

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (Reach)

according to Regulation (EU) 2020/878

ba 4

Revision date: 08.12.2022

Printdate: 17.04.2023

Version: 1.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Trade name

ba 4

UFI: DPH0-C0P1-U00V-5MG0

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.3. Details of the supplier of the safety data sheet****supplier (manufacturer/importer/downstream user/distributor)**

technotrans solutions GmbH

Scherl 10

D-58540 Meinerzhagen

Telephone: +49 (0) 2354 7060 0

Telefax: +49 (0) 2354 7060 150

Department responsible for information:

E-mail

info-solutions@technotrans.de**1.4. Emergency telephone number**

Emergency telephone number

Poison Emergency Call Berlin +49 (0) 30 30686700

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008 [CLP]**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Acute Tox. 4 / H302

Acute toxicity (oral)

Harmful if swallowed.

Acute Tox. 4 / H332

Acute toxicity (inhalative)

Harmful if inhaled.

Skin Irrit. 2 / H315

Skin corrosion/irritation

Causes skin irritation.

Eye Dam. 1 / H318

Serious eye damage/eye irritation

Causes serious eye damage.

STOT SE 3 / H335

STOT-single exposure

May cause respiratory irritation.

2.2. Label elements

The product is classified and labelled according to EC directives or corresponding national laws.

Labelling according to Regulation (EC) No. 1272/2008 [CLP]**Hazard pictograms****Danger****Hazard statements**

H302

Harmful if swallowed.

H315

Causes skin irritation.

H318

Causes serious eye damage.

H335

May cause respiratory irritation.

H332

Harmful if inhaled.

Precautionary statements

P261

Avoid breathing vapours.

P280

Wear protective gloves and eye/face protection.

P301 + P312

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P302 + P352

IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P403 + P233

Store in a well-ventilated place. Keep container tightly closed.

Hazard components for labelling

hydrogen peroxide solution

Supplemental hazard information

not applicable

2.3. Other hazards

No information available.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (Reach)

according to Regulation (EU) 2020/878

ba 4

Revision date: 08.12.2022

Printdate: 17.04.2023

Version: 1.1

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Description

Hazardous ingredients

Classification according to Regulation (EC) No 1272/2008 [CLP]

EC No. CAS No. Index No.	REACH No. Designation classification: // Remark	weight-%
231-765-0 7722-84-1 008-003-00-9	01-2119485845-22 hydrogen peroxide solution Ox. Liq. 1 H271 / Acute Tox. 4 H332 / Acute Tox. 4 H302 / Skin Corr. 1A H314 Specific concentration limit (SCL): Ox. Liq. 1 H271 >= 70 / Ox. Liq. 2 H272 >= 50 / Skin Corr. 1A H314 >= 70 / Skin Corr. 1B H314 >= 50 / Skin Irrit. 2 H315 >= 35 / Eye Dam. 1 H318 >= 8 / Eye Irrit. 2 H319 >= 5 / STOT SE 3 H335 >= 35 Acute toxicity estimate (ATE): ATE (oral): 500 mg/kg bw / ATE (inhalation, vapour): 2,00 mg/L	25 - 50

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice.

In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest.

In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Take off immediately all contaminated clothing.

Wash immediately with: WaterWash immediately with: Water

After eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Seek medical advice immediately.

Following ingestion

If swallowed, rinse mouth with water (only if the person is conscious).

Seek medical advice immediately.

Keep victim calm.

Do NOT induce vomiting.

Self-protection of the first aider

First aider: Pay attention to self-protection!

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water, Foam, Water spray jetCo-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

carbon dioxide, Extinguishing powder

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (Reach)

according to Regulation (EU) 2020/878

ba 4

Revision date: 08.12.2022

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Version: 1.1

5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

Oxidizing, Danger of bursting container.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protection equipment. Provide adequate ventilation. Do not breathe vapours.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Sawdust, Fabric

6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

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

Avoid contact with eyes and skin. If handled uncovered, arrangements with local exhaust ventilation should be used if possible. Handle and open container with care. When using do not eat, drink or smoke.

Further information

Only use containers specifically approved for the substance/product. Do not keep the container sealed.

7.2. Conditions for safe storage, including any incompatibilities**Packaging materials:**

Unsuitable container/equipment material: No data available

Requirements for storage rooms and vessels

Keep in a cool, well-ventilated place.

Hints on joint storage

Do not store together with: Alkali (lye) Reducing agent, Organic solvents:

Further information on storage conditions

Take care of instructions on label.

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational exposure limit values**

not applicable

DNEL:

hydrogen peroxide solution

Index No. 008-003-00-9 / EC No. 231-765-0 / CAS No. 7722-84-1

DNEL acute inhalative (local), Workers: 3 mg/m³DNEL long-term inhalative (local), Workers: 1,4 mg/m³**PNEC:**

hydrogen peroxide solution

Index No. 008-003-00-9 / EC No. 231-765-0 / CAS No. 7722-84-1

PNEC aquatic, freshwater: 0,0126 mg/L

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (Reach)

according to Regulation (EU) 2020/878

ba 4

Revision date: 08.12.2022

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Version: 1.1

PNEC aquatic, marine water: 0,0126 mg/L
 PNEC sediment, freshwater: 0,047 mg/kg
 PNEC sediment, marine water: 0,047 mg/kg
 PNEC, soil: 0,0023 mg/kg
 PNEC sewage treatment plant (STP): 4,66 mg/L

8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Personal protection equipment

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

For prolonged or repeated handling the following glove material must be used: Butyl caoutchouc (butyl rubber)
 Thickness of the glove material > 0,4 mm ; Breakthrough time: > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection

Wear closely fitting protective glasses in case of splashes.

Body protection

Wear suitable protective clothing, gloves and eye/face protection.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	colourless
Odour:	odourless
Odour threshold:	not applicable
Melting point/freezing point:	-33 °C
Initial boiling point and boiling range:	108 °C
Flammability:	not applicable
Lower and upper explosion limit:	
Lower explosion limit:	not applicable
Upper explosion limit:	not applicable
Flash point:	not applicable
Auto-ignition temperature:	not applicable
Decomposition temperature:	> 108 °C
pH at 20 °C:	1,5 - 4 / 35,0 weight-%
Cinematic viscosity (40°C):	17,71 mm²/s
Viscosity at 20 °C:	< 20 mPa* s
Solubility(ies):	
Water solubility at 20 °C:	999
Partition coefficient: n-octanol/water:	see section 12
Vapour pressure at 25 °C:	30 mbar

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (Reach)

according to Regulation (EU) 2020/878

ba 4

Revision date: 08.12.2022

Printdate: 17.04.2023

Version: 1.1

Source: hydrogen peroxide solution

Density and/or relative density:	
Density at 20 °C:	1,13 g/cm³
Relative vapour density:	not applicable
particle characteristics:	not applicable

9.2. Other information

Solid content:	0,00 weight-%
solvent content:	
Organic solvents:	0 weight-%
Water:	65 weight-%

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. Conditions to avoid

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures: , Oxygen

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Harmful if swallowed.

Harmful if inhaled.

Hydrogen peroxide 35 % for biocidal use PT2-4

oral, LD50, Rat 1193 - 1270 mg/kg

dermal, LD50, Rabbit: > 4000 mg/kg

inhalative (vapours), LC50, Rat (4 h)

inhalative (dust and mist), LC50, Rat: 2 mg/L (4 h)

hydrogen peroxide solution

oral, LD50, Rat: > 500 mg/kg

Values refer to diluted substance (49,9%)

dermal, LD50, Rabbit: > 4000 mg/kg

Values refer to diluted substance (49,9%)

inhalative (vapours), LC50, Rat: 2 mg/L (4 h)

Skin corrosion/irritation; Serious eye damage/eye irritation

Causes skin irritation.

Causes serious eye damage.

Hydrogen peroxide 35 % for biocidal use PT2-4

Skin (4 h)

Irritating to skin.

eyes

Causes serious eye damage.

hydrogen peroxide solution

Skin

Causes skin irritation.

eyes

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (Reach)

according to Regulation (EU) 2020/878

ba 4

Revision date: 08.12.2022

Printdate: 17.04.2023

Version: 1.1

Causes serious eye damage.

Respiratory or skin sensitisation

Hydrogen peroxide 35 % for biocidal use PT2-4

Skin:

hydrogen peroxide solution

Skin:

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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

STOT-single exposure; STOT-repeated exposure

May cause respiratory irritation.

Hydrogen peroxide 35 % for biocidal use PT2-4

Specific target organ toxicity (single exposure), Irritation

hydrogen peroxide solution

Specific target organ toxicity (single exposure), Irritation

Aspiration hazard

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

Practical experience/human evidence**Overall assessment on CMR properties**

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

11.2. Information on other hazards**Endocrine disrupting properties**

No information available.

SECTION 12: Ecological information

Classification according to Regulation (EC) No 1272/2008 [CLP]

Do not allow to enter into surface water or drains.

12.1. Toxicity

Hydrogen peroxide 35 % for biocidal use PT2-4

Fish toxicity, LC50, Pimephales promelas 22 - 33 mg/L (96 h)

Daphnia toxicity, EC50, Daphnia magna (Big water flea) 2,4 - 7,7 mg/L (48 h)

Acute (short-term) fish toxicity, LC50:, Leuciscus idus (golden orfe) 35 (48 h)

Acute (short-term) fish toxicity, LC50:, Oncorhynchus mykiss (Rainbow trout): 38,5 mg/L (168 h)

Algae toxicity, LC50:: > 1,7 mg/L

hydrogen peroxide solution

Fish toxicity, LC50, Pimephales promelas 22 - 33 mg/L (96 h)

Daphnia toxicity, EC50, Daphnia magna (Big water flea) 2,4 - 7,7 mg/L (48 h)

Acute (short-term) fish toxicity, LC50:, Oncorhynchus mykiss (Rainbow trout): 38,5 mg/L (168 h)

Acute (short-term) fish toxicity, LC50:, Leuciscus idus (golden orfe): 35 mg/L (48 h)

Algae toxicity, LC50:: > 1,7 mg/L

Long-term Ecotoxicity

Hydrogen peroxide 35 % for biocidal use PT2-4

Daphnia toxicity, NOEC, Daphnia magna (Big water flea): 0,63 mg/L

12.2. Persistence and degradability

Toxicological data are not available.

12.3. Bioaccumulative potential

Hydrogen peroxide 35 % for biocidal use PT2-4

Partition coefficient: n-octanol/water:

Bioaccumulation is not expected.

hydrogen peroxide solution

Partition coefficient: n-octanol/water: -1,57

Bioconcentration factor (BCF)

Toxicological data are not available.

12.4. Mobility in soil

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (Reach)

according to Regulation (EU) 2020/878

ba 4

Revision date: 08.12.2022

Printdate: 17.04.2023

Version: 1.1

Hydrogen peroxide 35 % for biocidal use PT2-4
: 30

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Appropriate disposal / Package Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1. UN number or ID number

UN 2014

14.2. UN proper shipping name

Land transport (ADR/RID):

Hydrogen peroxide, aqueous solution

Sea transport (IMDG):

HYDROGEN PEROXIDE, AQUEOUS SOLUTION

Air transport (ICAO-TI / IATA-DGR):

Hydrogen peroxide, aqueous solution

14.3. Transport hazard class(es)

5.1 (8)

14.4. Packing group

II

14.5. Environmental hazards

Land transport (ADR/RID)

not applicable

Marine pollutant

not applicable

14.6. Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

Further information

Land transport (ADR/RID)

Tunnel restriction code

E

Sea transport (IMDG)

EmS-No.

F-A, S-B

14.7. Maritime transport in bulk according to IMO instruments

No transport as bulk according IBC - Code.

SECTION 15: Regulatory information

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

EU legislation

Regulation (EU) No. 528/2012 on biocides

biocidal product

biocide, active substance

hydrogen peroxide solution

349,3 g/kg

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (Reach)

according to Regulation (EU) 2020/878

ba 4

Revision date: 08.12.2022

Printdate: 17.04.2023

Version: 1.1

Biocide authorizations

N-63679

Use

Desinfektionsmittel

Schutzmittel

PA01 Biozid-Produkte für die menschliche Hygiene

PA02 Desinfektionsmittel für den Privatbereich und den Bereich des öffentlichen Gesundheitswesens sowie andere Biozid-Produkte

PA03 Biozid-Produkte für die Hygiene im Veterinärbereich

PA04 Desinfektionsmittel für den Lebens-und Futtermittelbereich

PA05 Trinkwasserdesinfektionsmittel

PA06 Topf-Konservierungsmittel zum Schutz von Fertigerzeugnissen (außer Lebensmittel und Futtermittel) in Behältern zur Ver- längerung ihrer Haltbarkeit

PA11 Schutzmittel für Flüssigkeiten in Kühl-und Verfahrens- systemen

PA12 Schleimbekämpfungsmittel zum Schutz von Materialien, Ein- richtungen und Gegenständen, die in industriellen Verfahren Anwendung finden (z.B. Zellstoff)

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]

VOC-value (in g/L): 0

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Substance/product listed in the following inventories:

AICS gelistet (AICSJ-EN.rtf)

DSL gelistet (DSLJ-EN.rtf)

EHS no information (EHS-EN.rtf)

IECSC gelistet (IECSCJ-EN.rtf)

KECI gelistet (KECIJ-EN.rtf)

MITI gelistet (MITIJ-EN.rtf)

NZLoC no information (NZLoCK-EN.rtf)

PICCS gelistet (PICCSJ-EN.rtf)

TCSI no information (TCSIK-EN.rtf)

Listet in TOXIC SUBSTANCES CONTROL ACT (TSCA)

15.2. Chemical Safety Assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

EC No. CAS No.	Designation	REACH No.
231-765-0 7722-84-1	hydrogen peroxide solution	01-2119485845-22

SECTION 16: Other information

Full text of classification in section 3:

Ox. Liq. 1 / H271	Oxidising liquids	May cause fire or explosion; strong oxidiser.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Acute Tox. 4 / H302	Acute toxicity (oral)	Harmful if swallowed.
Skin Corr. 1A / H314	Skin corrosion/irritation	Causes severe skin burns and eye damage.

Classification procedure

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

Acute Tox. 4	Acute toxicity (oral)	Calculation method.
Acute Tox. 4	Acute toxicity (inhalative)	Calculation method.
Skin Irrit. 2	Skin corrosion/irritation	Calculation method.
Eye Dam. 1	Serious eye damage/eye irritation	Calculation method.
STOT SE 3	STOT-single exposure	Calculation method.

Abbreviations and acronyms

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit Value
BLV	Biological Limit Value

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (Reach)

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ba 4

Revision date: 08.12.2022

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CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic
DIN	German Institute for Standardization / German industrial standard
DNEL	Derived No-Effect Level
EAKV	European Waste Catalogue Directive
EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG Code	International Maritime Code for Dangerous Goods
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MARPOL	Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative

Further information

Classification according to Regulation (EC) No 1272/2008 [CLP]

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in section 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.