

# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

## Peracetic acid 15%

Creation date 22nd April 2021

Revision date 10th July 2024 Version 3.0

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

1.1. Product identifier Peracetic acid 15%

Substance / mixture mixture

Other mixture names

Peracetic acid solution

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

Mixture's intended use

Oxidizing agent.

#### Mixture uses advised against

The product should not be used in ways other than those referred in Section 1.

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

Supplier

Name or trade name Ing. Petr Švec - PENTA s.r.o.
Address Radiová 1122/1, Praha 10, 102 00

Czech Republic

Identification number (CRN)02096013VAT Reg NoCZ02096013Phone+420 226 060 681E-mailinfo@pentachemicals.euWeb addresswww.pentachemicals.eu

Competent person responsible for the safety data sheet

Name Ing. Petr Švec - PENTA s.r.o. E-mail info@pentachemicals.eu

1.4. Emergency telephone number

European emergency number: 112 112

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

# 2.1. Classification of the substance or mixture

#### Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Org. Perox. E, H242 Met. Corr. 1, H290 Acute Tox. 4, H302+H332 Acute Tox. 3, H311 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Chronic 1, H410

#### Most serious adverse physico-chemical effects

Heating may cause a fire. May be corrosive to metals.

# Most serious adverse effects on human health and the environment

Causes serious eye damage. May cause respiratory irritation. Causes severe skin burns and eye damage. Toxic in contact with skin. Harmful if swallowed or if inhaled. Very toxic to aquatic life with long lasting effects.



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#### 2.2. Label elements

#### **Hazard pictogram**









## Signal word

Danger

#### **Hazardous substances**

hydrogen peroxide solution... % peracetic acid . . . %

#### **Hazard statements**

H242 Heating may cause a fire.
H290 May be corrosive to metals.
H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H410 Very toxic to aquatic life with long lasting effects.

H302+H332 Harmful if swallowed or if inhaled.

**Precautionary statements** 

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P261 Avoid breathing mist/vapours/spray.

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.

P310 Immediately call a doctor.

**Supplemental information** 

EUH071 Corrosive to the respiratory tract.

#### 2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.



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

#### 3.2. Mixtures

#### **Chemical characterization**

Mixture of substances and additives specified below.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 008-003-00-9 CAS: 7722-84-1 EC: 231-765-0 Registration number: 01-2119485845-22- 0000	hydrogen peroxide solution %	23,5-26,5	Ox. Liq. 1, H271 Acute Tox. 4, H302, H332 Skin Corr. 1A, H314 Specific concentration limit: Skin Corr. 1A, H314: $C \ge 70$ % Skin Corr. 1B, H314: $50$ % $\le C < 70$ % Skin Irrit. 2, H315: $35$ % $\le C < 50$ % Eye Irrit. 2, H319: $5$ % $\le C < 8$ % Eye Dam. 1, H318: $8$ % $\le C < 50$ % Ox. Liq. 1, H271: $C \ge 70$ % Ox. Liq. 2, H272: $50$ % $\le C < 70$ % STOT SE 3, H335: $C \ge 35$ %	1
Index: 607-094-00-8 CAS: 79-21-0 EC: 201-186-8	peracetic acid %	14-17	Flam. Liq. 3, H226 Org. Perox. D, H242 Acute Tox. 4, H302+H312+H332 Skin Corr. 1A, H314 Aquatic Acute 1, H400 (M=1) Specific concentration limit: STOT SE 3, H335: $C \ge 1$ %	1, 2
Index: 607-002-00-6 CAS: 64-19-7 EC: 200-580-7 Registration number: 01-2119475328-30- xxxx	acetic acid %	<15	Flam. Liq. 3, H226 Skin Corr. 1A, H314 Eye Dam. 1, H318 Specific concentration limit: Skin Corr. 1A, H314: $C \ge 90 \%$ Skin Irrit. 2, H315: $10 \% \le C < 25 \%$ Skin Corr. 1B, H314: $25 \% \le C < 90 \%$ Eye Irrit. 2, H319: $10 \% \le C < 25 \%$	1, 3

## Notes

- Note B: Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.
- Note D: Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3 of Annex VI to Regulation (EC) No 1272/2008. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier who places such a substance on the market must state on the label the name of the substance followed by the words "non-stabilised".
- 3 A substance for which exposure limits are set.



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Full text of all classifications and hazard statements is given in the section 16.

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

#### 4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

#### If inhaled

Take care of your own safety, do not let the affected person walk! Terminate the exposure immediately; move the affected person to fresh air. Beware of the contaminated clothes. Depending on the situation, call the medical rescue service and ensure medical treatment considering the frequent need of further observation for at least 24 hours.

#### If on skin

Remove contaminated clothes. Take off any rings, watches, bracelets before or during washing if worn in the contaminated areas of the skin. Depending on the situation, call the medical rescue service and always ensure medical treatment. Rinse contaminated areas with a flow of water, lukewarm at best, for 10-30 minutes; do not use any brush, soap or neutralizers. Rinse skin with water or shower. Rinse cautiously with water for several minutes.

#### If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. No neutralization should be performed in any case! Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible. Everyone must be referred for treatment even if affected only a little.

#### If swallowed

INDUCE VOMITING! Vomiting should be induced in the person only if conscious, within 1 hour from ingestion. If in doubt whether vomiting should be induced, contact the Toxicological Information Centre and give information about the substances or composition of the product as provided on the original packaging or in the safety data sheet of the product. FOLLOWING INGESTION OF TOXIC OR HIGHLY TOXIC SUBSTANCES, GIVE 10-20 CRUSHED TABLETS OF ACTIVATED CARBON, MIXED IN WATER, WITHIN NO LATER THAN 5 MINUTES - irrespective of whether vomiting could be induced. Call medical rescue service.

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

#### If inhaled

Inhaling vapours can cause corrosion of the breathing system. Cough, headache. May cause respiratory irritation.

#### If on skin

Causes severe skin burns.

#### If in eyes

Causes serious eye damage.

#### If swallowed

Corrosion of the digestion system can occur.

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

Symptomatic treatment.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

#### Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

## Unsuitable extinguishing media

Water - full jet.

# 5.2. Special hazards arising from the substance or mixture

Decomposes under the influence of heat. In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.



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#### 5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

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

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

Heating may cause a fire. May be corrosive to metals. Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale mist/vapours/spray. Prevent contact with skin and eyes.

#### 6.2. Environmental precautions

Do not allow to enter drains. Prevent contamination of the soil and entering surface or ground water.

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

Suitable absorbent material: sand, kieselgur. Type IIIR sorbent must not be used to eliminate the leak. Material suitable for the treatment of contaminated materials: dilute sodium hydroxide solution, calcium hydroxide suspension. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents. Absorb spillage to prevent material damage.

#### 6.4. Reference to other sections

See the Section 7, 8 and 13.

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

## 7.1. Precautions for safe handling

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. Do not inhale mist/vapours/spray. Prevent contact with skin and eyes. Do not eat, drink or smoke when using this product. Wash hands and exposed parts of the body thoroughly after handling. Use only outdoors or in a well-ventilated area. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Ground and bond container and receiving equipment. Avoid release to the environment.

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

Suitable materials for containers and packing: plastic packaging. Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Store locked up. Keep only in original packaging. Protect from sunlight. Keep container tightly closed. Store separately. Keep cool.

Storage temperature

min 0 °C, max 20 °C

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

not available

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

#### 8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

#### **European Union**

#### Commission Directive (EU) 2017/164

Substance name (component)	Туре	Value
	OEL 8 hours	25 mg/m <sup>3</sup>
postic poid 0/ (CAS, 64.10.7)	OEL 8 hours	10 ppm
acetic acid % (CAS: 64-19-7)	OEL 15 minutes	50 mg/m <sup>3</sup>
	OEL 15 minutes	20 ppm



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#### 8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

#### Eye/face protection

Protective goggles or face shield (based on the nature of the work performed).

#### Skin protection

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly.

# **Respiratory protection**

Halfmask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of substances are exceeded or in a poorly ventilated environment.

#### Thermal hazard

Not available.

#### **Environmental exposure controls**

Observe usual measures for protection of the environment, see Section 6.2. Collect spillage.

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

#### 9.1. Information on basic physical and chemical properties

Physical state liquid
Colour colourless
Odour characteristic
Melting point/freezing point -37 °C
Boiling point or initial boiling point and boiling range >80 °C

Flammability data not available Lower and upper explosion limit data not available

Flash point 66-70 °C

Auto-ignition temperature data not available
Decomposition temperature data not available
pH 0-1 (undiluted at 20 °C)

Kinematic viscosity data not available

Solubility in water soluble

Partition coefficient n-octanol/water (log value) data not available Vapour pressure 1.42 kPa at 20 °C

Density and/or relative density

Density 1.156 g/cm³ at 20 °C Relative vapour density data not available Particle characteristics data not available

#### 9.2. Other information

not available

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The substance is oxidizing.

#### 10.2. Chemical stability

The product is stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

It may initiate explosive polymerisation of substances with unsaturated chemical bonds.



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#### 10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost. Heating may cause a fire.

#### 10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents. May be corrosive to metals.

#### 10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

## **SECTION 11: Toxicological information**

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

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the mixture.

#### **Acute toxicity**

Toxic in contact with skin. Harmful if swallowed or if inhaled.

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Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination
Oral	ATE	1205 mg/kg				Calculation of value
Dermal	ATE	7333 mg/kg				Calculation of value
Inhalation (vapor)	ATE	26.51 mg/l				Calculation of value

acetic acid %						
Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination
Oral	LD50	3310 mg/kg		Rat (Rattus norvegicus)		
Dermal	LD50	1060 mg/kg		Rabbit		

#### Skin corrosion/irritation

Causes severe skin burns and eye damage.

# Serious eye damage/irritation

Causes serious eye damage. Causes severe skin burns and 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.



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# Toxicity for specific target organ - single exposure

May cause respiratory irritation.

#### Toxicity for specific target organ - 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

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

Very toxic to aquatic life with long lasting effects.

#### **Acute toxicity**

acetic acid %						
Parameter	Value	Exposure time	Species	Environment		
LC50	75 mg/l	96 hours	Fish (Lepomis macrochirus)			
EC50	47 mg/l	24 hours	Daphnia (Daphnia magna)			

#### 12.2. Persistence and degradability

No data are available for either the mixture or the components.

#### 12.3. Bioaccumulative potential

No data are available for either the mixture or the components.

## 12.4. Mobility in soil

No data are available for either the mixture or the components.

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

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

# 12.6. Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

#### 12.7. Other adverse effects

Not available.

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.



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#### Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

#### **SECTION 14: Transport information**

14.1. UN number or ID number

UN 3107

14.2. UN proper shipping name

ORGANIC PEROXIDE TYPE E, LIQUID

14.3. Transport hazard class(es)

5.2 Organic peroxides

14.4. Packing group

not relevant

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

Reference in the Sections 4 to 8.

#### 14.7. Maritime transport in bulk according to IMO instruments

not relevant

#### **Additional information**

Hazard identification No.

**UN** number

Classification code

Safety signs



Ρ1

5.2+hazardous for the environment



Tunnel restriction code (D)

Air transport - ICAO/IATA

Packaging instructions passenger 570 Cargo packaging instructions 570

Marine transport - IMDG

EmS (emergency plan) F-J, S-R

# **SECTION 15: Regulatory information**

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Product contains restricted explosives precursors: Making available, introduction, possession and use according to Regulation (EU) 2019/1148, Article 5. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).



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#### 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

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

H226 Flammable liquid and vapour. H242 Heating may cause a fire.

H271 May cause fire or explosion; strong oxidiser.

H272 May intensify fire; oxidiser.
H290 May be corrosive to metals.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.

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. H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H302+H332 Harmful if swallowed or if inhaled.

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

#### Guidelines for safe handling used in the safety data sheet

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P261 Avoid breathing mist/vapours/spray.

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.

P310 Immediately call a doctor.

#### A list of additional standard phrases used in the safety data sheet

EUH071 Corrosive to the respiratory tract.

# Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

#### Key to abbreviations and acronyms used in the safety data sheet

ADR European agreement concerning the international carriage of dangerous goods by

road

BCF Bioconcentration Factor
CAS Chemical Abstracts Service

CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of

substance and mixtures

EC Identification code for each substance listed in EINECS

EC50 Concentration of a substance when it is affected 50% of the population EINECS European Inventory of Existing Commercial Chemical Substances

EmS Emergency plan EU European Union

EuPCS European Product Categorisation System IATA International Air Transport Association

IBC International Code For The Construction And Equipment of Ships Carrying

Dangerous Chemicals

ICAO International Civil Aviation Organization



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IMDG International Maritime Dangerous Goods IMO International Maritime Organization

INCI International Nomenclature of Cosmetic Ingredients
ISO International Organization for Standardization
IUPAC International Union of Pure and Applied Chemistry

LC50 Lethal concentration of a substance in which it can be expected death of 50% of the

population

LD50 Lethal dose of a substance in which it can be expected death of 50% of the

population

 log Kow
 Octanol-water partition coefficient

 OEL
 Occupational Exposure Limits

 PBT
 Persistent, Bioaccumulative and Toxic

ppm Parts per million

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Agreement on the transport of dangerous goods by rail

UN Four-figure identification number of the substance or article taken from the UN

Model Regulations

UVCB Substances of unknown or variable composition, complex reaction products or

biological materials

VOC Volatile organic compounds

vPvB Very Persistent and very Bioaccumulative

Acute Tox. Acute toxicity

Aquatic Acute Hazardous to the aquatic environment

Aquatic Chronic Hazardous to the aquatic environment (chronic)

Eye Dam. Serious eye damage Flam. Liq. Flammable liquid Met. Corr. Corrosive to metals Org. Perox. Organic peroxide Ox. Liq. Oxidising liquid Skin Corr. Skin corrosion

STOT SE Specific target organ toxicity - single exposure

#### **Training guidelines**

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

## Recommended restrictions of use

not available

#### Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

## The changes (which information has been added, deleted or modified)

The version 3.0 replaces the SDS version from 23 June 2022. Changes were made in sections 1, 2, 7, 13, 15 and 16.

#### More information

Classification procedure - calculation method.

#### Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.