PeliKine Human IL-6 ELISA MoAb Set A (M2021)

Kit cover sheet

Date of compilation: 23.09.2026

Composition/information on ingredients

Hazardous components (including safety data sheet)

Components	Classification acc. to GHS	Pictograms	Page
HPE buffer	Eye Irrit. 2 / H319		2 – 13

Non hazardous components (no safety data sheet attached)

Components	Product number
IL-6 ELISA standard	M191603
Anti-IL-6 Biotinylated MoAb	M202104
Streptavidin-poly-HRP	M1942

Safety Data Sheet

acc. to Hazard communication of chemicals based on GHS-Labelling and Safety Data Sheet (SDS) - Japanese Industrial Standard

HPE buffer

Version number: 4.0
Replaces version of: 2024-08-05 (3)

Revision: 2025-06-19

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 laboratory professional use only.

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
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	
Thiomersal	CAS No 54-64-8	< 0.1	Acute Tox. 3 / H301 Acute Tox. 1 / H310 Acute Tox. 2 / H330 Eye Irrit. 2B / H320 Skin Sens. 1 / H317 Muta. 2 / H341 Carc. 2 / H351 Repr. 1B / H360 STOT SE 2 / H371 STOT RE 1 / H372 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	1(a) A(a)

Notes

1(a): The concentration stated is the percentage by weight of the metallic element calculated with reference to the total weight of the mixture

A(a): The name of substance is a general description. It is required that the correct name is stated on the label

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

Symptoms and effects are not known to date.

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; 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

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).

Appropriate containment techniques

Use of adsorbent materials.

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

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.

- 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

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

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

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
Evaporation rate	not determined
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

Vapour pressure	2.3 kPa at 20 °C calculated value, referring to a component of the mixture

Density and/or relative density

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

Particle characteristics	not relevant (liquid)

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

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.

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
Thiomersal	54-64-8	oral	100 $^{mg}/_{kg}$
Thiomersal	54-64-8	dermal	5 $^{mg}/_{kg}$
Thiomersal	54-64-8	inhalation: vapour	>0.5 $^{mg}/_{l}$/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.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

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	LC50	>100 mg/l	fish	96 h
tetrasodium ethylenediaminetetraacetate	64-02-8	EC50	>114 mg/l	aquatic invertebrates	48 h
tetrasodium ethylenediaminetetraacetate	64-02-8	ErC50	>60 mg/l	algae	72 h
tetrasodium ethylenediaminetetraacetate	64-02-8	NOEC	100 mg/l	fish	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	fish	35 d
tetrasodium ethylenediaminetetraacetate	64-02-8	LOEC	50 mg/l	aquatic invertebrates	21 d
tetrasodium ethylenediaminetetraacetate	64-02-8	growth (EbCx) 10%	>500 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 ≥ 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

Tetrasodium ethylenediaminetetraacetate.
Chemical Substance Emission Identification and Management Promotion Act
Concentration: 1<2.5%
Classification: Type 1

Deleterious Substances (Cabinet Order).
Article 2-1-22-2 of Cabinet Order.
Preparations which contain 0.1% or less of sodium [(2-carboxylatophenyl)thio](ethyl)mercurate (1-) (synonym:thimerosal).

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: 2025-06-19. Version number: 4.0. Date format: (YYYY-MM-DD).

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)
1.3	Details of the supplier of the safety data sheet: Sanquin Plesmanlaan 125 1066 CX Amsterdam 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)
3.2		Mixtures: change in the listing (table)
7.3	Specific end use(s): There is no additional information.	Specific end use(s): See section 1.2.
9.1	Vapour pressure: 0 Pa at 20 °C calculated value, referring to a component of the mixture	Vapour pressure: 2.3 kPa at 20 °C calculated value, referring to a component of the mixture
9.2	Other information: There is no additional information.	Other information
11.1		Acute toxicity estimate (ATE) of components: change in the listing (table)
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture: Tetrasodium ethylenediaminetetraacetate. Chemical Substance Emission Identification and Management Promotion Act Concentration: 1<2.5% Classification: Type 1	Safety, health and environmental regulations/legislation specific for the substance or mixture: Tetrasodium ethylenediaminetetraacetate. Chemical Substance Emission Identification and Management Promotion Act Concentration: 1<2.5% Classification: Type 1 Deleterious Substances (Cabinet Order). Article 2-1-22-2 of Cabinet Order. Preparations which contain 0.1% or less of sodium [(2-carboxylatophenyl)thio](ethyl)mercurate (1-) (synonym:thimerosal).
16		Abbreviations and acronyms: change in the listing (table)
16		List of relevant phrases (code and full text as stated in section 2 and 3): change in the listing (table)

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
Carc.	Carcinogenicity
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)

Abbr.	Descriptions of used abbreviations
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
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
Muta.	Germ cell mutagenicity
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
Repr.	Reproductive toxicity
Skin Sens.	Skin sensitisation
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single 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

Classification of chemicals based on Globally Harmonized System of Classification and Labelling of Chemicals (GHS) (JISZ7252). Hazard communication of chemicals based on GHS-Labelling and Safety Data Sheet (SDS) - Japanese Industrial Standard. JIS Z7253.

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
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H320	Causes eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H360	May damage fertility or the unborn child.
H371	May cause damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H402	Harmful to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Disclaimer

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