Safety data sheet

Härterpaste für Acryl- und Polyesterharze

Uniprox Safety data sheet in accordance with regulation (EC) 1907/2006
Product: Härterpaste für Acryl- und Polyesterharze
Date/ Revised: 14.10.2021
Document-No.: MG119_Haerterpaste_005_EN

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1. Substance/preparation and company identification

Trade name: Härterpaste für Acryl- und Polyesterharze (MG119)
Application of the substance/ the preparation: 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. 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.
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


GHS09

Signal word Warning

Hazard-determining components of labelling:

dibenzoyl peroxide

Hazard statements

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

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
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.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

Description: Mixture of substances listed below with nonhazardous additions.
Components:

CAS: 94-36-0 EINECS: 202-327-6 Index number: 617-008-00-0 Reg.nr.: 01-2119511472-50-XXXX	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	45-52%
CAS: 131-11-3 EINECS: 205-011-6 Reg.nr.: 01-2119437229-36-XXXX	dimethyl phthalate substance with a Community workplace exposure limit	25-35%
CAS: 107-21-1 EINECS: 203-473-3 Index number: 603-027-00-1 Reg.nr.: 01-2119456816-28-XXXX	ethanediol STOT RE 2, H373; Acute Tox. 4, H302	0.1-9.9%

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

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4. First-aid measures

4.1 Description of first aid measures
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.
After skin contact:
If skin irritation continues, consult a doctor.
Immediately wash with water and soap and rinse thoroughly.
After eye contact:
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing:
Do not induce vomiting; call for medical help immediately.
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.

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5. Fire-fighting measures

5.1 Extinguishing media
Suitable extinguishing agents:
CO_2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire extinguishing methods suitable to surrounding conditions.
5.2 Special hazards arising from the substance or mixture
In case of fire, the following can be released:
Carbonic anhydride (CO_2)

Carbon monoxide (CO)
Benzoic acid
Benzene
Biphenyl
Phenyl benzoate
Under certain fire conditions, traces of other toxic gases cannot be excluded.

5.3 Advice for firefighters

Protective equipment:
Do not inhale explosion gases or combustion gases.
Mouth respiratory protective device.
Wear suitable fire protection equipment.

Additional information
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

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6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Keep away from ignition sources.
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Use respiratory protective device against the effects of fumes/dust/aerosol.

6.2 Environmental precautions:
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:
Pick up mechanically.
Do not allow to dry out
Ensure adequate ventilation.

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.

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7. Handling and storage

7.1 Precautions for safe handling
Use only in well ventilated areas.
Ensure good ventilation/exhaustion at the workplace.
Keep away from heat and direct sunlight.
Protect against electrostatic charges.

Information about fire - and explosion protection:
Substance/product is oxidising when dry.
Keep ignition sources away - Do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:
Store in a cool location.
Store only in the original receptacle.

Information about storage in one common storage facility:
Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.

Further information about storage conditions:
Store receptacle in a well ventilated area.
Prevent from drying out.

Keep container tightly sealed.
The product, stored in the original containers, away from sunlight, maintains its properties for 12 months from the production date.
Recommended storage temperature: +5 °C / +25 °C
7.3 Specific end use(s) No further relevant information available.

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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/m³
PEL (USA)	Long-term value: 5 mg/m³
REL (USA)	Long-term value: 5 mg/m³
TLV (USA)	Long-term value: 5 mg/m³

131-11-3 dimethyl phthalate

WEL (Great Britain)	Short-term value: 10 mg/m³ Long-term value: 5 mg/m³
PEL (USA)	Long-term value: 5 mg/m³
REL (USA)	Long-term value: 5 mg/m³
TLV (USA)	Long-term value: 5 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
WEL (Great Britain)	Short-term value: 104** mg/m³, 40** ppm Long-term value: 10* 52** mg/m³, 20** ppm Sk *particulate **vapour
TLV (USA)	Short-term value: NIC-127* NIC-10** mg/m³, NIC-50* ppm Long-term value: NIC-63.5* mg/m³, NIC-25* ppm Ceiling limit: (100) mg/m³ (H); *inh. fraction + vapor,P:**inh. fraction, H

Regulatory information

WEL (Great Britain): EH40/2011
PEL (USA): Permissible Exposure Limits (OSHA)
REL (USA): Recommended Exposure Limits (NIOSH)
TLV (USA): Threshold Limit Values (ACGIH)
IOELV (EU): Dir. 2009/161/EU

DNELs

94-36-0 dibenzoyl peroxide

Oral	DNEL / Long term exposure- Systemic effects 2 mg/kg bw/d (general population)
Dermal	DNEL / Long term exposure- Systemic effects 13.3 mg/kg bw/d (workers)
Inhalative	DNEL / Long term exposure- Systemic effects 39 mg/m³ (workers)

PNECs

94-36-0 dibenzoyl peroxide

PNEC / aqua	0.00002 mg/l (freshwater) 0.000602 mg/l (intermittent releases) 0.000002 mg/l (marine water)
PNEC / sediment	0.0127 mg/kg dw (freshwater)

	0.00127 mg/kg dw (marine water)
PNEC / soil	0.0025 mg/kg dw
PNEC / STP	0.35 mg/l (sewage treatment plant)

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

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Do not eat, drink, smoke or sniff while working.
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.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.

Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.

Protection of hands:


Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

Neoprene gloves
Nitrile rubber, NBR
Recommended thickness of the material: > 0.14 mm
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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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.
For the mixture of chemicals mentioned, the penetration time has to be at least 30 minutes (Permeation according to EN 374 Part 3: Level 2).

Eye protection:


Tightly sealed goggles

Body protection: Light weight protective clothing

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9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Pasty
Colour:	Red
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value:	Not determined.

Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable. Above the SADT value.
Flammability (solid, gaseous):	May cause fire.
Ignition temperature:	
Decomposition temperature:	Not determined. SADT = 50 °C
Self-igniting:	Not determined.
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:	1.15-1.25 g/cm³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with water:	Insoluble.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
VOC (UE)	Not applicable.
9.2 Other information	No further relevant information available.

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10. Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.
Exothermic thermal decomposition.
Visible decomposition with spontaneous ignition on heating.
SADT = 50 °C
SADT (Self accelerating decomposition temperature) is the lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport.
A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the SADT.
Contact with incompatible substances can cause decomposition at or below the SADT.

10.3 Possibility of hazardous reactions

Reacts with reducing agents.
Reacts with heavy metals.
Reacts with alkali, amines and strong acids.

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials:

Reducing agents like amines, acids, alkali, compounds based on heavy metals (p.e. accelerators)

10.6 Hazardous decomposition products:

Benzoic acid
Benzene
Biphenyl

Phenyl benzoate

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11. Toxicological information

11.1 Information on toxicological effects

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

LD/LC50 values relevant for classification:

94-36-0 dibenzoyl peroxide

Oral	LD0	2000 mg/kg (rat)
Inhalative	LC0	24.3 mg/l (rat)

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.

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 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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12. Ecological information

12.1 Toxicity

Aquatic toxicity:

94-36-0	**dibenzoyl peroxide**
LC50 / 96h	0.0602 mg/l (fish - Oncorhynchus mykiss) (OECD TG 203)
EC50 / 48h	0.110 mg/l (crustacea - Daphnia magna) (OECD TG 202)
ErC50 / 72h	0.0711 mg/l (algae - Pseudokirchneriella subcapitata) (OECD TG 201)
	M Factor Acute 10
NOEC / 96h	0.0316 mg/l (fish)
EC10 / 21d	0.001 mg/l (crustacea - Daphnia magna) (OECD TG 211)
NOEC / 72 h	0.02 mg/l (algae - Pseudokirchneriella subcapitata)
	M Factor Chronic 10

12.2 Persistence and degradability

94-36-0 dibenzoyl peroxide

Ready Biodegradability in water / 28d 71 % (OECD TG 301 D)

12.3 Bioaccumulative potential

94-36-0 dibenzoyl peroxide

Log Kow 3.2 (OECD TG 117)

12.4 Mobility in soil

94-36-0 dibenzoyl peroxide

Log Koc 3.8 (OECD TG 121)

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 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or

sewage system.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

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13. Disposal considerations

13.1 Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Disposal must be made according to official regulations.

Uncleaned packaging:

Recommendation:

Disposal must be made according to official regulations.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

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14. Transport information

14.1 UN-Number	
ADR, IMDG, IATA	UN3108
14.2 UN proper shipping name	
ADR	3108 ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYLPEROXIDE), ENVIRONMENTALLY HAZARDOUS
IMDG	ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE), MARINE POLLUTANT
IATA	ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)
14.3 Transport hazard class(es)	
ADR	
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:	
Marine pollutant:	Yes Symbol (fish and tree)
14.6 Special precautions for user	Warning: Organic peroxides.
Danger code (Kemler):	-
EMS Number:	F-J,S-R
Stowage Category	D
Stowage Code	SW1 Protected from sources of heat.
Segregation Code	SG35 Stow "separated from" acids. SG36 Stow "separated from" alkalis.
14.7 Transport in bulk according to Annex II of MARPOL73/78 andthe IBC Code	Not applicable.
Transport/Additional information:	

ADR	
Limited quantities (LQ)	500 g
Excepted quantities (EQ)	Code E0. Not permitted as Excepted Quanitity
Transport category	2
Tunnel restriction code	D
RID / GGVSEB:	like ADR
IMDG	like ADR
UN "Model Regulation":	UN 3108 ORGANIC PEROXIDE TYPE E, SOLID, 5.2, ENVIRONMENTALLY HAZARDOUS

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15. Regulatory information

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

Regulation (EC) No 1907/2006 (REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals)
Regulation (EC) No 1272/2008 (CLP - Classification, Labelling and Packaging of substances and mixtures)
Compilation of Safety Data Sheet: Reg.UE n. 830/2015 (amending Reg.EC n.1907/2006, Annex II)
Directive 2012/18/EU
Named dangerous substances - ANNEX I None of the ingredients is listed.
Seveso category
P6b SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES
E1 Hazardous to the Aquatic Environment
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:
Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
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.
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.

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

No further relevant information available.

Abbreviations and acronyms:

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
CLP: Classification, Labelling and Packaging
TLV: Threshold Limit Value
TLV-TWA: Threshold Limit Value - Time Weighted Average
TLV-STEL: Threshold Limit Value - Short Term Exposure Limit
IOELV: Indicative Occupational Exposure Limit Value
BEI: Biological Exposure Indices

LD50: Lethal dose, 50 percent
LC50: Lethal Concentration, 50 percent
Kow: Octanol-Water partition coefficient
BCF: BioConcentration Factor
LC50: LC50: Lethal Concentration, 50 percent
EC50: Effective Concentration, 50 percent
ErC50: Effective Concentration, 50 percent, growth rate
WGK: Wassergefährdungsklasse - Water hazard class [Germany]
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
ACGIH: American Conference of Governmental Industrial Hygienists [USA]
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)
VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Org. Perox. B: Organic peroxides – Type B
Org. Perox. E: Organic peroxides – Type E/F
Acute Tox. 4: Acute toxicity – Category 4
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
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

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the products properties (product specification). Neither should any agreed property nor the suitable of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed

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