Revision: 11.12.2024

Sicherheitsdatenblatt gemäß 1907/2006/EG, Artikel 31

Printing date 11.12.2024

Version number 6 (replaces version 5)

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

· 1.1 Product identifier

Trade name: BENAMIN Fresh

- · UFI: E861-10JP-D00K-XHX4
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.

- · Application of the substance / the mixture Disinfectant
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

BWT Holding GmbH Walter-Simmer-Straße 4 A - 5310 Mondsee

AUSTRIA

Tel.: +43/6232/5011-0 Fax: +43/6232/4058 email: office@bwt.at

· Further information obtainable from:

Abteilung F&E - Chemikalienbeauftragte(r)

Tel.: +43/6232/5011-1893 +43/6232/5011-1427

email: msds-info@bwt-group.com

· 1.4 Emergency telephone number:

Poison center Vienna Tel.: +43/1-406 43 43

SECTION 2: Hazards identification

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



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H335 May cause respiratory irritation.

- · 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





GHS05 GHS07

- · Signal word Danger
- · Hazard-determining components of labelling:

hydrogen peroxide solution

(Contd. on page 2)

Printing date 11.12.2024

Version number 6 (replaces version 5) Revision: 11.12.2024

Trade name: BENAMIN Fresh

(Contd. of page 1)

· Hazard statements

H302+H332 Harmful if swallowed or if inhaled.

H315 Causes skin irritation. H318 Causes serious eye damage. H335 May cause respiratory irritation.

· Precautionary statements

P261 Avoid breathing mist/vapours/spray.

P280 Wear protective gloves / eye protection / face protection.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P301+P312

P302+P352 IF ON SKIN: Wash with plenty of water. P310 Immediately call a POISON CENTER/doctor.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. P304+P340

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P405 Store locked up.

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

regulations.

· Additional information:

Product contains: Restricted explosives precursors. Making available, introduction, possession and use according to Regulation (EU) 2019/1148, Article 5 (1) and (3).

Contains biocidal products: hydrogen peroxide solution

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- Determination of endocrine-disrupting properties

This product does not contain ingredients with endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% (w/w) or more.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Dangerous components:

· **Description:** Mixture of substances listed below with nonhazardous additions.

CAS: 7722-84-1	hydrogen peroxide solution	≥35-<50%
		<u>-</u> 33-\30/0
EINECS: 231-765-0	⋄ Ox. Liq. 1, H271	
Reg.nr.: 01-2119485845-22-xxxx	Skin Corr. 1A, H314	
	Acute Tox. 4, H302; Acute Tox. 4, H332	
	Åquatic Chronic 3, H412	
	Specific concentration limits: Ox. Liq. 1; H271: C ≥ 70 %	
	Ox. Liq. 2; H272: $50 \% \le C <$	
	70 %	
	Skin Corr. 1A; H314: C ≥ 70 %	
	Skin Corr. 1B; H314: 50 % ≤ C	
	< 70 %	
	Skin Irrit. 2; H315: 35 % ≤ C <	
	50 %	
	Eye Dam. 1; H318: C ≥ 8 %	
	Eye Irrit. 2; H319: 5 % ≤ C < 8	

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

STOT SE 3; H335: C ≥ 35 %

Printing date 11.12.2024

Version number 6 (replaces version 5)

Trade name: BENAMIN Fresh

(Contd. of page 2)

Revision: 11.12.2024

SECTION 4: First aid measures

4.1 Description of first aid measures

· General information:

If you feel unwell, contact a POISON CENTRE or doctor.

Immediately remove any clothing contaminated with the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

In case of unconsciousness place patient stably in side position for transportation.

In the event of irregular breathing or respiratory arrest, initiate artificial respiration.

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

· After skin contact:

If skin irritation persists, consult a doctor.

Immediately rinse with water.

· After eye contact:

Call a doctor immediately.

Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing:

Rinse mouth with water and drink plenty of water. Never give anything by mouth to an unconscious person. Place a vomiting person lying on their back in the recovery position.

Call for a doctor immediately.

- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- \cdot 4.3 Indication of any immediate medical attention and special treatment needed

First aiders should take care to protect themselves and wear the recommended protective clothing.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: Water spray
- · For safety reasons unsuitable extinguishing agents:

Full jet of water

Carbon dioxide

· 5.2 Special hazards arising from the substance or mixture

The product itself does not burn.

When exposed to heat from fire, oxygen is released, which promotes combustion.

Pressure increase and risk of bursting during heating.

- · 5.3 Advice for firefighters
- · Protective equipment:

Mouth respiratory protective device.

In case of fire, wear self-contained breathing apparatus.

Wear suitable protective clothing (full protective suit).

Collect contaminated extinguishing water separately.

Do not allow extinguishing water to enter sewers and bodies of water.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Keep unprotected persons away.

Ensure adequate ventilation.

Do not inhale vapour.

Avoid contact with eyes and skin.

Wear protective equipment. Keep unprotected persons away.

• 6.2 Environmental precautions: Do not allow to enter sewers/surface or ground water.

(Contd. on page 4)

Printing date 11.12.2024

Version number 6 (replaces version 5)

Trade name: BENAMIN Fresh

(Contd. of page 3)

Revision: 11.12.2024

· 6.3 Methods and material for containment and cleaning up:

Take up leaking material with non-combustible, absorbent material (e.g. sand, diatomaceous earth).

After removing the product, rinse the area with water.

Dispose of in suitable containers.

Ensure adequate ventilation.

Dispose contaminated material as waste according to section 13.

· 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

Do not seal receptacles gas-tight.

Use personal protective equipment.

Avoid contact with skin and eyes.

Do not inhale vapours and spray mist.

Emergency eye showers should be available in the immediate vicinity.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about fire - and explosion protection:

This product is not flammable. Usual fire prevention measures.

Heating leads to an increase in pressure and risk of bursting.

· Handling:

Do not eat, drink or smoke in the application area.

Wash hands before breaks and at the end of work.

Remove contaminated clothing immediately.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Protect from heat and direct sunlight.

Store in a cool and dry place.

· Information about storage in one common storage facility:

Store away from flammable substances.

Do not store together with alkalis.

Keep away from food, drink and animal feed.

- · Further information about storage conditions: Keep container tightly sealed.
- · Storage class: 5.1 B
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· DNELs					
CAS: 7722	CAS: 7722-84-1 hydrogen peroxide solution				
Inhalative	DNEL inhalativ	1,93 mg/m3 (general population) Acute, local effects			
		3 mg/m3 (worker) Acute, local effects			

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

(Contd. on page 5)

Printing date 11.12.2024

Version number 6 (replaces version 5)

Trade name: BENAMIN Fresh

(Contd. of page 4)

Revision: 11.12.2024

- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as 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 and skin.

· Respiratory protection:

Use suitable respiratory protective device only when aerosol or mist is formed.

Recommended filter type:

Filter P2

Type: ABEK (combination filter for gases and vapours, identification colour: brown/grey/yellow/green). 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.

Hand protection



Protective gloves

According to EN 374.

Protective gloves should be replaced at the first sign of wear.

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

· Material of gloves

Nitrile rubber, NBR

Butyl rubber, BR

Natural rubber, NR

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

≥8h

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection



Tightly sealed goggles

- · Body protection: Acid resistant protective clothing
- · Environmental exposure controls

In the event of contamination of water bodies, sewage systems and/or ingress into the ground, inform the relevant authorities.

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information

· Physical state Fluid

· Colour: Colourless to light yellow

· Odour: Acrid

· *Odour threshold:* Not determined.

(Contd. on page 6)

Printing date 11.12.2024 Version number 6 (replaces version 5) Revision: 11.12.2024

Trade name: BENAMIN Fresh

(Contd. of page 5) · Melting point/freezing point: Undetermined. · Boiling point or initial boiling point and boiling 108 °C · Flammability *Not applicable.* · Lower and upper explosion limit · Lower: Not determined. · Upper: Not determined. · Flash point: Not applicable. · Decomposition temperature: Not determined. · pH at 20 °C >2-4 · Viscosity: Not determined. · Kinematic viscosity · Dynamic: Not determined. ·Solubility · water: Fully miscible. Not determined. · Partition coefficient n-octanol/water (log value) · Vapour pressure: Not determined. · Density and/or relative density Density at 20 °C: 1,132 g/cm3 Not determined. · Relative density · Vapour density Not determined. 9.2 Other information · Appearance: · Form: Fluid Important information on protection of health and environment, and on safety. Ignition temperature: Product is not selfigniting. · Explosive properties: Product does not present an explosion hazard. · Solvent content: · VOC (EC) 0,00% · Change in condition · Evaporation rate Not determined. · Information with regard to physical hazard classes · Explosives Void · Flammable gases Void · Aerosols Void · Oxidising gases Void · Gases under pressure Void · Flammable liquids Void · Flammable solids Void · Self-reactive substances and mixtures Void · Pyrophoric liquids Void · Pyrophoric solids Void · Self-heating substances and mixtures Void · Substances and mixtures, which emit flammable gases in contact with water Void · Oxidising liquids Void · Oxidising solids Void · Organic peroxides Void

Void

Void

SECTION 10: Stability and reactivity

· Corrosive to metals

· Desensitised explosives

· 10.1 Reactivity The product reacts with copper, aluminium, zinc and their alloys.

(Contd. on page 7)

Printing date 11.12.2024

Version number 6 (replaces version 5)

Trade name: BENAMIN Fresh

(Contd. of page 6)

Revision: 11.12.2024

- · 10.2 Chemical stability The product is stable under normal storage conditions.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions

Elevated temperatures or catalysers decompose hydrogen peroxide into water and oxygen.

· 10.4 Conditions to avoid

Heat, flames and sparks.

Protect from direct sunlight, gas development through decomposition leads to pressure in closed systems.

· 10.5 Incompatible materials:

Flammable substances

Organic materials

Strong reducing agents

Copper

Metal oxides

Zinc

Aluminium

Bases

Acetone

• 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Harmful if swallowed or if inhaled.

· LD/LC50	LD/LC50 values relevant for classification:				
Oral	LD50	1.078-1.231 mg/kg (rat) (Rechenmethode)Eingestuft, basierend auf der Berechungsmethode der CLP-Verordnung.			
Dermal	LD50	>2.000 mg/kg (rabbit) (Rechenmethode)Nicht eingestuft, basierend auf der Berechnungsmethode der CLP Verordnung.			
Inhalative	LD50	3,75-4,29 mg/l /4h (rat) (Staub/Nebel) (Rechenmethode)Eingestuft, basierend auf der Berechungsmethode der CLP-Verordnung.			

CAS: 7722	CAS: 7722-84-1 hydrogen peroxide solution			
Oral	LD50	431 mg/kg (rat)		
		(Ratte, männlich und weiblich) (US-EPA-Methode)		
Dermal	LD50	>2.000 mg/kg (rabbit)		
Inhalative	LC50/4 h	11 mg/l (rat)		

- · Primary irritant effect:
- · Skin corrosion/irritation Causes skin irritation.
- · Serious eye damage/irritation Causes serious eye damage.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · 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 May cause respiratory irritation.
- · 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.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

DE/EN

Printing date 11.12.2024

Version number 6 (replaces version 5)

Trade name: BENAMIN Fresh

(Contd. of page 7)

Revision: 11.12.2024

SECTION 12: Ecological information

· 12.1 Toxicity

	Aquatic toxicity:			
Ī	CAS: 7722-84-1 hydrogen peroxide solution			
ſ	LC50 / 48h	2,4 mg/l (wir)		
		>1.000 mg/L /3h (bac) statischer Test; OECD- Prüfrichtlinie 209		
		1,38 mg/l (algae)		
ı	ErC50//2n ErC50	1,38 mg/l (algae) 1,38 mg/l /72h (algae)		
	LC50/96h	16,4 mg/l (fìsh)		

· 12.2 Persistence and degradability

Easily biodegradable

The product can be degraded by abiotic, e.g. chemical or photolytic processes. Decomposition with release of oxygen.

- · 12.3 Bioaccumulative potential non-bioaccumulative
- · 12.4 Mobility in soil

The product is mobile in an aqueous environment.

Adsorption on the ground is not to be expected.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- · 12.7 Other adverse effects
- · 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.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Special disposal in accordance with local legal regulations is required.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

		1 0		0 0	1	0	-
· European waste catalogue							
16 09 03* peroxides, for example hydrogen peroxide							
HP6 Acute Toxicity							
HP8 Corrosive							
	HP14	Ecotoxic					

- · Uncleaned packaging:
- · Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning. Packagings that may not be cleansed are to be disposed of in the same manner as the product.

· Recommended cleansing agents: Water

DE/EN

Printing date 11.12.2024 Version number 6 (replaces version 5)

Trade name: BENAMIN Fresh

(Contd. of page 8)

Revision: 11.12.2024

SECTION 14: Transport information	
14.1 UN number or ID number ADR, IMDG, IATA	UN2014
14.2 UN proper shipping name ADR IMDG, IATA	2014 HYDROGEN PEROXIDE, AQUEOUS SOLUTI HYDROGEN PEROXIDE, AQUEOUS SOLUTION
14.3 Transport hazard class(es)	
ADR	
Class	5.1 Oxidising substances. 5.1+8
Label IMDG	5.1+8
Class Label	5.1 Oxidising substances. 5.1/8
Class Label	5.1 Oxidising substances. Forbidden
14.4 Packing group ADR, IMDG, IATA	II
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user Hazard identification number (Kemler code): EMS Number: Segregation groups	Warning: Oxidising substances. 58 F-H,S-Q (SGG16) Peroxides
Stowage Category	D
Stowage Code Segregation Code	SW1 Protected from sources of heat. SG16 Stow "separated from" class 4.1 SG59 Stow "separated from" SGG14-permanganates SG72 See 7.2.6.3.2.
14.7 Maritime transport in bulk according to IM instruments	10 Not applicable.
Transport/Additional information:	
ADR Limited quantities (LQ) Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml
Transport category	Maximum net quantity per outer packaging: 500 ml 2

(Contd. on page 10)

Printing date 11.12.2024 Version number 6 (replaces version 5) Revision: 11.12.2024

Trade name: BENAMIN Fresh

	(Contd. of page 9)
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	1L
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 2014 HYDROGEN PEROXIDE, AQUEOUS SOLUTION, 5.1 (8), II

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Labelling according to Regulation (EC) No 1272/2008

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

· Hazard pictograms





GHS05 GHS07

- · Signal word Danger
- · Hazard-determining components of labelling:

hydrogen peroxide solution

· Hazard statements

H302+H332 Harmful if swallowed or if inhaled.

H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

· Precautionary statements

P261 Avoid breathing mist/vapours/spray.

P280 Wear protective gloves / eye protection / face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P302+P352 IF ON SKIN: Wash with plenty of water. P310 Immediately call a POISON CENTER/doctor.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P405 Store locked up.

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

regulations.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

- · REGULATION (EU) 2019/1148
- · Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

All substances have the value >12-≤35 %.

(Contd. on page 11)

Printing date 11.12.2024

Version number 6 (replaces version 5)

Trade name: BENAMIN Fresh

(Contd. of page 10)

Revision: 11.12.2024

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

- · National regulations:
- · Waterhazard class: Water hazard class 1 (Self-assessment): slightly 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.

This safety data sheet complies with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· Relevant phrases

H271 May cause fire or explosion; strong oxidiser.

H272 May intensify fire; oxidiser.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

· Date of previous version: 09.12.2024

· Version number of previous version: 5

· 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 relatif au transport international 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)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative Ox. Liq. 1: Oxidizing liquids – Category 1

Acute Tox. 4: Acute toxicity - Category 4

Skin Corr. 1A: Skin corrosion/irritation - Category 1A

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

* Data compared to the previous version altered.

DE/EN