

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.12.2015

Version number 13

Revision: 09.12.2015

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

1.1 Product identifier

- Trade name: **Hardener Paste white phthalate-free**
- Article number: 30405, 30406, 30407, 30408, 30409, 30410, 30411, 30420, 30428, 30433, 30438

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

- Application of the substance / the mixture No further relevant information available.

Hardening agent/ Curing agent

1.3 Details of the supplier of the safety data sheet

- Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH Tel. +49(0)911-642960
Lechstrasse 28 Fax. +49(0)911-644456
D 90451 Nürnberg e-mail info@akemi.de

- Further information obtainable from:

Laboratory

1.4 Emergency telephone number:

Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH
Tel. +49(0)911-64296-59
Reachable during the following office hours:
Monday – Thursday from 07:30 a.m. to 16:30 p.m.
Friday from 07:30 a.m. to 13:30 p.m.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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



GHS02 flame

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



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

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

- Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of water.
IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
- Storage: Protect from sunlight. Store in a well-ventilated place.
Store in a well-ventilated place. Keep cool.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

2.2 Label elements

- Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.12.2015

Version number 13

Revision: 09.12.2015

Trade name: Hardener Paste white phthalate-free

(Contd. of page 1)

· Hazard pictograms

GHS02 GHS07 GHS09

· Signal word

Warning

· Hazard-determining components of labelling:· Hazard statements

dibenzoyl peroxide
 H242 Heating may cause a fire.
 H319 Causes serious eye irritation.
 H317 May cause an allergic skin reaction.
 H400 Very toxic to aquatic life.

· Precautionary statements

H411 Toxic to aquatic life with long lasting effects.

P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 P103 Read label before use.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P220 Keep away from reducing agents, heavy metal compounds, acids and alkalis.
 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.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P410 Protect from sunlight.
 P411+P235 Store at temperatures not exceeding 25°C. Keep cool.
 P420 Store away from other materials.
 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.

SECTION 3: Composition/information on ingredients· **3.2 Chemical characterisation: Mixtures**· Description: Mixture: consisting of the following components.· Dangerous components:

CAS: 94-36-0 EINECS: 202-327-6 Index number: 617-008-00-0 Reg.nr.: 01-2119511472-50	dibenzoyl peroxide Org. Perox. B, H241 Aquatic Acute 1, H400; Aquatic Chronic 2, H411 Eye Irrit. 2, H319; Skin Sens. 1, H317	25-50%
CAS: 5444-75-7 EINECS: 226-641-8	2-Ethylhexylbenzoat Aquatic Chronic 4, H413	1-5%

· Additional information: For the wording of the listed risk phrases refer to section 16.**SECTION 4: First aid measures**· **4.1 Description of first aid measures**· General information: Personal protection for the First Aider.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.12.2015

Version number 13

Revision: 09.12.2015

Trade name: Hardener Paste white phthalate-free

(Contd. of page 2)

- After inhalation: Take affected persons out into the fresh air. Immediately remove any clothing soiled by the product. Take affected persons into fresh air and keep quiet. 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. Immediately rinse with water.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: Rinse out mouth and then drink plenty of water. Seek immediate medical advice.
- **4.2 Most important symptoms and effects, both acute and delayed**
- Information for doctor: Allergic reactions
Dibenzoyl peroxide: Inhalation, swallowing or skin contact may cause health damages. Irritates respiratory tract and eyes: e.g., cough, dyspnea, lacrimation. May irritates the skin: burning and itching. May cause allergic reactions of respiratory tract and skin.
- Hazards Danger of impaired breathing.
- **4.3 Indication of any immediate medical attention and special treatment needed** If swallowed, gastric irrigation with added, activated carbon.

SECTION 5: Firefighting 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** Formation of toxic gases is possible during heating or in case of fire. In case of fire, the following can be released:
Carbon monoxide (CO)
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. Wear self-contained respiratory protective device. Wear fully protective suit.
- Additional information Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Keep away from ignition sources. Ensure adequate ventilation
- **6.2 Environmental precautions:** Do not allow product to reach sewage system or any water course. 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:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). 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.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.12.2015

Version number 13

Revision: 09.12.2015

Trade name: Hardener Paste white phthalate-free

(Contd. of page 3)

See Section 13 for disposal information.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Keep receptacles tightly sealed.
 Store in cool, dry place in tightly closed receptacles.
 Keep away from heat and direct sunlight.
 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.
 Ensure that suitable extractors are available on processing machines
 Handle with care. Avoid jolting, friction and impact.
 Ensure good ventilation/exhaustion at the workplace.
 Prevent formation of aerosols.

Information about fire - and explosion protection:

Substance/product is oxidising when dry.
 Use explosion-proof apparatus / fittings and spark-proof tools.

7.2 Conditions for safe storage, including any incompatibilities**Storage:****Requirements to be met by storerooms and receptacles:**

Store only in the original receptacle.
 Use only receptacles specifically permitted for this substance/product.
 Prevent any seepage into the ground.

Information about storage in one common storage facility:

Store away from foodstuffs.
 Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.

Further information about storage conditions:

Protect from contamination.
 Store in a cool place.
 Protect from frost.
 Keep container tightly sealed.

Storage class:

5.2

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/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:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

DNELs**94-36-0 dibenzoyl peroxide**

Oral	DNEL (Langzeit-wiederholt)	1.65 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	6.6 mg/kg bw/day (ARB)
		3.3 mg/kg bw/day (BEV)
Inhalative	DNEL (Langzeit-wiederholt)	11.75 mg/m ³ Air (ARB)
		2.9 mg/m ³ Air (BEV)

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.12.2015

Version number 13

Revision: 09.12.2015

Trade name: Hardener Paste white phthalate-free

(Contd. of page 4)

· PNECs

94-36-0 dibenzoyl peroxide

PNEC (wässrig)	0.35 mg/l (KA)
	0.000602 mg/l (MW)
	0.000602 mg/l (SW)
PNEC (fest)	0.0758 mg/kg Trockengew (BO)
	0.0338 mg/kg Trockengew (MWS)
	0.338 mg/kg Trockengew (SWS)

· Additional information: The lists valid during the making were used as basis.· **8.2 Exposure controls**· Personal protective equipment:· General protective and hygienic measures:

Avoid close or long term contact with the skin.
Do not eat, drink, smoke or sniff while working.
Use skin protection cream for skin protection.
Clean skin thoroughly immediately after handling the product.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.

· Respiratory protection:

Avoid contact with the eyes and skin.
Not necessary if room is well-ventilated.
Filter A/P2

· Protection of hands:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Preventive skin protection by use of skin-protecting agents is recommended.
After use of gloves apply skin-cleaning agents and skin cosmetics.
Skin protection agent recommendation for preventive skin shelter without use of protective gloves:
ARRETIL (<http://www.stoko.com>)
Skin protection agent recommendation for preventive skin shelter in application and combination of protective gloves:
STOKODERM (<http://www.stoko.com>)
Skin protection recommendation for skin cleaning after product handling:
SLIG SPEZIAL (<http://www.stoko.com>)
SOLOPOL (<http://www.stoko.com>)
Skin protection agent recommendation for skin aftercare:
STOKO VITAN (<http://www.stoko.com>)

**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

The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times' data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory analyses of the company KCL GmbH in compliance with EN374.

This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.12.2015


Version number 13

Revision: 09.12.2015

Trade name: Hardener Paste white phthalate-free

(Contd. of page 5)

different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: <http://www.kcl.de>).

- Material of gloves
Nitrile rubber, NBR
Butyl rubber, BR
Fluorocarbon rubber (Viton)
Neoprene 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. 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
Value for the permeation: Level \leq 6, 480 min
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- For the permanent contact gloves made of the following materials are suitable:
Fluorocarbon rubber (Viton)
Vitoject (KCL, Art_No. 890)
Nitrile rubber, NBR
Camatril (KCL, Art_No. 730, 731, 732, 733)
Neoprene gloves
Nitopren (KCL, Art_No. 717)
Butyl rubber, BR
Butoject (KCL, Art_No. 897, 898)
- As protection from splashes gloves made of the following materials are suitable:
Nitrile rubber, NBR
Camatril (KCL, 730, 731, 732, 733)
Butoject (KCL, Art_No. 897, 898)
Butyl rubber, BR
- Not suitable are gloves made of the following materials:
Natural rubber, NR
Leather gloves
Strong material gloves
- Eye protection:
 Tightly sealed goggles
- Body protection:
Protective work clothing

SECTION 9: Physical and chemical properties**· 9.1 Information on basic physical and chemical properties**· General Information· Appearance:

Form:	Pasty
Colour:	White
· Odour:	Specific type
· Odour threshold:	Not determined.

· pH-value: Not applicable

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

(Contd. on page 7)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.12.2015

Version number 13

Revision: 09.12.2015

Trade name: Hardener Paste white phthalate-free

(Contd. of page 6)

· <u>Flash point:</u>	Not applicable.
· <u>Flammability (solid, gaseous):</u>	Not applicable.
· <u>Self-igniting:</u>	Product is not selfigniting.
· <u>Danger of explosion:</u>	SADT 50 °C
· <u>Explosion limits:</u>	
<u>Lower:</u>	Not determined.
<u>Upper:</u>	Not determined.
· <u>Vapour pressure at 20 °C:</u>	1 hPa
· <u>Density at 20 °C:</u>	1,15 g/cm ³
· <u>Relative density</u>	Not determined.
· <u>Vapour density</u>	Not determined.
· <u>Evaporation rate</u>	Not determined.
· <u>Solubility in / Miscibility with water:</u>	Not miscible or difficult to mix.
· <u>Partition coefficient (n-octanol/water):</u>	Not determined.
· <u>Viscosity:</u>	
<u>Dynamic:</u>	Not determined.
<u>Kinematic:</u>	Not determined.
· <u>Solvent content:</u>	
<u>Organic solvents:</u>	0,0 %
· 9.2 Other information	No further relevant information available.

SECTION 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.
To avoid thermal decomposition do not overheat.
SDAT (Self Accelerating Decomposition Temperature) is defined as the lowest temperature at which self accelerating decomposition can occur within the transport packaging. A dangerous self accelerating decomposition reaction, under adverse circumstances resulting in explosion or fire, can arise from thermal decomposition at or above the mentioned temperature value. Contact with incompatible substances can cause decomposition at or already below SDAT.
- **10.3 Possibility of hazardous reactions**

Reacts with heavy metals.
Reacts with amines.
Reacts with strong alkali.
Reacts with strong acids.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- Acute toxicity Based on available data, the classification criteria are not met.

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.12.2015

Version number 13

Revision: 09.12.2015

Trade name: Hardener Paste white phthalate-free

(Contd. of page 7)

· LD/LC50 values relevant for classification:**94-36-0 dibenzoyl peroxide**

Oral	LD50	>5000 mg/kg (rat)
Inhalative	LC50/4 h	>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 (carcinogenicity, 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.

SECTION 12: Ecological information· **12.1 Toxicity**· Aquatic toxicity:**94-36-0 dibenzoyl peroxide**

EC50	35 mg/l (bacteria)
EC50/48h	0.11 mg/l (daphnia magna)
EC50/48h	2.9 mg/l (daphnia magna)
EC50/72h	0.0711 mg/l (Pseudokirchneriella subcapitata)
LC50/96h	0.0602 mg/l (Oncorhynchus mykiss)
	2 mg/l (poecilia reticulata)

· **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.

· Additional ecological information:· General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

· **12.5 Results of PBT and vPvB assessment**· PBT: Not applicable.· vPvB: Not applicable.· **12.6 Other adverse effects**

No further relevant information available.

SECTION 13: Disposal considerations· **13.1 Waste treatment methods**· Recommendation

Must be specially treated adhering to official regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

16 00 00	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 09 00	oxidising substances
16 09 03*	peroxides, for example hydrogen peroxide

(Contd. on page 9)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.12.2015

Version number 13




Revision: 09.12.2015

Trade name: Hardener Paste white phthalate-free

(Contd. of page 8)

- Uncleaned packaging:
- Recommendation: Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

SECTION 14: Transport information

- | | |
|---|---|
| · 14.1 UN-Number | UN3108 |
| · <u>ADR, IMDG, IATA</u> | |
| · 14.2 UN proper shipping name | 3108 ORGANIC PEROXIDE TYPE E, SOLID (dibenzoyl peroxide), ENVIRONMENTALLY HAZARDOUS |
| · <u>ADR</u> | ORGANIC PEROXIDE TYPE E, SOLID (dibenzoyl peroxide), MARINE POLLUTANT |
| · <u>IMDG</u> | Organic peroxide type E, solid (dibenzoyl peroxide) |
| · <u>IATA</u> | |
| · 14.3 Transport hazard class(es) | |
| · <u>ADR</u> | |
|  | |
| · <u>Class</u> | 5.2 (P1) Organic peroxides. |
| · <u>Label</u> | 5.2 |
| · <u>IMDG</u> | |
|  | |
| · <u>Class</u> | 5.2 Organic peroxides. |
| · <u>Label</u> | 5.2 |
| · <u>IATA</u> | |
|  | |
| · <u>Class</u> | 5.2 Organic peroxides. |
| · <u>Label</u> | 5.2 |
| · 14.4 Packing group | Void |
| · <u>ADR, IMDG, IATA</u> | |
| · 14.5 Environmental hazards: | |
| · <u>Marine pollutant:</u> | Symbol (fish and tree) |
| · <u>Special marking (ADR):</u> | Symbol (fish and tree) |
| · 14.6 Special precautions for user | Warning: Organic peroxides. |
| · <u>Danger code (Kemler):</u> | - |
| · <u>Stowage Category</u> | D |
| · <u>Stowage Code</u> | SW1 Protected from sources of heat. |
| · <u>Segregation Code</u> | SG35 Stow "separated from" acids.
SG36 Stow "separated from" alkalis. |
| · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |

(Contd. on page 10)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.12.2015

Version number 13

Revision: 09.12.2015

Trade name: Hardener Paste white phthalate-free

(Contd. of page 9)

· Transport/Additional information:

· ADR

· Limited quantities (LQ)

500 g

· Excepted quantities (EQ)

Code: E0

Not permitted as Excepted Quantity

· Transport category

2

· Tunnel restriction code

D

· UN "Model Regulation":

UN 3108 ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE), 5.2, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

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

· TSCA

All ingredients are listed.

· 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:

· Information about limitation of use: Employment restrictions concerning pregnant and lactating women must be observed.
Employment restrictions concerning juveniles must be observed.

· Waterhazard class:

Water hazard class 2 (Self-assessment): hazardous for water.

· **15.2 Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

SECTION 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.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
H413 May cause long lasting harmful effects to aquatic life.

· Recommended restriction of use

refer to Technical Data Sheet (TDS)

· Department issuing MSDS:

Laboratory

· Contact:

Dieter Zimmermann

· Abbreviations and acronyms:

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 Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

(Contd. on page 11)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.12.2015

Version number 13

Revision: 09.12.2015

Trade name: Hardener Paste white phthalate-free

(Contd. of page 10)

IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised 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
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Org. Perox. B: Organic Peroxides, Type B
Org. Perox. EF: Organic Peroxides, Types E, F
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

Aquatic Chronic 4: Hazardous to the aquatic environment - Chronic Hazard, Category 4

· Sources

· * Data compared to the previous version altered.

REACH directive 1907/2006/EC

Adaptation in accordance with REACH directive 1907/2006/EC

GB