

### Safety data sheet

# Härterpulver für Acryl- und Polyesterharze

Uniprox Safety data sheet according to 1907/2006/EC, Article 31

Product: Härterpulver für Acryl- und Polyesterharze

Date/ Revised: 05.12.2019

Document-No.: MG120\_Haerterpulver\_006\_EN

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#### 1. Substance/preparation and company identification

<u>Trade name:</u> Härterpulver für Acryl- und Polyesterharze (MG120) <u>Application of the substance/ the preparation:</u> Reaction initiator

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#### 2. Hazard identification

#### 2.1 Classification of the substance or mixture

### Classification according to Regulation (EC) No 1272/2008

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.

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



P02H

Signal word

Hazard-determining components of labelling: Hazard statements

Danger

dicyclohexyl phthalate, dibenzoyl peroxide

H242 Heating may cause a fire.H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction. H360D May damage the unborn child.

Page 1 of 11 int: 15.12.2022



H400	Very toxic to aquatic 1	ife.
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H410 Very toxic to aquatic life with long lasting effects.

### **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. -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 for professional users.

2.3 Other hazards

Results of PBT and vPvB assessment

**PBT:** Not applicable. **vPvB:** Not applicable.

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# 3. Composition / information on ingredients

### 3.2 Chemical characterization : Mixtures

#### **Dangerous components:**

<u>CAS: 94-36-0</u> dibenzoyl peroxide 40-50% EINECS: 202-327-6 Org. Perox. B, H241; Aquatic Acute 1, H400 (M=10); Index number: 617-008-00-0 Aquatic Chronic 1, H410 (M=10); Eye Irrit. 2,

Reg-No.:01-2119511472-50 H319; Skin Sens. 1, H317

CAS: 84-61-7 dicyclohexyl phthllate 40-50%

EINECS: 201-545-9 Repr. 1B, H360D; Skin Sens. 1, H317;

Index number: 607-719-00-4 Aquatic Chronic 3, H412

Reg-No.:01-2119978223-34

**Additional information:** For the wording of the listed risk phrases refer to section 16.

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#### 4. First-aid measures

### 4.1 Description of first aid measures

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General information: After inhalation: Take care of personal protection for the first aider. 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.

If symptoms persist consult doctor.

After swallowing:

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

No further relevant information available.

5. Fire-fighting 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, carbondioxide and -monoxid.

5.3 Advice for firefighters Protective equipment: Additional information

Do not inhale explosion gases or combustion gases. Cool endangered receptacles with water spray.

Self-protection first.

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 decom-

position of materials.

Wear protective equipment. Keep unprotected persons

away.

**6.2 Environmental precautions:** Inform respective author

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.

Large quantities should be diluted with suitable desensitation agent to a concentration below 10 % before disposal. Soak up with absorbent material (e. g. Vermiculit) and dispose of in accordance with government

regulations.

**6.4 Reference to other sections** 

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.



# 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.

heavymetal compounds and amines). Oxidizing because of releasing oxygene. 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.

Do not smoke.

Information about fire – and explosion protection:

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

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:

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.

Recommended storage

temperature (To maintain

quality):  $max. +30 \, ^{\circ}C$ 

**7.3 Specific end use(s)** No further relevant information available.

#### 8. Exposure controls and personal protection

Additional information about

**design of technical facilities:** No further data; see item 7.

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/m<sup>3</sup>

84-61-7 dicyclohexyl phthalate

WEL (Great Britain) Long-term value: 5 mg/m<sup>3</sup>

**DNELs** 

94-36-0 dibenzoyl peroxide

Oral DNEL Longterm System 2 mg/kg bw/day (General population)

Dermal DNEL Longterm System 13.3 mg/kg bw/day (Worker)

Inhalative DNEL Longterm System 39 mg/m³ (Worker)

84-61-7 dicyclohexyl phthalate

Dermal DNEL Longterm System 0.5 mg/kg bw/day (Worker)

Inhalative DNEL Longterm System 35.2 mg/m³ (Worker)

**PNECs** 

94-36-0 dibenzoyl peroxide

PNEC Marinewater sed 0.001 mg/kg sed dw PNEC Freshwater 0.000002 mg/l (AF50) PNEC Freshwater sed 0.013 mg/kg sed dw

PNEC STP 0.35 mg/l (-)

PNEC Marinewater 0.000002 mg/l (AF500)

84-61-7 dicyclohexyl phthalate

PNEC Marinewater sed

PNEC Freshwater

O.004 mg/l (AF50)

PNEC Freshwater sed

PNEC Soil

PNEC STP

O.004 mg/l (AF10)

O.21 mg/kg sed dw

O.21 mg/kg soil dw

O.21 mg/l (AF10)

O.21 mg/l (AF500)

**Additional information:** The lists valid during the making were used as basis.

8.2 Exposure controls

**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.

**Respiratory protection:** Not necessary if room is well-ventilated.

Use suitable respiratory device when it exceed exposure limit and when insufficiently ventilated. Filter P2

**Protection of hands:** 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 degrada-

tion.

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 through time has to be found out by

the manufacturer of the protective gloves and has to be

observed.

**Eye protection:** Tightly sealed goggles. **Body protection:** Protective work clothing.

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# 9. Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

**General Information** 

**Appearance:** 

Form: Solid Powder
Colour: Whitish
Odour: Characteristic
Odour threshold: Not determined.
pH-value: Not determined.

Change in condition

Melting point/Melting range:

Boiling point/Boiling range:

Flash point:

Flammability (solid, gaseous):

Decomposition temperature:

Not applicable.

Not applicable.

Not applicable.

Not applicable.

Not applicable.

**Self-igniting:** Product is not selfigniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Explosion limits:** 

Lower: Not determined. Upper: Not determined. Vapour pressure: Not determined. Density at 20°C: 1.23 g/cm<sup>3</sup> Bulk density at 20 °C:  $650 \text{ kg/m}^3$ **Relative density** Not determined. Vapour density Not determined. **Evaporation rate** Not determined.

Solubility in / Miscibility with

water: Undetermined.

Partition coefficient (n-octanol/water): not determined

**Viscosity:** 



**Dynamic:** Not applicable. **Kinematic:** Not determined.

**9.2 Other information** No further relevant information available.

**Active oxygen** 3,2 - 3,4 %

10. Stability and reactivity

**10.1 Reactivity** 

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 selfaccelerating 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 10.4 Conditions to avoid 10.5 Incompatible materials: Self-accelerating decomposition at SADT.

No further relevant information available.

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.

11. Toxicological information

11.1 Information on toxicological effects

**Acute toxicity:** 

LD/LC50 values relevant for classification:

94-36-0 dibenzoyl peroxide

Oral LD50 >5000 mg/kg (rattus)

84-61-7 dicyclohexyl phthalate

Oral LD50 >2000 mg/kg (rattus)

**Primary irritant effect:** 

**Skin corrosion/irritation** Based on available data, the classification criteria are

not met.

**Serious eye damage/irritation Respiratory or skin sensitisation**CMR effects (carcinogenity, mutagenicity and toxicity 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** May damage the unborn child.

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.

### 12. Ecological information

12.1 Toxicity
Aquatic toxicity:

94-36-0 dibenzoyl peroxide

EC50 / 48h 0.110 mg/l (daphnia magna)

EC50 / 72h 0.0711 mg/l (pseudokirchneriella subcapitata)

LC50 / 96h 0.0602 mg/l (oncorhynchus mykiss)

12.2 Persistence and

**degradability**No further relevant information available. **12.3 Bioaccumulative potential**No further relevant information available.

**12.4 Mobility in soil**No further relevant information available.

**Ecotoxical effects:** 

**Remark:** Very toxic for fish

Additional ecological information:

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

Very toxic for aquatic organisms

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.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

**12.6 Other adverse effects** No further relevant information available.

13. Disposal considerations

13.1 Waste treatment methods

**Recommendation** After diluting with a suitable inert solid material to

10 %, the product must be supplied to a special treatment (e. g. thermal utilization) under observance

of all official regulations.

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.

Page 8 of 11

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Document-No.: MG120\_Haerterpulver\_006\_EN



14. Transport information

14.1 UN-Number

ADR, IMDG, IATA UN3106

14.2 UN proper shipping name

**ADR** 3106 ORGANIC PEROXIDE TYPE D,

SOLID (DIBENZOYL PEROXIDE), ENVIRONMENTALLY HAZARDOUS

ORGANIC PEROXIDE TYPE D, SOLID

(DIBENZOYL PEROXIDE), MARINE

**POLLUTANT** 

IATA ORGANIC PEROXIDE TYPE D, SOLID

(DIBENZOYL PEROXIDE)

14.3 Transport hazard class(es)

**ADR** 

**IMDG** 

Class 5.2 (P1) Organic peroxides.

Label 5.2

**IMDG** 

Class 5.2 Organic peroxides.

Label 5.2

**IATA** 

Class 5.2 Organic peroxides.

Label 5.2

14.4 Packing group

ADR, IMDG, IATA Void

**14.5 Environmental hazards:** Product contains environmentally hazardous

substances: DIBENZOYL PEROXIDE

**Marine pollutant:** Yes

Symbol (fish and tree)

**Special marking (ADR): Symbol (fish and tree) 14.6 Special precautions for user**Warning: Organic peroxides.

Danger code (Kemler):

**EMS Number:** F-J,S-R

Stowage CategorySW1 Protected from sources of heat.Stowage CodeSG35 Stow "separated from" acids.Segregation CodeSG36 Stow "separated from" alkalis.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and

the IBC Code Not applicable.

**Transport/Additional information:** 

**ADR** 

Limited quantities (LQ) 500 g
Transport category 2
Tunnel restriction code D

**RID / GGVSEB:** like ADR

**IMDG** 

Limited quantities (LQ) 500g

**Excepted quantities (EQ)**Code: E0 Not permitted as Excepted Quantity

15. Regulatory information

 $15.1\ Safety, health\ and\ environmental\ regulations/legislation\ specific\ for\ the\ substance$ 

or mixture

Directive 2012/18/EU



Qualifying quantity (tonnes) for the application of lower-tier requirements 50t Qualifying quantity (tonnes) for the application of upper-tier requirements 200t REGULATION (EC) No 1907/2006

**ANNEX XVII** Conditions of restriction: 30

**National regulations:** 

Other regulations, limitations and prohibitive regulations

**Please note:** Take care of the respective local regulations.

15.2 Chemical safety

**assessment:** A Chemical Safety Assessment has not been

carried out.

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#### 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

H241 Heating may cause a fire or explosion.

H317 May cause an 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.

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer

(Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

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 (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent Org. Perox. B: Organic Peroxides, Type B

Org. Perox. CD: Organic Peroxides, Types C, D

Olg. Felox. CD. Olganic Feloxides, Types C, D

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Repr. 2: Reproductive toxicity, Hazard Category 2

Aquatic Acute 1: Hazardous to the aquatic environment – Acute Hazard, Category 1 Aquatic

Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category  $\boldsymbol{3}$ 

The information refers explicit to the indicated product. In opinion of the Uniprox GmbH & Co. KG this information is right and reliable at the time of the generation. Uniprox GmbH & Co.

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Page 10 of 11
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Document-No.: MG120\_Haerterpulver\_006\_EN



completeness. Everybody who received this information is requested by the Uniprox GmbH & Co. KG to decide about suitability and completeness of this information for his special application.