak up with inert absorbent material (e.g. vermiculite, clean sand).

In compliance with regulations by local authorities this can be subjected to a special treatment (e.g. thermal utilization) after dilution with an inert solid to 10% content of peroxides.

Do not keep container sealed.

6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8).

Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.

Avoid the formation of dust. Do not breathe dust.

Wash hands before breaks and at the end of workday.

Keep away from acids, bases, heavy metal salts and reducing agents.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

Keep away from open flames, hot surfaces and sources of ignition.

Use explosion-proof equipment / fittings and non-sparking tools.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in original container.

Keep container tightly closed in a dry, cool and well-ventilated place.

Protect against direct sun radiation.

Recommended storage temperature: +5°C - +30°C

Advice on storage compatibility

Incompatible with:

Reducing agents., Heavy metal salts, Acids and bases.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Hardener

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
		-	-		STEL (15 min)	WEL
84-61-7	Dicyclohexyl phthalate	-	5		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL



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8.2. Exposure controls

Appropriate engineering controls

Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.

Protective and hygiene measures

- Do not breathe dust.
- Avoid contact with eyes and skin.
- Wash hands before breaks and immediately after handling the product.
- When using do not eat, drink or smoke.
- Remove and wash contaminated clothing before re-use.

Eye/face protection

- Tightly fitting goggles (EN 166).
- Eye wash bottle with pure water (EN 15154).

Hand protection

- Chemical protective gloves made of nitrile, nitrile/cotton, butyl or neoprene, with a minimum thickness of 0.7 mm, permeation time of approx. 480 minutes.
- This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.
- Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.
- Pls. find examples in the protective gloves database under: <http://bestglove.com/site/chemrest/>

Skin protection

- Long sleeved clothing (EN 368).
- Apron (EN 467).

Respiratory protection

- Breathing apparatus (particle filter) only if dust is formed. (Particle filter P2)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Powder
Colour:	Whitish
Odour:	Characteristic

Test method

Changes in the physical state

Flash point:	n.a.
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Explosive properties

The product is considered non-explosive; nevertheless explosive dust/air mixture can be generated

Lower explosion limits:	n.a.
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Upper explosion limits:

Ignition temperature:	n.a.
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Auto-ignition temperature

Solid: The product is not self-igniting

Decomposition temperature:	+60 °C SADT
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Oxidizing properties

May cause fire.

Bulk density (at 20 °C):	610 kg/m ³
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Water solubility:
(at 20 °C) n.d.

9.2. Other information

SADT (UN-Test H.4): approx. 60°C
Active oxygen: 3,2 - 3,5%

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if stored normally.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts with:
Soil, rust, chemicals, strong acids and bases and accelerators (heavy metal salts, amines).

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.
Self-Accelerating decomposition temperature (SADT) from 60°C (SADT).
Dust may form explosive mixtures with air.

10.5. Incompatible materials

Soil, rust, chemicals, strong acids and bases and accelerators (heavy metal salts, amines).

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide
Hydrocarbons

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.
No toxicological data available.
Dibenzoyl peroxide: LD50/oral/rat: > 5000 mg/kg
Dicyclohexyl phthalate: LD50/oral/rat: > 2000 mg/kg

Irritation and corrosivity

Causes serious eye irritation.
Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Skin irritation: Not classified.

Sensitising effects

May cause an allergic skin reaction. (Dicyclohexyl phthalate; Dibenzoyl peroxide)

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of damaging fertility. (Dicyclohexyl phthalate)
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: 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.



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Additional information on tests

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available.
Very toxic to aquatic organisms.
Harmful to aquatic life with long lasting effects.
Dibenzoyl peroxide
LC50/Oncorhynchus mykiss/96 h = 0,0602 mg/l
EC50/Daphnia magna/48 h = 0,110 mg/l
EC50/Pseudokirchneriella subcapitata/72 h = 0,0711 mg/l

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

12.6. Other adverse effects

Hazardous water pollutant.

Further information

Do not flush into surface water or sanitary sewer system.
Risk of drinking water contamination even when low quantities are released into the ground.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

In compliance with regulations by local authorities this can be subjected to a special treatment (e.g. thermal utilization) after dilution with an inert solid to 10% content of peroxides.
Where possible recycling is preferred to disposal.

Waste disposal number of waste from residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Contaminated packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.
Packaging that cannot be cleaned should be disposed of like the product.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 3106

14.2. UN proper shipping name: ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide)

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14.3. Transport hazard class(es): 5.2

14.4. Packing group: -

Hazard label: 5.2



Classification code: P1
Limited quantity: 500 g / 30 kg
Excepted quantity: E0
Transport category: 2
Tunnel restriction code: D

Inland waterways transport (ADN)

14.1. UN number: UN 3106

14.2. UN proper shipping name: ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide)

14.3. Transport hazard class(es): 5.2

14.4. Packing group: -

Hazard label: 5.2



Classification code: P1
Limited quantity: 500 g / 30 kg
Excepted quantity: E0

Marine transport (IMDG)

14.1. UN number: UN 3106

14.2. UN proper shipping name: ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide)

14.3. Transport hazard class(es): 5.2

14.4. Packing group: -

Hazard label: 5.2



Marine pollutant: Yes
Limited quantity: 500 g / 30 kg
Excepted quantity: E0
EmS: F-J, S-R

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 3106

14.2. UN proper shipping name: ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide)

14.3. Transport hazard class(es): 5.2

14.4. Packing group: -

Hazard label: 5.2





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Limited quantity Passenger:	Forbidden
Passenger LQ:	Forbidden
Excepted quantity:	E0
IATA-packing instructions - Passenger:	570
IATA-max. quantity - Passenger:	5 kg
IATA-packing instructions - Cargo:	570
IATA-max. quantity - Cargo:	10 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes



14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practice.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

The transport takes place only in approved and appropriate packaging.

SECTION 15: Regulatory information

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

EU regulatory information

2004/42/EC (VOC): 0 %

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils 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 contaminating class (D): 2 - water contaminating

Additional information

Consider Chemical prohibition regulation.

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Abbreviations and acronyms

- ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
- RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
- ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
- IMDG = International Maritime Code for Dangerous Goods
- IATA/ICAO = International Air Transport Association / International Civil Aviation Organization
- MARPOL = International Convention for the Prevention of Pollution from Ships
- IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk



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GHS = Globally Harmonized System of Classification and Labelling of Chemicals
REACH = Registration, Evaluation, Authorization and Restriction of Chemicals
CAS = Chemical Abstract Service
EN = European norm
ISO = International Organization for Standardization
DIN = Deutsche Industrie Norm
PBT = Persistent Bioaccumulative and Toxic
vPvB = Very Persistent and very Bio-accumulative
LD = Lethal dose
LC = Lethal concentration
EC = Effect concentration
IC = Median immobilisation concentration or median inhibitory concentration

Relevant H and EUH statements (number and full text)

H241	Heating may cause a fire or explosion.
H242	Heating may cause a fire.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

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