

[in accordance with the regulation no 1907/2006 (REACH) and 453/2010]

Produktionsgesellschaft mbH

Revision: 30.10.2018 Version: 2/ENG

#### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier

Trade name: PLASTIFLOOR® Hardener 500

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

Relevant identified uses: coating.

<u>Uses advised against:</u> not determined.

1.3 Details of the supplier of the safety data sheet

Supplier: Plasti-Chemie Produktionsgesellschaft mbH

Address: Falgardring 1

D-08223 Falkenstein

Germany

Telephone/Fax number: +49 3745/74432-0 / +49 3745/74432-27

E-mail address for a competent person responsible of sds: volkmar.lull@plasti-chemie.de

Further information provided by: Mr. Volkmar Lull, +49 3745/74432-0

## 1.4 Emergency telephone number

Chemtrec: 1-800-424-9300 for US +1 703-527-3887 outside US

Europa 112

Österreich +43 1 406 43 43

**Belgien** Poison center (BE): +32 70 245 245

**Dänemark** Poison Control Hotline (DK): +45 82 12 12 12 **Finnland** Poison Information Centre (FI):+358 9 471 977

Frankreich ORFILA (FR): + 01 45 42 59 59 Deutschland Giftnotruf Berlin, Tel. 030 30686 790

Poison Center Nord: +49 551 19240 (24h erreichbar, Deutsch und Englisch)

Poison Information Centre Erfurt: +49 361 730730 (Gemeinsames Giftinformationszentrum der Länder Mecklenburg-Vorpommern, Sachsen, Sachsen-Anhalt und Thüringen c/o HELIOS Klinikum Erfurt Nordhäuser Straße 74, 99089 Erfurt)

Irland National Poisons Information Centre (IE): +353 1 8379964

Island +354 543 2222

Italien Poison Center, Milan (IT): +39 02 6610 1029

Luxemburg 112

Niederlande National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only

available to health professionals)

Norwegen Poisons Information (NO):+ 47 22 591300 Portugal Poison Information Center (PT): +351 21 330 3284 Spanien Poison Information Service (ES): +34 91 562 04 20 Schweden Poisons Information Center (SV):+46 8 33 12 31

Schweiz Poison Center: Tel 145; +41 44 251 51 51

Großbritannien NHS Direct (UK): +44 (0) 845 46 47; 111

#### **SECTION 2: HAZARDS IDENTIFICATION**

#### 2.1 Classification of the substance or mixture

Classification according to 1272/2008/EC

Org. Perox. D H242 Heating may cause a fire.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Repr. 1B H360D May damage the unborn child.

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



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#### 2.2 Label elements

#### Hazard symbols and signal words









#### **Product identifier**

Contains: Dibenzoylperoxid, Dicyclohexylphthalat.

#### **Hazard statements**

H242 Heating may cause a fire.

H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H360D May damage the unborn child.

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

P280 Wear protective gloves/protective clothing/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.

P410 Protect from sunlight.

P411+P235 Store at temperatures not exceeding +30°C. Keep cool.
P420 Do not mix with peroxide-accelerators or reducing agents.

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

regulations.

· Additional information: Restricted to professional users.

### 2.3 Other hazards

The components of this mixture do not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH.

# SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 Substance

Not applicable.

#### 3.2 Mixture

CAS: 94-36-0	<u>Dibenzoyl peroxide</u>	
EINECS: 202-327-6	Classification acc. to 1272/2008/WE: Org. Perox. B H241, Aquatic Acute 1 H400	
Index number: 617-008-00-0	(M=10), Aquatic Chronic 1 H410, Eye Irrit. 2 H319, Skin Sens. 1 H317	40 - 50 %
REACH-number.: 01-2119511472-		
50		
CAS: 84-61-7	Dicyclohexl phthalate	
EINECS: 201-545-9	Classification acc. to 1272/2008/WE: Repr. 1B H360D, Skin Sens. 1 H317,	40 - 50 %
Index number: 612-056-00-9	Aquatic Chronic 3 H412	

Additional information: For the wording of the hazard statements refer to section 16.

## **ABSCHNITT 4: FIRST AID MEASUREMENTS**

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4.1 Description of first aid measurements

General information: Care of personal protection of the first aider.

Inhalation: Supply fresh air or oxygen, seek medical attention.

If unconscious place and transport in the recovery position.

Move victim to fresh air and keep calm.

Skin contact: Wash immediately with soap and water and rinse thoroughly.

Directly remove contaminated clothing.

Eye contact: Wash the eye with the eyelid open for several minutes under running water.

Consult doctor if symptoms persist. Consult doctor if symptoms persist.

Most important symptoms and effects, both acute and delayed

No further information relevant.

4.3 Indication of any immediate medical attention and special treatment

No further information relevant.

#### **SECTION 5: FIREFIGHTING MEASURES**

5.1 Extinguish media

Ingestion:

4.2

Suitable extinguish media: Water spray; CO<sub>2</sub>; extinguishing powder. Fight larger fires with water spray or alcohol

resistant foam.

Unsuitable extinguish media: -

5.2 Special hazards arising from the substance or mixture

Under certain fire conditions traces of other toxic substances are possible. Cracked Hydrocarbons, carbon monoxide and carbon dioxide.

5.3 Advise for firefighters

Special protective equipment: Do not breathe in explosion or brand vapours.

Additional information: Cool down endangered containers with water spray.

Note self-protection.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Exclude sources of ignition.

With further increase of temperature cool down with water spray from a safe distance.

If decomposition occurs, wear respirator with A filter.

Use personal protective measures. Keep unprotected persons away.

## **6.2** Environmental precautions

Do not allow product to reach sewage system, water bodies or ground/soil.

In case of release of product into water bodies or sewage system, notify appropriate authority.

## 6.3 Methods and material for containment and cleaning up

Ensure adequate ventilation.

Dilute larger quantities to a level of below 10 % with a suitable desensitizing agent before disposal.

Collect mechanically an dispose in accordance with government regualtions.

#### 6.4 Reference to other sections

<u>Disposal:</u> Section 13. <u>Personal protective equipment:</u> Section 8 <u>Safe Handling:</u> Section 7.

Additional information: In case of transport accidents or large spills, notify appropriate authority.

## **SECTION 7: HANDLING AND STORAGE**

## 7.1 Precautions for safe handling

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Keep away from heat or direct sunlight. Handle and open containers with care. Avoid dust formation. When decanting larger quantities without extractor use respirator. Do not refill residue into storage receptacles. Restrict quantity stored at the workplace. Wash thoroughly before breaks and at the end of work. The product may only get in contact with suitable materials, such as polyethylene or stainless steel. Keep away from dirt, rust, chemicals in particular conc. alkalis and conc. acids (e.g. heavy metal salts and amines). Oxidizing effect through the release of oxygen. Ensure suitable suction / ventilation in the workplace or at the working machines. Keep empty containers away from heat and sources of ignition. When handling the product do not eat, drink or smoke. No open flames or sparks. Keep product and emptied container away from heat and ignition sources. Avoid shock and friction. Avoid electrostatic charging.

### Precautions for prevention of fires and explosions:

Keep away from heat. Take measures to prevent electrostatic charging. Avoid shock and friction. Use explosion-proof equipment / fittings and spark-proof tools. Dust can combine with air to form an explosive mixture. Substance / product is oxidizing in dry state. Formation of flammable - or explosive dust / air mixtures possible. Avoid open flame, sparks, sunlight and other sources of ignition. Keep ignition sources away - Do not smoke.

#### 7.2 Conditions for safe storage, including any incompatibilities

<u>General information:</u> Observe country-specific requirements for the storage of hazardous substances.

Requirements for storage rooms

<u>and containers:</u> Store only in original container.

Safely prevent any seepage into the ground.

Only use containers that are specifically permitted for the substance / product.

Storage compatibility: Organic peroxides may not be stored together with heavy metal compounds or Amines

or mixtures of them.

Keep away from foodstuffs, beverages and food.

Additional information: Keep container tightly closed.

Protect from heat and direct sunlight. Protect against contamination. Storage in a collecting chamber.

Recommended Storage

temperature: max. + 30°C

Storage class: 5.2

7.3 Specific end use(s)

No information about other uses than those mentioned in subsection 1.2.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

Components with community workplace exposure limits:

Dibenzoyl peroxide, CAS 94-36-0

 $Limit \ value \ - \ Eight \ hours \\ \qquad \qquad 5 \ E \ mg/m^3 \ [1(I);DFG]$ 

**DNEL** 

94-36-0 Dibenzoyl peroxide:

Oral DNEL Longterm System 1,65 mg/kg bw/day (General Population)
Dermal DNEL Longterm System 6,6 mg/kg bw/day (General Population)

2.2 / 1 / (W. 1.)

3,3 mg/kg bw/day (Worker)

Inhalation DNEL Longterm System 11,75 mg/m³ (General Population)

2,9 mg/m³ (Worker)

84-61-7 Dicyclohexyl phthalate:

Dermal DNEL Longterm System 0,5 mg/kg bw/day (Worker)
Inhalation DNEL Longterm System 35,2 mg/kg (Worker)

**PNEC** 

94-36-0 Dibenzoyl peroxide:

PNEC Freshwater 0,000602 mg/L
PNEC Freshwater sed 0,338 mg/kg sed dw
PNEC Marinewater sed 0,0338 mg/kg sed dw

PNEC STP 0,35 mg/L PNEC Oral 6,67 mg/kg food



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#### 84-61-7 Dicyclohexyl phthalate

PNEC Freshwater 0,00362 mg/L (AF 50)
PNEC Freshwater sed 1,06 mg/kg sed dw
PNEC Marinewater 0,000362 mg/L (AF 500)
PNEC Marinewater sed 0,106 mg/kg sed dw
PNEC STP 10 mg/L (AF 10)
PNEC Soil 0,21 mg/kg soil dw

#### 8.2 Exposure controls

#### General safety and hygiene measures:

Observe the usual precautions for handling chemicals.

Keep away from foodstuff, beverages and food.

Directly remove contaminated clothing.

Wash hand thoroughly before breaks and at the end of work.

Separate storage of protective clothing.

Avoid prolonged contact with the skin.

Avoid contact with skin and eyes.

Do not eat/drink/smoke/snuff during work.

Preventive skin protection by skin protection ointment

#### Respiratory protection:

Not required with adequate ventilation.

At inadequate ventilation use respiratory protection.



Combination filter A-P2 (organic Vapours-Particles)

#### Hand protection:

Only use chemical protective gloves with CE labelling of Category III according to EN 374.



Selection of the glove material on consideration of the permeation times, rates of diffusion and the degradation.

## Glove material:

The selection of an adequate glove not only depends on the material, but also from different other quality characteristics and varies from manufacturer to manufacturer.

Butyl rubber

Fluor rubber (Viton®)

Nitrile rubber

Neoprene

## Penetration time of glove material:

The exact break through time is to be learned from the manufacturer and must be maintained. The break through time is dependent of the activity and usage time

Eye protection:



Tightly sealed goggles

#### **Body protection:**

Protective clothing.

#### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

## 9.1 Information on basic physical and chemical properties

Appearance:

Physical state:Solid, powderColour:WhiteOdour:Characteristic

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Odour threshold:	Not determined.		
Safety relevant basic data:			
Parameters		Unit	Remark
Density:	1,23	g/cm³	
Bulk density:	650	$kg/m^3$	
pH value:			not applicable
Melting point/Melting range:			not applicable
Boiling point/Boiling range:			not applicable
Flash point:			not applicable
Inflammability (solid/gaseous)			may cause fire
Explosion dangerousness:			not explosive 1
lower Explosion limit:			not determined
upper Explosion limit:			
Ignition temperature:			not determined
Decomposition temperature:			not determined
Oxidising potential:	+ 60	°C	SADT
Vapour pressure:			not determined
Rate of vaporization:			not applicable
Water solubility:			not applicable
Liposolubilty:			not determined
Soluble in:			not determined
Distribution coefficient:			not determined
n-Octanol/Water:			not determined
Viscosity:			not determined
Solvent separation test:			not applicable
Solvent content:			not determined
			not determined
<sup>1</sup> The formation of explosive vapour/air mixture	es is possible.		
Other information			
Active oxygen: $3.2 - 3.4\%$			

#### **SECTION 10: STABILITY AND REACTIVITY**

#### 10.1 Reactivity

9.2

No further information relevant.

## 10.2 Chemical stability

Thermal decomposition/ Conditions to be avoided

SADT (Self Accelerating Decomposition Temperature) is the lowest temperature, at which a self-accelerated decomposition in the transport packaging can occur. A dangerous self-accelerating decomposition reaction, at unfavourable conditions explosion or fire, through thermal decomposition can occur at or over the specified temperature. Contact with incompatible substances at or below SADT can cause decomposition.

No decomposition under normal storage and handling conditions.

Do not overheat to avoid thermal decomposition.

### 10.3 Possible hazardous reactions

Self-accelerating decomposition at SADT.

## 10.4 Conditions to avoid

No further information relevant.

### 10.5 Incompatible materials

Spontaneous decomposition at contact with Dirt, Rust, Chemicals, conc. Acids and conc. Alkalis as well as Accelerators (e.g. Heavy metal salts and Amines)

## 10.6 Hazardous decomposition products

Cracked Hydrocarbons; Carbon monoxide, Carbon dioxide



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No dangerous decomposition products under normal storage and handling conditions.

The emergency measures will depend on the particular circumstances. An emergency plan should be present at the work site.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

11.1 Information on toxicological effects

Acute Toxicity:

Relevant LD/LC50 Values:

Oral 94-36-0 Dibenzoyl peroxide: LD50 (Rat) > 5000 mg/kg

84-61-7 Dicyclohexyl phthalate: LD50 (Rat) > 2000 mg/kg

Irritation to the skin: Based on available data the classification criteria are not met.

<u>Serious eye damage/irritation:</u> Causes serious eye irritation. <u>Sensitization:</u> May cause allergic reactions.

Risk of aspiration toxicity:

Based on available data the classification criteria are not met.

CMR effects:

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

Germ cell mutagenicity Based on available data the classification criteria are not met.

Reproductive toxicity Suspected of damaging fertility or the unborn child.

Other information:

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.

#### **SECTION 12: ECOLOGICAL INFORMATION**

12.1 Toxicity

Aquatic Toxicity:

94-36-0 Dibenzoyl peroxide EC~50~(daphnia~magna):~0,110~mg/L~/~48~h

EC 50 (pseudokirchinella subcapitata): 0,0711 mg/L / 72 h  $\,$ 

LC 50 (oncorhynchus mykiss): 0,0602 mg/L / 96 h

12.2 Persistence and degradability

No further information relevant.

12.3 Bioaccumulative potential

No further information relevant.

12.4 Mobility in Soil

No further information relevant.

12.5 Results of PBT and vPvB assessment

The PBT/vPvB criteria of REACH are not applicable for this substance.

12.6 Other adverse effects

Ecotoxic effects: remark: very toxic to fish

Water hazard class: 2 (self-classification) - water endangering

<u>General information:</u> Do not allow product to reach ground water, waters or the sewerage even in small quantities.

Drinking water hazard, even if small quantities leak in the underground.

In waters also poisonous for fish and plankton.

Very toxic to water organisms.



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#### **SECTION 13: DISPOSAL CONSIDERATIONS**

#### Waste treatment methods

Disposal methods for the product:

Must be supplied to a special treatment (e.g. thermal utilization) in accordance with government regulations after diluting to 10% peroxide content with an inert solid.

Must not be disposed together with household garbage. Do not allow product to reach sewerage.

European waste catalogue

Please make contact with the disposal company of your choice to agree on the waste key number.

Disposal methods for use packing:

This product and its container must be disposed of as hazardous waste.

#### **SECTION 14: TRANSPORT INFORMATION**

#### 14.1 UN-Number

UN 3106

## 14.2 UN proper shipping name

ADR 3106 ORGANISCHES PEROXID TYP D, FEST (DIBENZOYLPEROXID),

**UMWELTGEFÄHRDEND** 

IMDG, ORGANIC PEROXIDE TYPE D, SOLID (DIBENZOYL PEROXIDE), MARINE POLLUTANT

IATA ORGANIC PEROXIDE TYPE D, SOLID (DIBENZOYL PEROXIDE)

## 14.3 Transport hazard class(es)

ADR





Class: 5.2 (P1) Organic Peroxide

Danger chit: 5.2

IMDG, IATA





Class: 5.2 Organic Peroxide

Danger chit: 5.2

## 14.4 Packing group

Omitted.

#### 14.5 Environmental hazards

This product contains environmentally dangerous substances: DIBENZOYL PEROXIDE

Marine pollutant: Yes, Symbol (Fish and Tree) Special labelling (ADR): Symbol (Fish and Tree)

#### 14.6 Special precautions for user

Caution: Organic Peroxide

<u>Kemler-number:</u> -<u>EMS-number:</u> F-J,S-R

## 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

## Transport/Additional information:

ADR:

Limited quantities (LQ): 500 g

Transport category: 2

Tunnel restriction code: D

RID/GGVCEB see ADR



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#### **SECTION 15: REGULATORY INFROMATION**

# 15.1 Safety, health and environmental regulations/legislation specific to the substance or mixture 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

## National regulations:

Other regulations, limitations and prohibitive regulations

Note:

Take care of the respective local regulations.

## 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

#### **SECTION 16: OTHER INFORMATION**

#### **Additional details:**

Classification was made based on the data on the content of hazardous substances using the calculation method based on the guidelines of regulation 1272/2008/EC (CLP).

#### Relevant Phrases:

H241	Heating may cause a fire or explosion.
H317	May cause allergic skin reaction.
H319	Causes serious eye irritation.
H360D	May damage the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects

Safety Data Sheet issuing person: Pascal Konrad Safety Data Sheet issued on: 22.08.2016