## **Safety Data Sheet**





Page 1 of 10

Revision date: 20.11.2019

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

#### 1.1. Product identifier

KaVo Oxygenal 6

Product code:

0.489.3451

#### Further trade names

Oxygenal

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

#### Use of the substance/mixture

The product is intended for professional use.

## 1.3. Details of the supplier of the safety data sheet

Company name: KaVo Dental GmbH Street: Bismarckring 39 Place: D-88400 Biberach

Telephone: +49 (0) 7351 56 0 Telefax: + 49 (0) 7351 56 1488

e-mail: sdb@kavo.com

e-mail (Contact person): support@gefahrstoff.com

Internet: www.kavo.com

Responsible Department: Questions concerning SDB: PES-Ingenieurgesellschaft mbH

**1.4. Emergency telephone** +49 (0) 7351 56 4000 (24 h)

number:

### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

## Regulation (EC) No. 1272/2008

Hazard categories:

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:

Causes serious eye irritation.

#### 2.2. Label elements

## Regulation (EC) No. 1272/2008

Signal word: Warning

Pictograms:



## **Hazard statements**

H319 Causes serious eye irritation.

## **Precautionary statements**

P264 Wash hands thoroughly after handling.

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.

## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006



Page 2 of 10

Revision date: 20.11.2019

Print date: 21.11.2019

P337+P313 If eye irritation persists: Get medical advice/attention.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Warning

Pictograms:



#### 2.3. Other hazards

No information available.

## **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

#### **Hazardous components**

CAS No	Chemical name			Quantity	
	EC No	Index No	REACH No		
	GHS Classification				
7722-84-1	Hydrogen peroxide solution			5,5 - 6 %	
	231-765-0	008-003-00-9	01-2119485845-22		
	Ox. Liq. 1, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1A, STOT SE 3; H271 H332 H302 H314 H335				

Full text of H and EUH statements: see section 16.

## **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### **General information**

Move victim to fresh air. Put victim at rest and keep warm. If breathing is irregular or stopped, administer artificial respiration. Where appropriate artificial ventilation. If unconscious place in recovery position and seek medical advice. Observe risk of aspiration if vomiting occurs. When in doubt or if symptoms are observed, get medical advice.

## After inhalation

Provide fresh air. If experiencing respiratory symptoms: Get medical advice/attention.

#### After contact with skin

After contact with skin, wash immediately with plenty of water. Take off contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

#### After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

## After ingestion

Rinse mouth immediately and drink plenty of water. Get medical advice/attention if you feel unwell.

Handling larger quantities: Call a physician immediately.

### 4.2. Most important symptoms and effects, both acute and delayed

Irritating to eyes.

Following skin contact: slightly irritant

#### 4.3. Indication of any immediate medical attention and special treatment needed

## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006



Page 3 of 10

Revision date: 20.11.2019

Print date: 21.11.2019

Treat symptomatically.

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

#### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

#### 5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Gases/vapours, toxic.

#### 5.3. Advice for firefighters

Fight fire with normal precautions from a reasonable distance. In case of fire: Wear self-contained breathing apparatus.

#### **Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Move undamaged containers from immediate hazard area if it can be done safely. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Remove all sources of ignition. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Evacuate area. Remove persons to safety. Use personal protection equipment.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

### 6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal. Treat the recovered material as prescribed in the section on waste disposal.

Clean contaminated articles and floor according to the environmental legislation.

## 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

#### Advice on safe handling

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

#### Advice on protection against fire and explosion

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

#### Further information on handling

Clear contaminated areas thoroughly. Wash contaminated clothing prior to re-use.

#### 7.2. Conditions for safe storage, including any incompatibilities

## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006



Page 4 of 10

Revision date: 20.11.2019

#### Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect containers against damage.

Suitable container/equipment material: Stainless steel, Aluminium, plastic, Glass

#### Hints on joint storage

No information available.

## Further information on storage conditions

Protect against: Frost, Light, UV-radiation/sunlight.

#### 7.3. Specific end use(s)

The product is intended for professional use.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

## **Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
7722-84-1	Hydrogen peroxide	1	1.4		TWA (8 h)	WEL
		2	2.8		STEL (15 min)	WEL

#### 8.2. Exposure controls







## Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

## Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Avoid contact with skin, eyes and clothes. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. Keep away from food, drink and animal feedingstuffs.

### Eye/face protection

Wear eye/face protection.

## Hand protection

Wear suitable gloves.

Suitable material: Butyl caoutchouc (butyl rubber), NBR (Nitrile rubber), NR (natural rubber, natural latex), PE (polyethylene), FKM (fluoro rubber), PE/EVA, PVC (polyvinyl chloride)

Unsuitable material: CR (polychloroprene, chloroprene rubber), PVA (Polyvinyl alcohol)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

## **Safety Data Sheet**

**K4VO**Dental Excellence

according to Regulation (EC) No 1907/2006

Page 5 of 10

Revision date: 20.11.2019

#### Skin protection

Wear suitable protective clothing.

#### Respiratory protection

Usually no personal respirative protection necessary. In case of inadequate ventilation wear respiratory protection.

#### **Environmental exposure controls**

Do not allow to enter into surface water or drains.

#### **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour: colourless, clear Odour: odourless

pH-Value: 3,0 - 4,0

Changes in the physical state

Melting point:  $-6 \, ^{\circ}\mathrm{C}$  Initial boiling point and boiling range:  $103 \, ^{\circ}\mathrm{C}$  Flash point: not applicable

Flammability

Solid: not applicable
Gas: not applicable

**Explosive properties** 

No information available.

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not determined

not determined

**Auto-ignition temperature** 

Solid: not applicable
Gas: not applicable

Decomposition temperature: not determined

Oxidizing properties

No information available.

Vapour pressure: not determined

Density: 1,021 - 1,023 g/cm³

Water solubility: completely miscible

Solubility in other solvents

Soluble in: Ether, Ethanol

Partition coefficient: -1,36
Viscosity / dynamic: 1,77 mPa·s

(at 0 °C)

Viscosity / kinematic: not determined
Vapour density: not applicable

## **Safety Data Sheet**



according to Regulation (EC) No 1907/2006

Page 6 of 10

Revision date: 20.11.2019

Print date: 21.11.2019

Evaporation rate: not applicable

#### 9.2. Other information

Odour threshold: not applicable

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

#### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

In case of light influence: Oxidation (slow decomposition; Hydrogen peroxide: May intensify fire; oxidiser.)

Impurities may cause catalytic decomposition (see subsection 10.5).

### 10.3. Possibility of hazardous reactions

May cause decomposition by long-term light influence. (Oxidation; Hydrogen peroxide: May intensify fire; oxidiser.)

#### 10.4. Conditions to avoid

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

Protect against: Frost, Light, UV-radiation/sunlight.

#### 10.5. Incompatible materials

Avoid: Hazardous impurities.

#### 10.6. Hazardous decomposition products

No information available.

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

## **Acute toxicity**

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

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
7722-84-1	Hydrogen peroxide solution						
	oral	ATE mg/kg	500				
	dermal	LD50 mg/kg	> 2000	Rabbit	Manufacturer		
	inhalation vapour	ATE	11 mg/l				
	inhalation aerosol	ATE	1,5 mg/l				

## Irritation and corrosivity

Causes serious eye irritation.

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

Following skin contact: slightly irritant

#### Sensitising effects

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

#### Carcinogenic/mutagenic/toxic effects for reproduction

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

## **Safety Data Sheet**

K4VO

Dental Excellence

according to Regulation (EC) No 1907/2006

Page 7 of 10

Revision date: 20.11.2019

#### 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

The product is not: Ecotoxic.

#### 12.2. Persistence and degradability

Hydrogen peroxide:

Degradation: not applicable; Photolysis (air)

## 12.3. Bioaccumulative potential

The product has not been tested.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
7722-84-1	Hydrogen peroxide solution	-1,36

## 12.4. Mobility in soil

The product has not been tested.

#### 12.5. Results of PBT and vPvB assessment

No information available.

#### 12.6. Other adverse effects

No information available.

#### **Further information**

Avoid release to the environment.

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

## Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

## Waste disposal number of waste from residues/unused products

061399 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from inorganic chemical processes not otherwise specified; wastes not otherwise specified

## Waste disposal number of used product

061399 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from inorganic chemical processes not otherwise specified; wastes not otherwise specified

### Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

## **SECTION 14: Transport information**

#### Land transport (ADR/RID)

## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006



Page 8 of 10

Revision date: 20.11.2019

Print date: 21.11.2019

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

## 14.6. Special precautions for user

No information available.

## 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

#### **SECTION 15: Regulatory information**

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

## **EU** regulatory information

Restrictions on use (REACH, annex XVII): Entry 3: Hydrogen peroxide solution

2010/75/EU (VOC): not applicable

Information according to 2012/18/EU Not subject to 2012/18/EU (SEVESO III)

(SEVESO III):

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile

work protection guideline' (94/33/EC).

Water contaminating class (D): 1 - slightly water contaminating

## 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

#### **SECTION 16: Other information**

## **Safety Data Sheet**



according to Regulation (EC) No 1907/2006

Page 9 of 10

Revision date: 20.11.2019

#### Changes

This data sheet contains changes from the previous version in section(s): 2,3,4,5,6,7,8,9,10,11,12,13,15,16.

## Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

**UN: United Nations** 

CAS: Chemical Abstracts Service **DNEL: Derived No Effect Level** DMEL: Derived Minimal Effect Level PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate LC50: Lethal concentration, 50%

LD50: Lethal dose, 50% LL50: Lethal loading, 50% EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative

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

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

IMDG: International Maritime Code for Dangerous Goods

EmS: Emergency Schedules MFAG: Medical First Aid Guide

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container VOC: Volatile Organic Compounds SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Eye Irrit. 2; H319	Calculation method

## R

Relevant H and EUH statements (number and full text)					
H271	May cause fire or explosion; strong oxidiser.				
H302	Harmful if swallowed.				
H314	Causes severe skin burns and eye damage.				
H319	Causes serious eye irritation.				

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006



Page 10 of 10

Revision date: 20.11.2019

Print date: 21.11.2019

#### **Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)