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

Kit cover sheet

Date of compilation: 2026-10-20

Composition/information on ingredients

Hazardous components (including safety data sheet)

Components	Classification acc. to GHS	Pictograms	Page
HPE buffer	Eye Irrit. 2 / H319		2 – 12

Non hazardous components (no safety data sheet attached)

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

Safety Data Sheet

acc. to Lao-An-3-Tzu-No. 0960145

HPE buffer

Version number: 1.0 Date of compilation: 27.07.2026

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

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)

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 state-ment
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

Results of PBT and vPvB assessment

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

Endocrine disrupting properties

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

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture).

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.

Name of substance	Identifier	Wt%	Classification acc. to GHS	Notes
Caseins	CAS No 9000-71-9	10 – < 25	Aquatic Chronic 4 / H413	
Tetrasodium ethylenediaminetetraacetate	CAS No 64-02-8	1 – < 2.5	Acute Tox. 4 / H302 Acute Tox. 4 / H332 Eye Dam. 1 / H318 STOT RE 2 / H373 Aquatic Acute 3 / H402	
sodium chloride	CAS No 7647-14-5	1 – < 2.5	Acute Tox. 5 / H303 Acute Tox. 5 / H333	

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.

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

- 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

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

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.

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/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Tetrasodium ethylenediaminetetraacetate	64-02-8	DNEL	3 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
Tetrasodium ethylenediaminetetraacetate	64-02-8	DNEL	1.5 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
Tetrasodium ethylenediaminetetraacetate	64-02-8	DNEL	3 mg/m³	human, inhalatory	worker (industry)	acute - local effects
Tetrasodium ethylenediaminetetraacetate	64-02-8	DNEL	0.6 mg/m³	human, inhalatory	consumer (private households)	chronic - local effects
Tetrasodium ethylenediaminetetraacetate	64-02-8	DNEL	1.2 mg/m³	human, inhalatory	consumer (private households)	acute - local effects
Tetrasodium ethylenediaminetetraacetate	64-02-8	DNEL	25 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
sodium chloride	7647-14-5	DNEL	2,069 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
sodium chloride	7647-14-5	DNEL	2,069 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
sodium chloride	7647-14-5	DNEL	295.5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
sodium chloride	7647-14-5	DNEL	295.5 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects
sodium chloride	7647-14-5	DNEL	443.3 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
sodium chloride	7647-14-5	DNEL	443.3 mg/m³	human, inhalatory	consumer (private households)	acute - systemic effects
sodium chloride	7647-14-5	DNEL	126.7 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects

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
sodium chloride	7647-14-5	DNEL	126.7 mg/kg bw/day	human, dermal	consumer (private households)	acute - systemic effects
sodium chloride	7647-14-5	DNEL	126.7 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
sodium chloride	7647-14-5	DNEL	126.7 mg/kg bw/day	human, oral	consumer (private households)	acute - systemic 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)
sodium chloride	7647-14-5	PNEC	5 $^{mg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)
sodium chloride	7647-14-5	PNEC	500 $^{mg}/_{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
sodium chloride	7647-14-5	PNEC	4.86 $^{mg}/_{kg}$	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: ≥ 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 (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 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

Appearance

Physical state	liquid
Colour	light yellow

Particle	not relevant (liquid)

Odour	characteristic

Other safety parameters

pH (value)	8
Melting point/freezing point	not determined
Initial boiling point and boiling range	100 °C calculated value, referring to a component of the mixture
Flash point	no data available
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Explosive limits	LEL: UEL: not determined
Vapour pressure	2.3 kPa at 20 °C calculated value, referring to a component of the mixture
Density	not determined
Relative density	information on this property is not available
Solubility	not determined

- n-octanol/water (log KOW)	this information is not available

Auto-ignition temperature	not determined
Decomposition temperature	no data available

Viscosity not determined

- kinematic viscosity	not determined
Explosive properties	none
Oxidising properties	none

9.2 Other information

There is no additional information.

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
sodium chloride	7647-14-5	oral	3,550 $^{mg}/_{kg}$
sodium chloride	7647-14-5	inhalation: dust/mist	42 $^{mg}/_{l}$/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
sodium chloride	7647-14-5	oral	LD50	3,550 $^{mg}/_{kg}$	rat
sodium chloride	7647-14-5	dermal	LD50	10,000 $^{mg}/_{kg}$	rabbit
sodium chloride	7647-14-5	inhalation: dust/mist	LC50	42 $^{mg}/_{l}$/1h	rat

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

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

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 ≥ 0,1%.

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 $^{mg}/_{l}$	algae	72 h
Tetrasodium ethylenediaminetetraacetate	64-02-8	LC50	>100 $^{mg}/_{l}$	rainbow trout (Oncorhynchus 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 (Oncorhynchus mykiss)	96 h

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
sodium chloride	7647-14-5	EC50	4,026 mg/l	daphnia magna	48 h
sodium chloride	7647-14-5	LC50	5,840 mg/l	bluegill (Lepomis macrochirus)	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	≥35.1 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 mg/l	microorganisms	30 min
sodium chloride	7647-14-5	LC50	874 mg/l	aquatic invertebrates	24 h
sodium chloride	7647-14-5	EC50	2,430 mg/l	algae	120 h
sodium chloride	7647-14-5	NOEC	252 mg/l	fathead minnow (Pimephales promelas)	33 d
sodium chloride	7647-14-5	LOEC	352 mg/l	fathead minnow (Pimephales promelas)	33 d
sodium chloride	7647-14-5	growth rate (ErCx) 16%	5,800 mg/l	algae	7 d

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 ≥ 0,1%.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of ≥ 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**	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 Transport in bulk according to IMO instruments

No data available.

Additional information for each of the UN Model Regulations

Transport information - national regulations - additional information (UN RTDG)

Not subject to transport regulations: UN RTDG

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

There is no additional information.

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

Revision

Date of compilation: 27.07.2026. Version number: 1.0.

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
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
ED	Endocrine disruptor
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control

Abbr.	Descriptions of used abbreviations
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
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
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
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
STOT RE	Specific target organ toxicity - repeated exposure
UEL	Upper explosion limit (UEL)
UN RTDG	UN Recommendations on the Transport of Dangerous Good
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Taiwan National Standards: Regulations for the Labeling and Hazard Communication of Hazardous Chemicals. Regulations for the Labeling and Hazard Communication of Hazardous Chemicals. Lao-An-3-Tzu-No. 0960145.

UN Recommendations on the Transport of Dangerous Good. 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.
H303	May be harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H333	May be harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H402	Harmful to aquatic life.
H413	May cause long lasting harmful effects to aquatic life.

Disclaimer

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