SAFETY DATA SHEET

In accordance with ISO 11014: 2009

Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product code	1-CJ1-002
Product name	ITEA Cry j 1 ELISA Self-build Kit (Biotin-labeled)
	A. Capture monoclonal antibody for coating
	B. Standard (lyophilized)
	C. Biotin-labeled monoclonal antibody

Manufacture/supplier

Manufacture/supplier	Institute of Tokyo Environmental Allergy, ITEA Inc.
Department in Charge	Quality Assurance Sec.
Address	1-33-18 Hakusan Bunkyo-ku Tokyo, 113-0001 Japan
Telephone number	+81-3-3526-2031
Fax number	+81-3-3526-2032
e-mail address	reag-info@itea.jp
Emergency telephone number	+81-3-3526-2031

Recommended use and restriction on use

Recommended use	Research reagent
Restrictions on use	This product should not be used for applications other than those recommended.

Section 2: HAZARDS IDENTIFICATION

Important hazards

GHS classification

Physical Hazards	Not classified
Health Hazards	
A. Capture monoclonal antibody for coating	Not classified
B. Standard (lyophilized)	Not classified
C. Biotin-labeled monoclonal antibody	Not classified
Environmental Hazards	Not classified

Label Elements

A. Capture monoclonal antibody for coating
B. Standard (lyophilized)
C. Biotin-labeled monoclonal antibody

Pictogram	Not classified
Signal word	Not classified
Hazard Statements	Not classified
Precautionary Statements	Not classified

Other hazards No information

Important symptoms and an outline of an anticipated emergency

A. Capture monoclonal antibody for coating	No information
B. Standard (lyophilized)	No information
C. Biotin-labeled monoclonal antibody	No information

Section 3: COMPOSITION/ INFORMATION ON INGREDIENTS

Substance/Mixture

Mixture

Compositions

A. Capture monoclonal antibody for coating

Chemical name/ Generic name	CAS number	Concentration (wt %)
Glycerol	56-81-5	40 ≤, < 60
Hydrogen chloride	7647-01-0	≤ 0.09

C. Biotin-labeled monoclonal antibody

Chemical name/ Generic name	CAS number	Concentration (wt %)
Glycerol	56-81-5	40 ≤, < 60

The following components do not contain hazardous ingredients.

B. Standard (lyophilized)

Section 4: FIRST-AID MEASURES

First aid procedures

IF INHALED	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, get medical advice/attention immediately and at rest.
IF ON SKIN	Rinse with plenty of water. If abnormality, immediately get medical advice/attention.
IF IN EYES	Immediately rinse cautiously with water for 15 - 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately get medical advice/attention.
IF SWALLOWED	Rinse mouth. Immediately get medical advice/attention.

Anticipated acute effects, anticipated delayed effects and most important symptoms/effects

A. Capture monoclonal antibody for coating	No information
C. Biotin-labeled monoclonal antibody	No information
B. Standard (lyophilized)	May cause skin, eyes and respiratory system irritation or cause allergic reaction if contact with or inhaled this product.

Protection of first-aiders

Wear appropriate eyes and skin protective equipment.

Note to an attending physician

No information

Section 5: FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

In case of fire, use water spray, dry extinguishant, fire foam or carbon dioxide.

Unsuitable extinguishing media

No restrictions on extinguishing media for this product.

Specific hazards arising from the chemical

A. Capture monoclonal antibody for coating	No information
B. Standard (lyophilized)	No information
C. Biotin-labeled monoclonal antibody	No information

Take action from windward.
Keep out except responsible personnel.
Move container to a safe area if it can be done without risk.

Protective equipment and precautions for firefighters

Fire fighters should wear appropriate protective equipment and fireproof clothing.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear suitable protective equipment described in section "Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION".

Environmental precautions

Prevent to flowing into drains, sewers, basements or closed areas.

Methods and materials for containment and cleaning up

A. Capture monoclonal antibody for coating

C. Biotin-labeled monoclonal antibody

Absorb into liquid absorbent, etc., and collect in an empty container.

B. Standard (lyophilized)

Sweep up scattered materials or vacuum them using a vacuum cleaner so as not to cause dust then collect them into an empty container.

Secondary disaster prevention measures

No information

Section 7: HANDLING AND STORAGE

Handling

A. Capture monoclonal antibody for coating

B. Standard (lyophilized)

C. Biotin-labeled monoclonal antibody

Technical measures	Install appropriate equipment and wear suitable protective apparatus described in section "Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION".
Precautions such as local /total ventilation	Handle the product in a well-ventilated area. In case of mist/vapours generation, use local ventilation.
Precautions for safe handling	Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid the generation of dust regarding B. Standard (lyophilized).
Prevention of contact	Avoid direct sunlight, high temperature and high humidity.

Storage

Technical measures	Store in a biomedical freezer at -20°C.
Incompatible materials and mixtures	
A. Capture monoclonal antibody for coating	No information
B. Standard (lyophilized)	No information
C. Biotin-labeled monoclonal antibody	No information
Conditions for safe storage	Store at -20°C. It may freeze at temperatures below -25°C as the reagent A and C contain glycerol.
Packing material	
A. Capture monoclonal antibody for coating	Polypropylene
B. Standard (lyophilized)	Polypropylene
C. Biotin-labeled monoclonal antibody	Polypropylene

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible concentration

Occupational Exposure Limits

A. Capture monoclonal antibody for coating

Hydrogen chloride

ACGIH TLV	2 ppm	(ceiling)

B. Standard (lyophilized)

ACGIH TLV-TWA (2018)	3 mg/m^3	(respirable particles)
	10 mg/m^3	(inhalable particles)
ACGIH TLV-STEL (2018)	Not applicable	

* This item is not an acceptable concentration for sensitization.

C. Biotin-labeled monoclonal antibody

Does not contain ingredients for which occupational exposure limits have been established.

Engineering controls

In a work place where dusts generate, ensure to use sealed instrument or local ventilation.
Under high temperature or in case of mist generation, use ventilation.

Personal protective equipment

Respiratory protection	Wear an appropriate protective mask.
Hand protection	Wear protective gloves.
Eye protection	Wear safety glasses .
Skin and body protection	Wear a lab coat.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, form and colour)	
A. Capture monoclonal antibody for coating	Clear and colourless liquid
B. Standard (lyophilized)	White powder
C. Biotin-labeled monoclonal antibody	Clear and colourless liquid
Odour	No information
Odour threshold	No information
pH	
A. Capture monoclonal antibody for coating	No information
B. Standard (lyophilized)	7.2 - 7.6 (after dissolving with distilled water)
C. Biotin-labeled monoclonal antibody	No information
Melting point/ freezing point	No information
Boiling point, initial boiling point and boiling range	No information
Flashpoint	No information
Evaporation rate	No information
Flammability	No information
Upper/lower explosive limits	No information
Vapour pressure	No information
Vapour density	No information
Specific gravity	No information
Solubility	Every component is miscible with water. B. Standard (lyophilized) may cause turbidity.
***n* -octanol/water partition coefficient**	No information
Auto-ignition temperature	No information
Decomposition temperature	No information
Viscosity	No information
Other information	No information

Section 10: STABILITY AND REACTIVITY

Chemical stability	Stable under normal handling condition.
Hazardous reactions	No hazardous reaction expected under normal handling.
Conditions to avoid	Direct sunlight, high temperature and high humidity
Incompatible materials	
A. Capture monoclonal antibody for coating	No information

B. Standard (lyophilized)	No information
C. Biotin-labeled monoclonal antibody	No information

Hazardous decomposition products

A. Capture monoclonal antibody for coating	No information
B. Standard (lyophilized)	No information
C. Biotin-labeled monoclonal antibody	No information

Section 11: TOXICOLOGICAL INFORMATION

Toxicological information for product No information

Toxicological information for ingredients

A. Capture monoclonal antibody for coating

Hydrogen chloride

Acute toxicity (oral):	Rat LD_{50} = 238 - 277 mg/kg
Acute toxicity (dermal):	Rabbit LD_{50} >5010 mg/kg (not classified)
Acute toxicity (gases):	Rat LC_{50} = 1411 ppm
Carcinogenicity:	IARC Group3 Not classifiable as to its carcinogenicity to humans

Section 12: ECOLOGICAL INFORMATION

Ecological information for product

Ecotoxicity	No information
Persistence and degradability	No information
Bioaccumulative potential	No information
Mobility in soil	No information
Hazardous to the ozone layer	No information

Ecological information for ingredients

A. Capture monoclonal antibody for coating

Hydrogen chloride

Ecotoxicity (acute)	Crustacean (*Daphnia magna*) 48 h EC_{50} = 0.492 mg/L
Ecotoxicity (chronic)	No information
Persistence and degradability	No information
Bioaccumulative potential	No information
Mobility in soil	No information
Hazardous to the ozone layer	No information

Section 13: DISPOSAL CONSIDERATIONS

Remaining product

A. Capture monoclonal antibody for coating

B. Standard (lyophilized)

C. Biotin-labeled monoclonal antibody

Dispose of waste in accordance with applicable local, regional and international regulations and standards.

Contaminated containers and packaging

When dispose of empty containers, contents should be removed completely and be recycled or dispose of in compliance with related laws and local regulations.

Section 14: TRANSPORT INFORMATION

International regulation

UN number	Not applicable
UN proper shipping name	Not applicable
Transport hazard class(es)	Not applicable
Subsidiary risk	Not applicable
Packing group	Not applicable

Marine pollutant	Not applicable
IBC Code	Not applicable

When transporting, confirm no damage to containers. Avoid handling violently or leaking wet. Load to prevent fall or falling down containers and take preventive measures of collapse.

Section 15: REGULATORY INFORMATION

US Federal regulation

TSCA inventory:	Registered	Sodium chloride Potassium dihydrogenphosphate Potassium chloride 3(2H)-Isothiazolone, 2-methyl- Sulfuric acid Hydrochloric acid 1,2,3-Propanetriol

EU regulation

The product and its ingredients are not regulated by specific provisions related to protection of human health or the environment at EU level, e.g. not considered as SVHCs or POPs.

(EC) 1272/2008 (Annex VI, Table 3): Listed (Hydrogen chloride)

Section 16: OTHER INFORMATION

Reference

Information of Institute of Tokyo Environmental Allergy, ITEA Inc.
NITE GHS classification results (http://www.safe.nite.go.jp/ghs/list.html). (2018)
ACGIH, American Conference of Governmental Industrial Hygienists (2018) TLVs and BEIs.