Safety data sheet

1. Substance / preparation and company identification

Trade name:
Härterpaste rot
Application of the substance / the preperation:
Reaction initiator
For industrial use

BEIL
Kunststoffproduktions- und Handelsgesellschaft mbH
Lehmkuhlenweg 25
D- 31224 Peine
Telefon: +49 (0)5171/70 99-0
Telefax: +49 (0)5171/7099-29
E-Mail: service@beil-peine.de

Information in case of emergency:
Giftzentrale Göttingen
Tel.: +49 (0)551/19240
Telefax: +49 (0)551/3831881

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 Danger

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	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.

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3. Composition / information on ingredients

3.2 Chemical characterization: Mixtures
Dangerous components:

CAS: 94-36-0	dibenzoyl peroxide	40-50 %
EINECS: 202-327-6	Org. Perox. B, H241; Aquatic Acute 1, H400;	
Index number: 617-008-00-0	Eye Irrit. 2, H319; Skin Sens. 1, H317	
Reg-No.:01-2119511472-50		
CAS: 9038-95-3	oxirane, methyl-, polymer with oxirane,	2.5-5 %
Polymer	monobutyl ether	
	Acute Tox. 4, H302; Eye Irrit. 2, H319	

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

4. First-aid measures

4.1 Description of first aid measures
General information: Take care of personal protection for the first aider.
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. 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.
After swallowing: If symptoms persist consult doctor.
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: Do not inhale explosion gases or combustion gases.
Additional information 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 decomposition of materials.
Wear protective equipment. Keep unprotected persons away.

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:
Ensure adequate ventilation.
Large quantities should be diluted with suitable desensitation agent to a concentration below 10 % before disposal.
Soak up with absorbant 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. Storage in a collecting room is required.
Recommended storage temperature (To maintain quality):	+5 …+30 °C
Storage class:	5.2
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/m³

557-05-1 zinc distearate, pure

WEL (Great Britain) Short-term value: 20* mg/m³
Long-term value: 10* 4** mg/m³
*inhalable dust **respirable dust

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)

PNECs

94-36-0 dibenzoyl peroxide

PNEC Marinewater sed	0.001 mg/kg sed dw
PNEC Freshwater	0.00002 mg/l (AF 50)
PNEC Freshwater sed	0.013 mg/kg sed dw
PNEC STP	0.35 mg/l

PNEC Marinewater 0.000002 mg/l (AF 500)
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 A2

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 degradation

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

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:	Not applicable.
Boiling point/Boiling range:	Not applicable.
Flash point:	Not determined.
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	+50 °C (SADT)
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:	1.2 g/cm³

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 at 20°C:	12.000 - 25.000 mPas
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 — No further relevant information available.

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 — Self-accelerating decomposition at SADT.

10.4 Conditions to avoid — No further relevant information available.

10.5 Incompatible materials: 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 — Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

94-36-0	**dibenzoyl peroxide**	
Oral	LD50	>5000 mg/kg (rattus)

Primary irritant effect:

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

Serious eye damage/irritation — Causes serious eye irritation.

Sensitization: Sensitization possible through skin contact.

Respiratory or skin sensitisation — May cause an allergic skin reaction.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity

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.

12. Ecological information

12.1 Toxicity

Aquatic toxicity:

94-36-0 dibenzoyl peroxide

EC50 / 72h	0.0711 mg/l (pseudokirchneriella subcapitata)
LC50 / 96h	0.0602 mg/l (oncorhynchus mykiss)
EC50 / 48h	0.110 mg/l (daphnia magna)

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 desentisation agent to 10 %, the solution 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.

14. Transport information

14.1 UN-Number

ADR, IMDG, IATA	UN3108

14.2 UN proper shipping name

ADR	3108 ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE), 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:	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):	-
Stowage Category	SW1 Protected from sources of heat.
Stowage Code	SG35 Stow "separated from" acids.
Segregation Code	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

15. Regulatory information

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

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
REGULATION (EC) No 1907/2006	
ANNEX XVII	Conditions of restriction: 3
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.

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.
H410 Very toxic to aquatic life with long lasting effects.

The information contained here in is based on the present state of our knowledge and does not therefore guarantee certain properties. Recipients of our product must take responsibility for observing existing laws and regulations.