

PeliKine Human IL-6 ELISA Rapid Set A (M2018)

Kit cover sheet

Date of compilation: 2026-09-21

Composition/information on ingredients

Hazardous components (including safety data sheet)

Components	Classification acc. to GHS	Pictograms	Page
HPE buffer	Eye Irrit. 2 / H319		2 – 18

Non hazardous components (no safety data sheet attached)

Components
IL-6 standard
Biotinylated antibody
streptavidin-poly-HRP conjugate

HPE buffer

Version number: 3.0
Replaces version of: 2020-06-03 (2)

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

1.1 Product identifier

Trade name	HPE buffer
Article number	M1940, M9161

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

Relevant identified uses	For research use only
Uses advised against	Not suitable for in vitro diagnostic use.

1.3 Details of the supplier of the safety data sheet

Essange Reagents Plesmanlaan 125 1066 CX Amsterdam Netherlands Telephone: +31 20 4570707 e-mail: info@essange-reagents.nl Website: www.essange-reagents.com e-mail (competent person)	safety@essange-reagents.nl
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1.4 Emergency telephone number

Emergency information service	+31 20 4570707 This number is only available during the following office hours: Mon-Fri 09:00 - 17:00, (CET)
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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Category	Hazard class and category	Hazard statement
3.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319

For full text of H-phrases: see SECTION 16

2.2 Label elements

Labelling

- signal word Warning

- pictograms

GHS07



- hazard statements

H319 Causes serious eye irritation.

- precautionary statements

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

2.3 Other hazards

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Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture).

3.2 Mixtures

The product does not contain (other) ingredients which are classified according to present knowledge of the supplier and contribute to the classification of the product and hence require reporting in this section.

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Tetrasodium ethylenediaminetetraacetate	CAS No 64-02-8 EC No 200-573-9 Index No 607-428-00-2 REACH Reg. No 01-2119486762- 27-xxxx 01-2120070096- 59-xxxx		Acute Tox. 4 / H302 Acute Tox. 4 / H332 Eye Dam. 1 / H318 STOT RE 2 / H373		GHS-HC

Notes

GHS-HC: Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/2008/EC, Annex VI)

Name of substance	Identifier	Specific Conc. Limits	M-Factors	ATE	Exposure route
Tetrasodium ethylenediaminetetraacetate	CAS No 64-02-8 EC No 200-573-9	-	-	>1,780 mg/kg 1.5 mg/l/4h	oral inhalation: dust/mist

Remarks

All the percentages given are percentages by weight unless stated otherwise. For full text of H-phrases: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician.

Following skin contact

Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Following eye contact

Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor.

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Following ingestion

Rinse mouth with water (only if the person is conscious). Call a POISON CENTER or doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Causes tears. Redness.

4.3 Indication of any immediate medical attention and special treatment needed

For specialist advice physicians should contact the poison centre.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray; Foam; Dry extinguishing powder; Carbon dioxide (CO₂);
Co-ordinate firefighting measures to the fire surroundings.

Unsuitable extinguishing media

Water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

During fire hazardous fumes/smoke could be produced. Carbon monoxide (CO). Carbon dioxide (CO₂).

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

Self-contained breathing apparatus (SCBA). Standard protective clothing for firefighters.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Follow emergency procedures such as the need to evacuate the danger area or to consult an expert. Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. Remove persons to safety. Ventilate affected area.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Use personal protective equipment as required.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece).

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

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- measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- flammability hazards

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

- incompatible substances or mixtures

Keep away from alkalis, oxidising substances, acids.

Control of effects

Protect against external exposure, such as

High temperatures. UV-radiation/sunlight. Frost.

Consideration of other advice

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

- packaging compatibilities

Keep only in original container.

7.3 Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

No information available. Countries not listed may have their own country specific values.

Relevant DNELs/DMELs/PNECs and other threshold levels

Relevant DNELs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Tetrasodium ethylenediaminetetraacetate	64-02-8	DNEL	1.5 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
Tetrasodium ethylenediaminetetraacetate	64-02-8	DNEL	3 mg/m ³	human, inhalatory	worker (industry)	acute - systemic effects
Tetrasodium ethylenediaminetetraacetate	64-02-8	DNEL	1.5 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects
Tetrasodium ethylenediaminetetraacetate	64-02-8	DNEL	3 mg/m ³	human, inhalatory	worker (industry)	acute - local effects
Tetrasodium ethylenediaminetetraacetate	64-02-8	DNEL	0.6 mg/m ³	human, inhalatory	consumer (private households)	chronic - local effects
Tetrasodium ethylenediaminetetraacetate	64-02-8	DNEL	1.2 mg/m ³	human, inhalatory	consumer (private households)	acute - local effects
Tetrasodium ethylene-	64-02-8	DNEL	25 mg/kg	human, oral	consumer (private)	chronic - systemic

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Relevant DNELs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
nediaminetetraacetate			bw/day		households)	effects

Relevant PNECs of components						
Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
Tetrasodium ethylenediaminetetraacetate	64-02-8	PNEC	2.83 mg/l	aquatic organisms	freshwater	short-term (single instance)
Tetrasodium ethylenediaminetetraacetate	64-02-8	PNEC	0.283 mg/l	aquatic organisms	marine water	short-term (single instance)
Tetrasodium ethylenediaminetetraacetate	64-02-8	PNEC	50 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Tetrasodium ethylenediaminetetraacetate	64-02-8	PNEC	1.1 mg/kg	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation. Provide eyewash stations and safety showers at the workplace.

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection

Skin protection

Chemical protective clothing.

- hand protection



Wear suitable gloves. Check leak-tightness/impermeability prior to use. 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. 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. Wash hands thoroughly after handling.

- type of material

PVC: polyvinyl chloride, CR: chloroprene (chlorobutadiene) rubber, Nitrile rubber

- material thickness

Use gloves with a minimum material thickness: $\geq 0,38$ mm.

- breakthrough time of the glove material

Use gloves with a minimum breakthrough time of the glove material: >480 minutes (permeation: level 6).

- other protection measures



Protective clothing (BS EN ISO 13688).

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Type: ABEK-P2 (combined filters against gases, vapours and

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particles, colour code: Brown/Grey/Yellow/Green/White).

Environmental exposure controls

Take appropriate precautions to avoid uncontrolled release into the environment. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	light yellow
Odour	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	100 °C calculated value, referring to a component of the mixture
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	LEL: UEL: not determined
Flash point	no data available
Auto-ignition temperature	not determined
Decomposition temperature	no data available
pH (value)	8
Kinematic viscosity	not determined
Solubility	not determined

Partition coefficient n-octanol/water (log value)	this information is not available
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Vapour pressure	2.3 kPa at 20 °C calculated value, referring to a component of the mixture
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Density and/or relative density

Density	not determined
Relative vapour density	information on this property is not available

Particle characteristics	not relevant (liquid)
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9.2 Other information

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
Other safety characteristics	there is no additional information

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SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

Oxidisers.

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to GHS

Acute toxicity

Shall not be classified as acutely toxic. Based on available data, the classification criteria are not met.

Acute toxicity estimate (ATE) of components			
Name of substance	CAS No	Exposure route	ATE
Tetrasodium ethylenediaminetetraacetate	64-02-8	oral	>1,780 mg/kg
Tetrasodium ethylenediaminetetraacetate	64-02-8	inhalation: dust/mist	1.5 mg/l/4h

Acute toxicity of components					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Tetrasodium ethylenediaminetetraacetate	64-02-8	oral	LD50	>1,780 – < 2,000 mg/kg	rat

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin. The product is not classified as corrosive based on the applicable Specific Concentration Limit (SCL).

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser. Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic. Based on available data, the classification criteria are not met.

Carcinogenicity

Shall not be classified as carcinogenic. Based on available data, the classification criteria are not met.

Reproductive toxicity

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Shall not be classified as a reproductive toxicant. Based on available data, the classification criteria are not met.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure). Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure). Based on available data, the classification criteria are not met.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard. Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

Other information

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Tetrasodium ethylenediaminetetraacetate	64-02-8	ErC50	$>60 \text{ mg/l}$	algae	72 h
Tetrasodium ethylenediaminetetraacetate	64-02-8	LC50	$>100 \text{ mg/l}$	rainbow trout (Onco-rhynchus mykiss)	96 h
Tetrasodium ethylenediaminetetraacetate	64-02-8	EC50	100.9 mg/l	daphnia magna	48 h
Tetrasodium ethylenediaminetetraacetate	64-02-8	NOEC	100 mg/l	rainbow trout (Onco-rhynchus mykiss)	96 h

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Tetrasodium ethylenediaminetetraacetate	64-02-8	NOEC	$\geq 35.1 \text{ mg/l}$	zebra fish (Danio rerio)	35 d
Tetrasodium ethylenediaminetetraacetate	64-02-8	LOEC	50 mg/l	daphnia magna	21 d
Tetrasodium ethylenediaminetetraacetate	64-02-8	growth (EbCx) 10%	$>500 \text{ mg/l}$	microorganisms	30 min

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$.

12.6 Endocrine disrupting properties

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Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment.

Waste treatment of containers/packagings

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

- | | |
|---|---|
| 14.1 UN number or ID number | not subject to transport regulations |
| 14.2 UN proper shipping name | not relevant |
| 14.3 Transport hazard class(es) | none |
| 14.4 Packing group | not assigned |
| 14.5 Environmental hazards | non-environmentally hazardous acc. to the dangerous goods regulations |
| 14.6 Special precautions for user | |
| There is no additional information. | |
| 14.7 Maritime transport in bulk according to IMO instruments | |
| No data available. | |

Additional information for each of the UN Model Regulations

International Maritime Dangerous Goods Code (IMDG) - additional information

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - additional information

Not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

This Safety Data Sheet is purely informative and does comply with EU regulations, but not with country-specific regulations.

Relevant provisions of the European Union (EU)

Seveso Directive

2012/18/EU (Seveso III)			
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements	Notes
	not assigned		

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

None of the ingredients are listed.

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Water Framework Directive (WFD)

List of pollutants (WFD)				
Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
Tetrasodium ethylenediaminetetraacetate	Metals and their compounds		a)	

Legend

a) Indicative list of the main pollutants

Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors, amending Regulation (EC) No 1907/2006 and repealing Regulation (EU) No 98/2013

None of the ingredients are listed.

Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

National regulations (GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

None of the ingredients are listed.

Restrictions according to GB REACH, Annex 17

None of the ingredients are listed.

Dangerous substances with restrictions (GB REACH, Annex 17)			
Name	Name acc. to inventory	Conditions of restriction	No
HPE buffer	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	R3	3

Legend

R3

- Shall not be used in:
 - ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
 - tricks and jokes,
 - games for one or more participants, or any article intended to be used as such, even with ornamental aspects,
- Articles not complying with paragraph 1 shall not be placed on the market.
- Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:
 - can be used as fuel in decorative oil lamps for supply to the general public, and,
 - present an aspiration hazard and are labelled with R65 or H304,
- Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the British Standard Specification on Decorative oil lamps (BS EN 14059) adopted by the British Standards Institute.
- Without prejudice to the implementation of other legislation relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:
 - lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: 'Keep lamps filled with this liquid out of the reach of children'; and, by 1 December 2010 'Just a sip of lamp oil'
 - or even sucking the wick of lamps
 - may lead to life-threatening lung damage';
 - grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter may lead to life-threatening lung damage';
 - lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.
- Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the Agency.

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

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SECTION 16: Other information

Revision

Date of compilation: 2026-08-20. Version number: 3.0. Date format: (YYYY-MM-DD).

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)
1.1	Registration number (REACH): not relevant (mixture)	
1.3	Details of the supplier of the safety data sheet: Sanquin Plesmanlaan 125 1066 CX Amsterdam The Netherlands Telephone: +31 20 512 3599 e-mail: reagents@sanquin.nl Website: www.sanquin.org/reagents	Details of the supplier of the safety data sheet: Essange Reagents Plesmanlaan 125 1066 CX Amsterdam Netherlands Telephone: +31 20 4570707 e-mail: info@essange-reagents.nl Website: www.essange-reagents.com
1.3	e-mail (competent person): CSVAM@sanquin.nl	e-mail (competent person): safety@essange-reagents.nl
1.4	Emergency information service: +31 20 512 3599 This number is only available during the following office hours: Mon-Fri 09:00 - 17:00, (CET)	Emergency information service: +31 20 4570707 This number is only available during the following office hours: Mon-Fri 09:00 - 17:00, (CET)
2.1		Classification acc. to GHS: change in the listing (table)
2.3	Other hazards: Of no significance.	Other hazards
2.3	Results of PBT and vPvB assessment: This mixture does not contain any substances that are as- sessed to be a PBT or a vPvB.	Results of PBT and vPvB assessment: Does not contain a PBT-/vPvB-substance at a concentra- tion of $\geq 0,1\%$.
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a con- centration of $\geq 0,1\%$.
3.2	Mixtures: The product does not contain any (other) ingredients which are classified according to present knowledge of the supplier and contribute to the classification of the product and hence require reporting in this section.	Mixtures: The product does not contain (other) ingredients which are classified according to present knowledge of the sup- plier and contribute to the classification of the product and hence require reporting in this section.
3.2		Mixtures: change in the listing (table)
3.2		Mixtures: change in the listing (table)
3.2	Remarks: For full text of H-phrases: see SECTION 16. All the per- centages given are percentages by weight unless stated otherwise.	Remarks: All the percentages given are percentages by weight un- less stated otherwise. For full text of H-phrases: see SECTION 16.
4.2	Most important symptoms and effects, both acute and delayed: Symptoms and effects are not known to date.	Most important symptoms and effects, both acute and delayed: Causes tears. Redness.
5.1	Suitable extinguishing media: Dry extinguishing powder; Carbon dioxide (CO ₂)	Suitable extinguishing media: Water spray; Foam; Dry extinguishing powder; Carbon di- oxide (CO ₂); Co-ordinate firefighting measures to the fire surroundings.
5.2	Hazardous combustion products: During fire hazardous fumes/smoke could be produced.	Hazardous combustion products: During fire hazardous fumes/smoke could be produced. Carbon monoxide (CO). Carbon dioxide (CO ₂).
5.3	Special protective equipment for firefighters: Self-contained breathing apparatus (EN 133). Standard	Special protective equipment for firefighters: Self-contained breathing apparatus (SCBA). Standard

Safety Data Sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)

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	protective clothing for firefighters.	protective clothing for firefighters.
6.1	For non-emergency personnel: Remove persons to safety. Ventilate affected area.	For non-emergency personnel: Follow emergency procedures such as the need to evacuate the danger area or to consult an expert. Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. Remove persons to safety. Ventilate affected area.
6.3	Appropriate containment techniques: Use of adsorbent materials.	
7.2		- flammability hazards: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
7.2	Protect against external exposure, such as: High temperatures. Frost. UV-radiation/sunlight.	Protect against external exposure, such as: High temperatures. UV-radiation/sunlight. Frost.
7.2		- packaging compatibilities: Keep only in original container.
7.3	Specific end use(s): There is no additional information.	Specific end use(s): See section 1.2.
8.1		Relevant DNELs of components of the mixture: change in the listing (table)
8.1		Relevant PNECs of components: change in the listing (table)
8.2	Appropriate engineering controls: General ventilation.	Appropriate engineering controls: General ventilation. Provide eyewash stations and safety showers at the workplace.
8.2	Eye/face protection: eye protection must be worn Use safety goggle with side protection (EN 166).	Eye/face protection: eye protection must be worn Use safety goggle with side protection
8.2	Skin protection: Protective clothing (EN 340 & EN ISO 13688).	Skin protection: Chemical protective clothing.
8.2	Hand protection: safety gloves must be worn Wear suitable gloves. Check leak-tightness/impermeability prior to use. 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. Chemical protection gloves are suitable, which are tested according to EN 374. 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.	Hand protection: safety gloves must be worn Wear suitable gloves. Check leak-tightness/impermeability prior to use. 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. 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. Wash hands thoroughly after handling.
8.2	Breakthrough times of the glove material: Use gloves with a minimum breakthrough times of the glove material: >480 minutes (permeation: level 6).	Breakthrough time of the glove material: Use gloves with a minimum breakthrough time of the glove material: >480 minutes (permeation: level 6).
8.2	- other protection measures: Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.	Other protection measures: wear protective clothing Protective clothing (BS EN ISO 13688). Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.
8.2	Environmental exposure controls: Use appropriate container to avoid environmental con-	Environmental exposure controls: Take appropriate precautions to avoid uncontrolled re-

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Section	Former entry (text/value)	Actual entry (text/value)
	tamination. Keep away from drains, surface and ground water.	lease into the environment. Keep away from drains, surface and ground water.
9.1	Appearance	
9.1	Other safety parameters	
9.1	Initial boiling point and boiling range: 100 °C	Boiling point or initial boiling point and boiling range: 100 °C calculated value, referring to a component of the mixture
9.1	Flammability (solid, gas): not relevant, (fluid)	Flammability: this material is combustible, but will not ignite readily
9.1	Explosive limits: not determined	Lower and upper explosion limit: LEL: UEL: not determined
9.1	Flash point: not determined	Flash point: no data available
9.1	Evaporation rate: not determined	
9.1		Decomposition temperature: no data available
9.1		Kinematic viscosity: not determined
9.1	Vapour pressure: 0 Pa at 20 °C	Vapour pressure: 2.3 kPa at 20 °C calculated value, referring to a component of the mixture
9.1		Density and/or relative density
9.1	Vapour density: this information is not available	
9.1	Partition coefficient	
9.1	Viscosity: not determined	
9.1	Explosive properties: none	
9.1	Oxidising properties: none	
9.1		Particle characteristics: not relevant (liquid)
9.2	Other information: There is no additional information.	Other information
9.2		Information with regard to physical hazard classes: hazard classes acc. to GHS (physical hazards): not relevant
9.2		Other safety characteristics: there is no additional information
10.2	Chemical stability: See below "Conditions to avoid".	Chemical stability: The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
11.1	Acute toxicity: Shall not be classified as acutely toxic.	Acute toxicity: Shall not be classified as acutely toxic. Based on available data, the classification criteria are not met.
11.1	Acute toxicity of components of the mixture	
11.1		Acute toxicity estimate (ATE) of components: change in the listing (table)
11.1		Acute toxicity of components:

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Section	Former entry (text/value)	Actual entry (text/value)
		change in the listing (table)
11.1	Respiratory or skin sensitisation: Shall not be classified as a respiratory or skin sensitiser.	Respiratory or skin sensitisation: Shall not be classified as a respiratory or skin sensitiser. Based on available data, the classification criteria are not met.
11.1	Germ cell mutagenicity: Shall not be classified as germ cell mutagenic.	Germ cell mutagenicity: Shall not be classified as germ cell mutagenic. Based on available data, the classification criteria are not met.
11.1	Carcinogenicity: Shall not be classified as carcinogenic.	Carcinogenicity: Shall not be classified as carcinogenic. Based on available data, the classification criteria are not met.
11.1	Reproductive toxicity: Shall not be classified as a reproductive toxicant.	Reproductive toxicity: Shall not be classified as a reproductive toxicant. Based on available data, the classification criteria are not met.
11.1	Specific target organ toxicity - single exposure: Shall not be classified as a specific target organ toxicant (single exposure).	Specific target organ toxicity - single exposure: Shall not be classified as a specific target organ toxicant (single exposure). Based on available data, the classification criteria are not met.
11.1	Specific target organ toxicity - repeated exposure: Shall not be classified as a specific target organ toxicant (repeated exposure).	Specific target organ toxicity - repeated exposure: Shall not be classified as a specific target organ toxicant (repeated exposure). Based on available data, the classification criteria are not met.
11.1	Aspiration hazard: Shall not be classified as presenting an aspiration hazard.	Aspiration hazard: Shall not be classified as presenting an aspiration hazard. Based on available data, the classification criteria are not met.
11.2		Information on other hazards
11.2		Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.
11.2		Other information: There is no additional information.
12.1		Aquatic toxicity (acute) of components of the mixture: change in the listing (table)
12.1		Aquatic toxicity (chronic) of components of the mixture: change in the listing (table)
12.5	Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.	Results of PBT and vPvB assessment: Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$.
12.6	Endocrine disrupting potential: None of the ingredients are listed.	Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.
14.4	Packing group: not assigned to a packing group	Packing group: not assigned
14.7	Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN): Not subject to ADR, RID and ADN.	
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	Safety, health and environmental regulations/legislation specific for the substance or mixture: This Safety Data Sheet is purely informative and does comply with EU regulations, but not with country-specific regulations.
15.1	Restrictions according to REACH, Annex XVII	
15.1		Restrictions according to REACH, Annex XVII: change in the listing (table)
15.1	List of substances subject to authorisation (REACH, An-	

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Section	Former entry (text/value)	Actual entry (text/value)
	<p>Annex XIV) / SVHC - candidate list: None of the ingredients are listed.</p>	
15.1	<p>Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD): None of the ingredients are listed.</p>	Water Framework Directive (WFD)
15.1		<p>List of pollutants (WFD): change in the listing (table)</p>
15.1		<p>Regulation on persistent organic pollutants (POP): None of the ingredients are listed.</p>
15.1		National regulations (GB)
15.1		<p>List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list: None of the ingredients are listed.</p>
15.1		<p>Restrictions according to GB REACH, Annex 17: None of the ingredients are listed.</p>
15.1		<p>Dangerous substances with restrictions (GB REACH, Annex 17): change in the listing (table)</p>
16	<p>Revision: Date of compilation: 2020-06-03. Version number: 2.0. Date format: (YYYY-MM-DD).</p>	<p>Revision: Date of compilation: 2026-08-20. Version number: 3.0. Date format: (YYYY-MM-DD).</p>
16		<p>Abbreviations and acronyms: change in the listing (table)</p>
16	<p>Key literature references and sources for data: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU. Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).</p>	<p>Key literature references and sources for data: Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).</p>

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth

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Abbr.	Descriptions of used abbreviations
	(EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LEL	Lower explosion limit (LEL)
LOEC	Lowest Observed Effect Concentration
NLP	No-Longer Polymer
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STOT RE	Specific target organ toxicity - repeated exposure
UEL	Upper explosion limit (UEL)
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H302	Harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.

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Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.