

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.08.2018

Version number 4

Revision: 22.08.2018

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

1.1 Product identifier

Trade name:

Hardener for Colour Bond, 12 min

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

Sector of Use

No further relevant information available.

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SU21 Consumer uses: Private households / general public / consumers

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

Product category

PC1 Adhesives, sealants

Process category

PROC5 Mixing or blending in batch processes

Environmental release category

ERC2 Formulation into mixture

Application of the substance / the mixture

Hardening agent/ Curing agent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

AKEMI chemisch technische Spezialfabrik GmbH
Lechstrasse 28
D 90451 Nürnberg

Tel. +49(0)911-642960

Fax. +49(0)911-644456

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.

+44 (171) 635 91 91

National Poison Inform. Centre

Medical Toxicology Unit

Avalonley Road

London SE14 5ER

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

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



GHS07

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.

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 22.08.2018

Version number 4

Revision: 22.08.2018

Trade name: Hardener for Colour Bond, 12 min

(Contd. of page 1)

· Hazard pictograms

GHS07 GHS09

· Signal word

Warning

· Hazard-determining components of labelling:· Hazard statements

dibenzoyl peroxide

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.

P103 Read label before use.

P273 Avoid release to the environment.

P280 Wear protective gloves.

P302+P352 IF ON SKIN: Wash with plenty of water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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	dibenzoyl peroxide	<10%
EINECS: 202-327-6	Org. Perox. B, H241	
Index number: 617-008-00-0	Aquatic Acute 1, H400; Aquatic Chronic 1, H410	
Reg.nr.: 01-2119511472-50	Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 9038-95-3	Polyalkylen glycol monobutylether	1-5%
	Acute Tox. 4, H302; Eye Irrit. 2, H319	

· Additional information: For the wording of the listed hazard 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.

Take affected persons out into the fresh air.

· After inhalation:

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.

· After eye contact:

Rinse opened eye for several minutes under running water.

· 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.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.08.2018

Version number 4

Revision: 22.08.2018

Trade name: Hardener for Colour Bond, 12 min

(Contd. of page 2)

· Hazards· **4.3 Indication of any immediate medical attention and special treatment needed**

May irritates the skin: burning and itching. May cause allergic reactions of respiratory tract and skin.
Danger of impaired breathing.

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:**

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.

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.

· Information about fire - and explosion protection:

Substance/product is oxidising when dry.

Use explosion-proof apparatus / fittings and spark-proof tools.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.08.2018

Version number 4

Revision: 22.08.2018

Trade name: Hardener for Colour Bond, 12 min

(Contd. of page 3)

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.

· Further information about storage conditions:

Protect from contamination.
Store in a cool place.
Protect from frost.

· Storage class:

11

· **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:**94-36-0 dibenzoyl peroxide**WEL Long-term value: 5 mg/m³· 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.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.

· Respiratory protection:

Not necessary if room is well-ventilated.

Filter A/P2

Not required.

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:

Kresto Classic (<http://debstoko.com>)SOLOPOL (<http://www.stoko.com>)

Skin protection agent recommendation for skin aftercare:

STOKO VITAN (<http://www.stoko.com>)

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

(Contd. on page 5)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.08.2018

Version number 4

Revision: 22.08.2018

Trade name: Hardener for Colour Bond, 12 min

(Contd. of page 4)

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 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>).

**Protective gloves**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

· 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 ≤ 6

The exact break through 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)
Butoject (KCL, Art_No. 897, 898)
Butyl rubber, BR

· 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
Nitrile rubber, NBR

· Eye protection:

Not required.

· Body protection:

Protective work clothing

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.08.2018

Version number 4

Revision: 22.08.2018

Trade name: Hardener for Colour Bond, 12 min

(Contd. of page 5)

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/freezing point:

Undetermined.

Initial boiling point and boiling range: Undetermined.

· Flash point:

Not applicable.

· Flammability (solid, gas):

May cause fire.

· Decomposition temperature:

Not determined.

· Auto-ignition temperature:

Product is not selfigniting.

· Explosive properties:

SADT 50°C

· Explosion limits:

Lower:

Not determined.

Upper:

Not determined.

· Vapour pressure at 20 °C:

1 hPa

· Density:

Not determined.

· Relative density

Not determined.

· Vapour density

Not applicable.

· Evaporation rate

Not applicable.

· Solubility in / Miscibility with water:

Insoluble.

· Partition coefficient: n-octanol/water:

Not determined.

· Viscosity:

Dynamic:

Not applicable.

Kinematic:

Not applicable.

· Solvent content:

Organic solvents:

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.**· 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.

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.08.2018

Version number 4

Revision: 22.08.2018

Trade name: Hardener for Colour Bond, 12 min

(Contd. of page 6)

· **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.· LD/LC50 values relevant for classification:**ATE (Acute Toxicity Estimates)**

Oral	LD50	20,000 mg/kg
------	------	--------------

· Primary irritant effect:· Skin corrosion/irritation

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

· Serious eye damage/irritation

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

· 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:

No further relevant information available.

· **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.

· Ecotoxicological effects:· Remark:

Very toxic for fish

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

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

· **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.

· Uncleaned packaging:· Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

(Contd. on page 8)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.08.2018

Version number 4

Revision: 22.08.2018

Trade name: Hardener for Colour Bond, 12 min

(Contd. of page 7)

SECTION 14: Transport information

· 14.1 UN-Number · <u>ADR, IMDG, IATA</u>	UN3077
· 14.2 UN proper shipping name · <u>ADR</u> · <u>IMDG</u> · <u>IATA</u>	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide mixture)
· 14.3 Transport hazard class(es) · <u>ADR</u>   · <u>Class</u> · <u>Label</u>	9 (M7) Miscellaneous dangerous substances and articles. 9
· <u>IMDG, IATA</u>   · <u>Class</u> · <u>Label</u>	9 Miscellaneous dangerous substances and articles. 9
· 14.4 Packing group · <u>ADR, IMDG, IATA</u>	III
· 14.5 Environmental hazards: · <u>Marine pollutant:</u> · <u>Special marking (ADR):</u> · <u>Special marking (IATA):</u>	Product contains environmentally hazardous substances: Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
· 14.6 Special precautions for user · <u>Stowage Category</u> · <u>Stowage Code</u>	Warning: Miscellaneous dangerous substances and articles. A SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· <u>Transport/Additional information:</u>	
· <u>ADR</u> · <u>Limited quantities (LQ)</u> · <u>Excepted quantities (EQ)</u> · <u>Transport category</u> · <u>Tunnel restriction code</u>	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g 3 E

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.08.2018

Version number 4

Revision: 22.08.2018

Trade name: Hardener for Colour Bond, 12 min

(Contd. of page 8)

· <u>IMDG</u>	
· <u>Limited quantities (LQ)</u>	5 kg
· <u>Excepted quantities (EQ)</u>	Code: E1
	Maximum net quantity per inner packaging: 30 g
	Maximum net quantity per outer packaging: 1000 g
· <u>UN "Model Regulation":</u>	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DIBENZOYL PEROXIDE), 9, III

SECTION 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 E1 Hazardous to the Aquatic Environment
- Qualifying quantity (tonnes) for the application of lower-tier requirements 100 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 1 (Self-assessment): slightly hazardous for water.
- VOC EU 0.0 g/l
- **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.
H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
- Recommended restriction of use refer to Technical Data Sheet (TDS)
- Department issuing SDS: 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)
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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

(Contd. on page 10)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.08.2018

Version number 4

Revision: 22.08.2018

Trade name: Hardener for Colour Bond, 12 min

(Contd. of page 9)

PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Org. Perox. B: Organic peroxides – Type B
Acute Tox. 4: Acute toxicity – Category 4
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
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
REACH directive 1907/2006/EC

· Sources· * Data compared to the previous
version altered.

Adaptation in accordance with REACH directive 1907/2006/EC

GB