

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.08.2020

Version number 2

Revision: 19.08.2020





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

- **1.1 Product identifier**
- Trade name: **IKO Perkadox**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**
 SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
 SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Application of the substance / the mixture** Quenchant
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 IKO Europe nv
 d'Herbouvillekaai 80
 B-2020 Antwerpen
 Belgium
 Tel.: +32 (0)3 248 30 00
 E-mail: sds.europe@iko.com
- **Further information obtainable from:**
 National Poisons Information Service UK: England and Wales: 0845 4647 Scotland: 08454 24 24 24;
 National Poisons Information Centre Ireland: +00 353 (0) 1 837 9964 or +00 353 (0) 1 809 2566. NPIS
 & NPIC services are provided exclusively for healthcare professionals working in NHS.
- **1.4 Emergency telephone number:**
 United Kingdom National Poisons Information Service (+44) 844 892 0111 - 0344 892 0111
 Ireland National Poisons Information Centre Tel: +353 1 8092566
 Emergency call only for healthcare professionals

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**

Self-react. C	H242	Heating may cause a fire.
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	GHS09
- **Signal word** Danger
- **Hazard-determining components of labelling:**
 dicyclohexyl phthalate

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dibenzoyl peroxide

- **Hazard statements**

H242 Heating may cause a fire.

H242 Heating may cause a fire.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H360D May damage the unborn child.

H410 Very toxic to aquatic life with long lasting effects.

- **Precautionary statements**

P201 Obtain special instructions before use.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P234 Keep in original packaging.

P240 Ground and bond container and receiving equipment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P370+P378 In case of fire: Use for extinction: CO₂, powder or water spray.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Additional information:**

Restricted to professional users.

- **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 of substances listed below with nonhazardous additions.

Mixture of aliphatic hydrocarbons and bitumen.

- **Dangerous components:**

CAS: 94-36-0 EINECS: 202-327-6 Reg.nr.: 01-2119511472-50	dibenzoyl peroxide	Org. Perox. B, H241 Aquatic Acute 1, H400 Eye Irrit. 2, H319; Skin Sens. 1, H317	≥40-≤60%
CAS: 84-61-7 EINECS: 201-545-9 Reg.nr.: 01-2119978223-34	dicyclohexyl phthalate	Repr. 2, H361 Skin Sens. 1, H317 Aquatic Chronic 3, H412	≥40-≤50%

- **SVHC**

CAS: 84-61-7 | dicyclohexyl phthalate

- **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:**

Seek immediate medical advice.

Take affected persons out of danger area and lay down.

- **After inhalation:**

Take affected persons into fresh air and keep quiet.

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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 immediately with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Hold eye wide open during flushing. Seek medical attention if symptoms persist.

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.

• **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.

SECTION 5: Firefighting measures

• **5.1 Extinguishing media**

• **Suitable extinguishing agents:**

Water spray

Alcohol resistant foam

Fire-extinguishing powder

Sand

Use fire extinguishing methods suitable to surrounding conditions.

• **5.2 Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

Accelerates combustion.

PLEASE NOTE that there may be reignition.

• **5.3 Advice for firefighters**

• **Protective equipment:** Wear self-contained respiratory protective device.

• **Additional information**

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

• **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective clothing.

Avoid formation of dust.

Ensure adequate ventilation

Keep away from ignition sources.

• **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:**

Keep wet with water.

Send for recovery or disposal in suitable receptacles.

• **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Keep away from heat and direct sunlight.
Use only in well ventilated areas.
Provide suction extractors if dust is formed.
- **Information about fire - and explosion protection:**
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.
Store in cool, dry place in tightly closed receptacles.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store in a cool place.
Keep container tightly sealed.
- **Storage class:** Hazard group OP II (Organic peroxides, BGV B4)

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:**

CAS: 94-36-0 dibenzoyl peroxide	
WEL	Long-term value: 5 mg/m ³
CAS: 84-61-7 dicyclohexyl phthalate	
WEL	Long-term value: 5 mg/m ³

- **DNELs**

94-36-0 dibenzoylperoxide

workers inhalation long term systemic effects :11.75 mg/m³

workers skin contact long term system effects : 6.6 mg/kg

consumers inhalation long term system effects : 2.9 mg/kg

consumers skin contact long term systemic effects :3.3 mg/kg

consumers ingestion long term system effects : 1.65 mg/kg

84-61-7 dicyclohexyl phthalate

workers skin contact acute system effects : 0.5 mg/kg

workers skin contact long term system effects : 0.5 mg/kg

workers inhalation acute system effects : 35.2 mg/kg

consumers inhalation acute system effects : 0.87 mg/kg

consumers skin contact long term system effects :0.25 mg/kg

consumers ingestion long term system effects : 0.25 mg/kg

- **PNECs**

94-36-0 dibenzoylperoxide

fresh water : 0.000602 mg/l

marine water : 0.000060 mg/l

intermittent water : 0.000602 mg/l

sewage treatment plant : 0.35 mg/l

fresh water sediment : 0.338 mg/l

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soil : 0.0758 mg/l
 secondary poisoning : 6.67 mg/l
 84-61-7 dicyclohexyl phthalate
 fresh water : 0.00362 mg/l
 intermittent water : 0.0326 mg/l
 marine water : 0.000362 mg/l
 oral : 133 mg/kg food
 fresh water sediment : 1.06 mg/kg dry weight
 marine sediment : 0.106 mg/kg dry weight
 sewage treatment plant : 10 mg/l
 soil : 0.21 mg/kg dry weight

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

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

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.
 Avoid contact with the eyes and skin.

· **Respiratory protection:** Filter P3

· **Protection of hands:**



Protective gloves

· **Material of gloves**

Nitrile rubber, NBR

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**

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

SECTION 9: Physical and chemical properties

55 °C

· **9.1 Information on basic physical and chemical properties**

· **Appearance:**

Form:	Powder
Colour:	White

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· Odour:	Light
· Odour threshold:	Not determined.
· pH-value:	Not applicable.
· Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	400 °C
· Flash point:	Not applicable.
· Flammability (solid, gas):	May cause fire.
· Ignition temperature:	Not determined.
· Decomposition temperature:	55°C
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Oxidising properties	Not determined.
· Vapour pressure:	Not applicable.
· Density at 20 °C:	1.23 g/cm ³
· Bulk density:	620-650 kg/m ³
· 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:	
Solids content:	100.0 %
· 9.2 Other information	active oxigen content : 3.3% Organic peroxides : 48-55% No further information available. 3.3 %

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 according to specifications.
- **10.3 Possibility of hazardous reactions**
Risk of dust explosion if enriched with fine dust in the presence of air.
Reacts with alkali and metals.
Reacts with acids.
- **10.4 Conditions to avoid** Keep away from heat and direct sunlight.
- **10.5 Incompatible materials:**
Reacts with reducing agents.
Reacts with heavy metals.
Acids, bases and amines.

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- **10.6 Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Benzoic acid
Benzene
SADT : 55°C

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:**
94-36-0 Dibenzoyl peroxide:
oral LD50 : >5000 mg/kg (rat)
inhalation: LC 50 : > 24.3 mg/l (rat)
84-61-7 Dicyclohexyl phthalate:
oral LD50 : >2000 mg/kg (rat)
dermal LD50 : >2000 mg/kg (rat)
- | | | |
|--|------|--------------------|
| CAS: 84-61-7 dicyclohexyl phthalate | | |
| Oral | LD50 | 30,000 mg/kg (rat) |
- **Primary irritant effect:**
 - **Skin corrosion/irritation** May cause skin irritation.
 - **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**
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.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**
94-36-0 Dibenzoyl peroxide
LC50 : 0.06 mg/l 96h (fish)
EC50 : 0.11 mg/l 48h (Daphnia magna)
84-61-7 Dicyclohexylphthalate
LC50 : > 2 mg/l 96h (fish)
EC50 : > 2 mg/l 48h (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.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish

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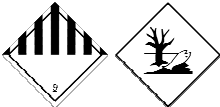
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- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Also poisonous for fish and plankton in water bodies.
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**
Disposal should be in accordance with applicable regional, national and local laws and regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN3106
- **14.2 UN proper shipping name**
- **ADR** UN3106 ORGANIC PEROXIDE TYPE D, SOLID, ENVIRONMENTALLY HAZARDOUS
- **IMDG** ORGANIC PEROXIDE TYPE D, SOLID, MARINE POLLUTANT
- **IATA** ORGANIC PEROXIDE TYPE D, SOLID
- **14.3 Transport hazard class(es)**
- **ADR**
- 
- **Class** 5.2 Organic peroxides.
- **Label** 9
- **IMDG**
- 
- **Class** 9 Miscellaneous dangerous substances and articles.

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· Label	9
· IATA	
	
· Class	5.2 Organic peroxides.
· Label	9
· 14.4 Packing group	
· IMDG	Void
· 14.5 Environmental hazards:	
· Marine pollutant:	Yes Symbol (fish and tree)
· Special marking (ADR):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Organic peroxides.
· EMS Number:	F-J,S-R
· Stowage Category	D
· Stowage Code	SW1 Protected from sources of heat.
· Segregation Code	SG35 Stow "separated from" SGG1-acids SG36 Stow "separated from" SGG18-alkalis.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	500 g
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· Transport category	3
· Tunnel restriction code	D
· UN "Model Regulation":	UN 3106 ORGANIC PEROXIDE TYPE D, SOLID, 9, ENVIRONMENTALLY HAZARDOUS

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
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: 30

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- **National regulations:**
- **Other regulations, limitations and prohibitive regulations**
- **Substances of very high concern (SVHC) according to REACH, Article 57**

CAS: 84-61-7 dicyclohexyl phthalate

- **15.2 Chemical safety assessment:**
A chemical safety assesment has been carried out for dibenzoyl peroxide
A chemical safety assesment is carried out for dicyclohexyl phtalate.
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.

This Safety Data Sheet (SDS) is calculated with a Calculation method based on CLP Annex I, parts 2 to 5.

- **Relevant phrases**

H241 Heating may cause a fire or explosion.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H361 Suspected of damaging fertility or the unborn child.
H400 Very toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

- **Contact:** sds.europe@iko.com

- **Abbreviations and acronyms:**

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)
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
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Self-react. C: Self-reactive substances and mixtures – Type C/D
Org. Perox. B: Organic peroxides – Type B
Org. Perox. D: Organic peroxides – Type C/D
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Repr. 1B: Reproductive toxicity – Category 1B
Repr. 2: Reproductive toxicity – 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
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

- *** Data compared to the previous version altered.**