

# **SAFETY DATA SHEET**

# BioOcean® Human IL-4 High Sensitivity ELISA Kit

## Section 1. Identification

GHS product identifier Code: BioOcean® Human IL-4 High Sensitivity ELISA Kit, EK104HS

Other means of identification: Not available Trade name: Human IL-4 High Sensitivity ELISA Kit

Supplier/Manufacturer 3550 Lexington Ave, Suite 203, Shoreview, Minnesota 55126

In case of emergency: Bio-Ocean: 1-800-852-7601

Section 2. Hazards identif	ication	
OSHA/HCS status:	BioOcean® anti-Human IL-4 detect antibody(100X)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	BioOcean® Human IL-4 Standard (Iyophilized)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	BioOcean® Stop Solution	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	BioOcean® Amplification Reagent	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	BioOcean® Amplification Diluent	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture:	BioOcean® anti-Human IL-4 detect antibody(100X)	Not classified.
	BioOcean® Human IL-4 Standard (lyophilized)	Not classified.
	BioOcean® PBS Buffer with Tween 20 (Assay,	Not classified.
	Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Not classified.
	BioOcean® Stop Solution	Not classified.
	BioOcean® Amplification Reagent	Not classified.
	BioOcean® Amplification Diluent	Not classified.
GHS label elements		
Signal word	BioOcean® anti-Human IL-4 detect antibody(100X)	No signal word.
	BioOcean® Human IL-4 Standard (lyophilized)	No signal word.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No signal word.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	No signal word.
	BioOcean® Stop Solution	No signal word.
	BioOcean® Amplification Reagent	No signal word.

No signal word.

Bio-Ocean LLC, 3550 Lexington Ave, Suite 203, Shoreview, Minnesota 55126 Phone: 1-800-852-7601 Fax: 1-844-697-5634 E-mail: info@bioocean.com

BioOcean® Amplification Diluent



Hazard statements	BioOcean® anti-Human IL-4 detect antibody(100X)	No known significant effects or critical hazards.
	BioOcean® Human IL-4 Standard (lyophilized)	No known significant effects or critical hazards.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No known significant effects or critical hazards.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	No known significant effects or critical hazards.
	BioOcean® Stop Solution	No known significant effects or critical hazards.
	BioOcean® Amplification Reagent	No known significant effects or critical hazards
	BioOcean® Amplification Diluent	No known significant effects or critical hazards
Precautionary statements General	BioOcean® anti-Human IL-4 detect antibody(100X)	Not applicable.
	BioOcean® Human IL-4 Standard (lyophilized)	Not applicable.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent BioOcean® Stop Solution	Not applicable.  Not applicable.
	BioOcean® Amplification Reagent	Not applicable.
	BioOcean® Amplification Diluent	Not applicable.
Prevention	BioOcean® anti-Human IL-4 detect antibody(100X)	Not applicable.
	BioOcean® Human IL-4 Standard (lyophilized)	Not applicable.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate	Not applicable.  Not applicable.
	Reagent Streptavium-rint (1992) and Substrate	Not applicable.
	BioOcean® Stop Solution	Not applicable.
	BioOcean® Amplification Reagent	Not applicable.
	BioOcean® Amplification Diluent	Not applicable.
Response	BioOcean® anti-Human IL-4 detect antibody(100X)	Not applicable.
	BioOcean® Human IL-4 Standard (lyophilized)	Not applicable.
	BioOcean® PBS Buffer with Tween 20 (Assay,	Not applicable.
	Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Not applicable.
	BioOcean® Stop Solution	Not applicable.
	BioOcean® Amplification Reagent	Not applicable.
	BioOcean® Amplification Diluent	Not applicable.
Storage	BioOcean® anti-Human IL-4 detect antibody(100X)	Not applicable.
•	BioOcean® Human IL-4 Standard (lyophilized)	Not applicable.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Not applicable.
	BioOcean® Stop Solution	Not applicable.
	BioOcean® Amplification Reagent	Not applicable.
	BioOcean® Amplification Diluent	Not applicable.
Disposal	BioOcean® anti-Human IL-4 detect antibody(100X)	Not applicable.
	BioOcean® Human IL-4 Standard (lyophilized)	Not applicable.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent BioOcean® Stop Solution	Not applicable.
		Not applicable.
	BioOcean® Amplification Reagent	Not applicable.
	BioOcean® Amplification Diluent	Not applicable.
Supplemental label elements	BioOcean® anti-Human IL-4 detect antibody(100X)	None known.
	BioOcean® Human IL-4 Standard (lyophilized)	None known.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	None known.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent RioOcean® Stop Solution	None known.
	BioOcean® Stop Solution	NOTE KITOWII.



BioOcean® Amplification Reagent None known BioOcean® Amplification Diluent None known

Hazards not otherwise classified

BioOcean® anti-Human IL-4 detect antibody(100X) None known.

BioOcean® Human IL-4 Standard (lyophilized) None known BioOcean® PBS Buffer with Tween 20 (Assay, None known. Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate None known.

Reagent

BioOcean® Stop Solution BioOcean® Amplification Reagent None known. BioOcean® Amplification Diluent None known.

# Section 3. Composition/information on ingredients

Substance/mixture: Mixture

Inhalation

Ingredient name CAS number

BioOcean® Human IL-4 Standard 99.9-100

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

#### Section 4. First aid measures

Description of necessary	tirst aid measures
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BioOcean® anti-Human IL-4 detect antibody(100X) Eye contact

BioOcean® Human IL-4 Standard (lyophilized)

BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)

BioOcean® Streptavidin-HRP (100x) and Substrate

BioOcean® Stop Solution

BioOcean® Amplification Reagent

BioOcean® Amplification Diluent

BioOcean® anti-Human IL-4 detect antibody(100X)

BioOcean® Human IL-4 Standard (lyophilized)

BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)

BioOcean® Streptavidin-HRP (100x) and Substrate

BioOcean® Stop Solution

BioOcean® Amplification Reagent

BioOcean® Amplification Diluent

BioOcean® anti-Human IL-4 detect antibody(100X) Skin contact

BioOcean® Human IL-4 Standard (lyophilized)

BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)

BioOcean® Streptavidin-HRP (100x) and Substrate Reagent

BioOcean® Stop Solution

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses.

Get medical attention if irritation occurs.

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses.

Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, occasionally lifting the

upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses.

Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, occasionally lifting the

upper and lower eyelids. Check for and remove any contact lenses.

Get medical attention if irritation occurs.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. Remove victim to fresh air and keep at rest in a position comfortable

for breathing. Get medical attention if symptoms occur.

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated

clothing and shoes. Get medical attention if symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

#### SDS, BioOcean® Human IL-4 High Sensitivity ELISA Kit V1



BioOcean® Amplification Reagent Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur BioOcean® Amplification Diluent Flush contaminated skin with plenty of water. Remove contaminated

clothing and shoes. Get medical attention if symptoms occur.

Ingestion

BioOcean® anti-Human IL-4 detect antibody(100X)

BioOcean® Human IL-4 Standard (Ivophilized)

BioOcean® PBS Buffer with Tween 20 (Assav. Diluent or Washing buffer)

BioOcean® Streptavidin-HRP (100x) and Substrate Reagent

BioOcean® Stop Solution

BioOcean® Amplification Reagent

BioOcean® Amplification Diluent

Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities

Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been

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swallowed and the exposed person is conscious, give small quantities

rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

#### Most important symptoms/effects, acute and delayed Potential acute health effects

Eye contact

Inhalation

BioOcean® anti-Human IL-4 detect antibody(100X) BioOcean® Human IL-4 Standard (lyophilized)

BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)

BioOcean® Streptavidin-HRP (100x) and Substrate Reagent

BioOcean® Stop Solution BioOcean® Amplification Reagent BioOcean® Amplification Diluent

BioOcean® anti-Human IL-4 detect antibody(100X)

BioOcean® Human IL-4 Standard (lyophilized) BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)

BioOcean® Streptavidin-HRP (100x) and Substrate Reagent

BioOcean® Stop Solution BioOcean® Amplification Reagent BioOcean® Amplification Diluent

Skin contact

BioOcean® anti-Human IL-4 detect antibody(100X)

BioOcean® Human IL-4 Standard (lyophilized) BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)

BioOcean® Streptavidin-HRP (100x) and Substrate Reagent BioOcean® Stop Solution

BioOcean® Amplification Reagent BioOcean® Amplification Diluent

Ingestion

No known significant effects or critical hazards. No known significant effects or critical hazards.

No known significant effects or critical hazards. No known significant effects or critical hazards.

No known significant effects or critical hazards No known significant effects or critical hazards. No known significant effects or critical hazards.

No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

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No known significant effects or critical hazards.

No known significant effects or critical hazards. No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

BioOcean® anti-Human IL-4 detect antibody(100X) BioOcean® Human IL-4 Standard (lyophilized)

No known significant effects or critical hazards. No known significant effects or critical hazards.



Diluent or Washing buffer)	NO KIOWII SIGNIII CATE ETIECES OF CITEDAT HAZAITUS.
BioOcean® Streptavidin-HRP (100x) and Substrate	No known significant effects or critical hazards.
Reagent	
BioOcean® Stop Solution	No known significant effects or critical hazards.
BioOcean® Amplification Reagent	No known significant effects or critical hazards.
BioOcean® Amplification Diluent	No known significant effects or critical hazards.

Over-exposure signs/symptoms
Eye contact

BioOcean® anti-Human IL-4 detect antibody(100X)

BioOcean® Human IL-4 Standard (lyophilized)

No specific data.

BioOcean® PBS Buffer with Tween 20 (Assay,
Diluent or Washing buffer)

No specific data.

RioOcean® DRS Ruffer with Tween 20 (Assay

BioOcean® Streptavidin-HRP (100x) and Substrate No specific data.

Reagent

BioOcean® Stop Solution No specific data.

BioOcean® Amplification Reagent No specific data.

BioOcean® Amplification Diluent No specific data.

Inhalation BioOcean® anti-Human IL-4 detect antibody(100X)

BioOcean® Human IL-4 Standard (Iyophilized)

No specific data.

BioOcean® PBS Buffer with Tween 20 (Assay,

No specific data.

Diluent or Washing buffer)

BioOcean® Streptavidin-HRP (100x) and Substrate Reagent
BioOcean® Stop Solution No specific data.

BioOcean® Amplification Reagent No specific data.

BioOcean® Amplification Diluent No specific data.

Skin contact BioOcean® anti-Human IL-4 detect antibody(100X) No specific data.

BioOcean® Human IL-4 Standard (lyophilized)

BioOcean® PBS Buffer with Tween 20 (Assay,
Diluent or Washing buffer)

No specific data.

BioOcean® Streptavidin-HRP (100x) and Substrate Reagent

BioOcean® Stop Solution No specific data.

BioOcean® Amplification Reagent No specific data.

BioOcean® Amplification Diluent No specific data.

Ingestion BioOcean® anti-Human IL-4 detect antibody(100X) No specific data.

BioOcean® Human IL-4 Standard (lyophilized)

BioOcean® PBS Buffer with Tween 20 (Assay,
Diluent or Washing buffer)

BioOcean® Streptavidin-HRP (100x) and Substrate
Reagent

BioOcean® Stop Solution

No specific data.
No specific data.

BioOcean® Amplification Reagent No specific data.

BioOcean® Amplification Reagent No specific data.

BioOcean® Amplification Diluent No specific data.

Indication of immediate medical attention and special treatment needed, if necessary, see toxicological information (Section 11)

Notes to physician Specific treatments Protection of first-aiders Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

No specific data.

No specific data.

No specific treatment

No action shall be taken involving any personal risk or without suitable training.

# Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

BioOcean® anti-Human IL-4 detect antibody(100X)

Use an extinguishing agent suitable for the surrounding fire.

BioOcean® Human IL-4 Standard (lyophilized)

Use an extinguishing agent suitable for the surrounding fire.

BioOcean® PBS Buffer with Tween 20 (Assay,
Diluent or Washing buffer)

Use an extinguishing agent suitable for the surrounding fire.

BioOcean® Streptavidin-HRP (100x) and Substrate Use an extinguishing agent suitable for the surrounding fire.

BioOcean® Stop Solution

Use an extinguishing agent suitable for the surrounding fire.

BioOcean® Amplification Reagent

Use an extinguishing agent suitable for the surrounding fire.

BioOcean® Amplification Diluent

Use an extinguishing agent suitable for the surrounding fire.



		A BETTER APPROACH FOR BIOLOGICAL RESEARCH
Unsuitable extinguishing media	BioOcean® anti-Human IL-4 detect antibody(100X)	None known.
	BioOcean® Human IL-4 Standard (lyophilized)	None known.
	BioOcean® PBS Buffer with Tween 20 (Assay,	None known.
	Diluent or Washing buffer)	
	BioOcean® Streptavidin-HRP (100x) and Substrate	None known.
	Reagent BioOcean® Stop Solution	None known.
	BioOcean® Amplification Reagent	None known.
	BioOcean® Amplification Diluent	None known.
Specific hazards arising from the chemical	BioOcean® anti-Human IL-4 detect antibody(100X)	In a fire or if heated, a pressure increase will occur and the container may burst.
	BioOcean® Human IL-4 Standard (lyophilized)	In a fire or if heated, a pressure increase will occur and the container may burst.
	BioOcean® PBS Buffer with Tween 20 (Assay,	In a fire or if heated, a pressure increase will occur and the container
	Diluent or Washing buffer)	may burst.
	BioOcean® Streptavidin-HRP (100x) and Substrate	In a fire or if heated, a pressure increase will occur and the container
	Reagent BioOcean® Stop Solution	may burst. In a fire or if heated, a pressure increase will occur and the container
		may burst.
	BioOcean® Amplification Reagent	In a fire or if heated, a pressure increase will occur and the container may burst.
	BioOcean® Amplification Diluent	In a fire or if heated, a pressure increase will occur and the container
		may burst.
Hazardous thermal decomposition products	BioOcean® anti-Human IL-4 detect antibody(100X)	No specific data.
	BioOcean® Human IL-4 Standard (lyophilized)	No specific data.
	BioOcean® PBS Buffer with Tween 20 (Assay,	No specific data.
	Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	No specific data.
	BioOcean® Stop Solution	No specific data.
	BioOcean® Amplification Reagent	No specific data.
	BioOcean® Amplification Diluent	No specific data.
Special protective actions for fire-fighters	BioOcean® anti-Human IL-4 detect antibody(100X)	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving
S .	BioOcean® Human IL-4 Standard (lyophilized)	any personal risk or without suitable training.  Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	any personal risk or without suitable training.  Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	any personal risk or without suitable training.  Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving
	BioOcean® Stop Solution	any personal risk or without suitable training.  Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving
	Dis Ossas ® Assall Control	any personal risk or without suitable training.
	BioOcean® Amplification Reagent	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving
	BioOcean® Amplification Diluent	any personal risk or without suitable training.  Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	BioOcean® anti-Human IL-4 detect antibody(100X)	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	BioOcean® Human IL-4 Standard (lyophilized)	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	operated in positive pressure mode.  Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	operated in positive pressure mode.  Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece
	BioOcean® Stop Solution	operated in positive pressure mode.  Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

BioOcean® Amplification Reagent

BioOcean® Amplification Diluent

Fire-fighters should wear appropriate protective equipment and selfcontained breathing apparatus (SCBA) with a full face-piece

operated in positive pressure mode.

Fire-fighters should wear appropriate protective equipment and selfcontained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

#### Section 6. Accidental release measures

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

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non- emergency personnel".

**Environmental precautions** 

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

#### Methods and materials for containment and cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

Precautions for safe handling Protective measures

BioOcean® anti-Human IL-4 detect antibody(100X)

Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8).

BioOcean® Human IL-4 Standard (lyophilized)

BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and

Substrate Reagent BioOcean® Stop Solution

BioOcean® Amplification Reagent

BioOcean® Amplification Diluent

Put on appropriate personal protective equipment (see Section

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Advice on general occupational hygiene

BioOcean® anti-Human IL-4 detect

antibody(100X)

BioOcean® Human IL-4 Standard

(lyophilized)

BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)

BioOcean® Streptavidin-HRP (100x) and

Substrate Reagent

BioOcean® Stop Solution

BioOcean® Amplification Reagent

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated



BioOcean® Amplification Diluent

clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage including any incompatibilities

BioOcean® anti-Human IL-4 detect antibody(100X)

BioOcean® Human IL-4 Standard (Ivophilized)

BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)

BioOcean® Streptavidin-HRP (100x) and Substrate Reagent

BioOcean® Stop Solution

BioOcean® Amplification Reagent

BioOcean® Amplification Diluent

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry,

Section 8. Exposure controls/personal protection

Control parameters
Occupational exposure limits

None



Appropriate engineering controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure controls** 

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures
Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection

**Body protection** 

Other skin protection

**Respiratory protection** 

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Not available.

# Section 9. Physical and chemical properties

Physical state	BioOcean® anti-Human IL-4 detect antibody(100X) BioOcean® Human IL-4 Standard (lyophilized)	Liquid. Solid
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Liquid.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent BioOcean® Stop Solution	Liquid.
	BioOcean® Amplification Reagent	Liquid.
	BioOcean® Amplification Diluent	Liquid.
Color	BioOcean® anti-Human IL-4 detect antibody(100X)	Not available.
	BioOcean® Human IL-4 Standard (Iyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean® Stop Solution	Not available.
	BioOcean® Amplification Reagent	Not available.
	BioOcean® Amplification Diluent	Not available.
Odor	BioOcean® anti-Human IL-4 detect antibody(100X)	Not available.
	BioOcean® Human IL-4 Standard (lyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean® Stop Solution	Not available.
	BioOcean® Amplification Reagent	Not available.
	BioOcean® Amplification Diluent	Not available.
Flash point	BioOcean® anti-Human IL-4 detect antibody(100X)	Not available.
	BioOcean® Human IL-4 Standard (lyophilized)	Not available.

Bio-Ocean LLC, 3550 Lexington Ave, Suite 203, Shoreview, Minnesota 55126 Phone: 1-800-852-7601 Fax: 1-844-697-5634 E-mail: info@bioocean.com

BioOcean® PBS Buffer with Tween 20 (Assay,

Diluent or Washing buffer)



		A BETTER APPROACH FOR BIOLOGICAL RESEARCH
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean® Stop Solution	Not available.
	BioOcean® Amplification Reagent	Not available.
	BioOcean® Amplification Diluent	Not available.
Auto-ignition temperature	BioOcean® anti-Human IL-4 detect antibody(100X)	Not available.
	BioOcean® Human IL-4 Standard (lyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean® Stop Solution	Not available.
	BioOcean® Amplification Reagent	Not available.
	BioOcean® Amplification Diluent	Not available.
Flammable limits	BioOcean® anti-Human IL-4 detect antibody(100X)	Not available.
	BioOcean® Human IL-4 Standard (lyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean® Stop Solution	Not available.
	BioOcean® Amplification Reagent	Not available.
	BioOcean® Amplification Diluent	Not available.
Molecular weight	BioOcean® anti-Human IL-4 detect antibody(100X)	Not available.
	BioOcean® Human IL-4 Standard (lyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean® Stop Solution	Not available.
	BioOcean® Amplification Reagent	Not available.
	BioOcean® Amplification Diluent	Not available.
Molecular formula	BioOcean® anti-Human IL-4 detect antibody(100X) BioOcean® Human IL-4 Standard (lyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and	Not available.  Not available.
	Substrate Reagent	Net envilable
	BioOcean® Stop Solution	Not available.
	BioOcean® Amplification Reagent	Not available.
	BioOcean® Amplification Diluent	Not available.
рН	BioOcean® anti-Human IL-4 detect antibody(100X)	7.0-7.2
	BioOcean® Human IL-4 Standard (lyophilized)	Not available
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	7.0-7.2
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	7.0-7.2
	BioOcean® Stop Solution	1.1-1.3
	BioOcean® Amplification Reagent	0
	BioOcean® Amplification Diluent	14
Boiling/condensation point	BioOcean® anti-Human IL-4 detect antibody(100X)	Not available.
	BioOcean® Human IL-4 Standard (lyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent BioOcean® Stop Solution	Not available.
	BioOcean® Stop Solution	
	BioOcean® Amplification Reagent	Not available.
	BioOcean® Amplification Diluent	Not available.



Melting/freezing point	BioOcean® anti-Human IL-4 detect antibody(100X)	Not available.
	BioOcean® Human IL-4 Standard (lyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay,	Not available.
	Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean® Stop Solution	Not available.
	BioOcean® Amplification Reagent	Not available.
	BioOcean® Amplification Diluent	Not available.
Relative density	BioOcean® anti-Human IL-4 detect antibody(100X)	Not available.
	BioOcean® Human IL-4 Standard (lyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean® Stop Solution	Not available.
	BioOcean® Amplification Reagent	Not available.
	BioOcean® Amplification Diluent	Not available.
Vapor pressure	BioOcean® anti-Human IL-4 detect antibody(100X)	Not available.
	BioOcean® Human IL-4 Standard (lyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay,	Not available.
	Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and	Not available.
	Substrate Reagent BioOcean® Stop Solution	Not available.
	BioOcean® Amplification Reagent	Not available.
	, ,	
	BioOcean® Amplification Diluent	Not available.
Vapor density	BioOcean® anti-Human IL-4 detect antibody(100X)	Not available.
	BioOcean® Human IL-4 Standard (lyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay,	Not available.
	Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean® Stop Solution	Not available.
	BioOcean® Amplification Reagent	Not available.
	BioOcean® Amplification Diluent	Not available.
Volatility	BioOcean® anti-Human IL-4 detect antibody(100X)	Not available.
	BioOcean® Human IL-4 Standard (lyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay,	Not available.
	Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and	Not available.
	Substrate Reagent	
	BioOcean® Stop Solution	Not available.
	BioOcean® Amplification Reagent	Not available.
	BioOcean® Amplification Diluent	Not available.
Evaporation rate	BioOcean® anti-Human IL-4 detect antibody(100X)	Not available.
	BioOcean® Human IL-4 Standard (lyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay,	Not available.
	Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean® Stop Solution	Not available.
	BioOcean® Amplification Reagent	Not available.
	BioOcean® Amplification Diluent	Not available.
Viscosity	BioOcean® anti-Human IL-4 detect antibody(100X)	Not available.
	BioOcean® Human IL-4 Standard (lyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.



BioOcean® Streptavidin-HRP (100x) and Substrate Reagent

BioOcean® Stop Solution

BioOcean® Amplification Reagent BioOcean® Amplification Diluent

Not available.

Not available. Not available. Not available.

Not available.

BioOcean® anti-Human IL-4 detect Solubility

antibody(100X)

BioOcean® Human IL-4 Standard (lyophilized) Not available. BioOcean® PBS Buffer with Tween 20 (Assay, Not available.

Diluent or Washing buffer)

BioOcean® Streptavidin-HRP (100x) and Substrate Reagent BioOcean® Stop Solution Not available. BioOcean® Amplification Reagent Not available.

Not available.

BioOcean® Amplification Diluent Not available.

Physical/chemical properties comments

BioOcean® anti-Human IL-4 detect antibody(100X)

Not available.

BioOcean® Human IL-4 Standard (lyophilized)

BioOcean® PBS Buffer with Tween 20 (Assay,

Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and

Substrate Reagent BioOcean® Stop Solution

BioOcean® Amplification Reagent BioOcean® Amplification Diluent

Not available. Not available.

Not available. Not available.

Not available. Not available.

### Section 10. Stability and reactivity

Reactivity

BioOcean® anti-Human IL-4 detect antibody(100X)

BioOcean® Human IL-4 Standard (lyophilized)

BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and

Substrate Reagent BioOcean® Stop Solution

BioOcean® Amplification Reagent

BioOcean® Amplification Diluent

No specific test data related to reactivity available for this product or its ingredients

No specific test data related to reactivity available for this product or its ingredients.

No specific test data related to reactivity available for this product or its ingredients

No specific test data related to reactivity available for this product or its ingredients

No specific test data related to reactivity available for this product or its ingredients

No specific test data related to reactivity available for this product or its ingredients No specific test data related to reactivity available for this product or

its ingredients.

Chemical stability

BioOcean® anti-Human IL-4 detect

antibody(100X)

BioOcean® Human IL-4 Standard (Ivophilized) BioOcean® PBS Buffer with Tween 20 (Assay,

Diluent or Washing buffer)

BioOcean® Streptavidin-HRP (100x) and Substrate Reagent

BioOcean® Stop Solution BioOcean® Amplification Reagent BioOcean® Amplification Diluent

The product is stable.

The product is stable. The product is stable.

The product is stable. The product is stable The product is stable. The product is stable.

Possibility of hazardous reactions

BioOcean® anti-Human IL-4 detect

antibody(100X)

BioOcean® Human IL-4 Standard (lyophilized)

BioOcean® PBS Buffer with Tween 20 (Assay,

Diluent or Washing buffer)

BioOcean® Streptavidin-HRP (100x) and Substrate Reagent

BioOcean® Stop Solution

Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.

Under normal conditions of storage and use, hazardous reactions will

not occur. Under normal conditions of storage and use, hazardous reactions will not occur.

Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.

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Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.

#### SDS, BioOcean® Human IL-4 High Sensitivity ELISA Kit V1

BI COCEAN

BioOcean® Amplification Reagent Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous

reactions will not occur.
BioOcean® Amplification Diluent Under normal condition

Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous

reactions will not occur.

No specific data.

No specific data.

No specific data

Conditions to avoid BioOcean® anti-Human IL-4 detect

antibody(100X)

BioOcean® Human IL-4 Standard (lyophilized) No specific data.

BioOcean® PBS Buffer with Tween 20 (Assay,

Diluent or Washing buffer)

BioOcean® Streptavidin-HRP (100x) and

Substrate Reagent BioOcean® Stop Solution

BioOcean® Stop Solution No specific data.

BioOcean® Amplification Reagent No specific data.

BioOcean® Amplification Diluent No specific data.

Incompatible materials BioOcean® anti-Human IL-4 detect

antibody(100X)

BioOcean® Human IL-4 Standard (lyophilized) BioOcean® PBS Buffer with Tween 20 (Assay,

Diluent or Washing buffer)

BioOcean® Streptavidin-HRP (100x) and Substrate Reagent BioOcean® Stop Solution BioOcean® Amplification Reagent BioOcean® Amplification Diluent

Hazardous decomposition products

BioOcean® anti-Human IL-4 detect

antibody(100X)

BioOcean® Human IL-4 Standard (lyophilized)

BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)

BioOcean® Streptavidin-HRP (100x) and

Substrate Reagent

BioOcean® Stop Solution

BioOcean® Amplification Reagent

BioOcean® Amplification Diluent

No specific data.

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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decomposition produces should not be produced. Onder normal conditions of storage and use, hazardous decomposition products should not be produced.

Under normal conditions of storage and use, hazardous

decomposition products should not be produced. Under normal

conditions of storage and use, hazardous decomposition products

should not be produced.

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal

conditions of storage and use, hazardous decomposition products

should not be produced.

## Section 11. Toxicological information

Information on toxicological effects
Acute toxicity: Not available.
Irritation/Corrosion: Not available.
Sensitization: Not available.
Mutagenicity: Not available.
Carcinogenicity: Not available.
Reproductive toxicity: Not available.

Teratogenicity: Not available.

Specific target organ toxicity (single exposure): Not available. Specific target organ toxicity (repeated exposure): Not available.

Aspiration hazard: Not available.

Information on the likely routes of exposure: Not available.

Potential acute health effects



Eye contact: Not available. Inhalation: Not available. Skin contact: Not available. Ingestion: Not available.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Not available. Inhalation: Not available. Skin contact: Not available. Ingestion: Not available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure: Not available.

Potential immediate effects: Not available. Potential delayed effects: Not available. Long term exposure: Not available. Potential immediate effects: Not available. Potential delayed effects: Not available.

Potential chronic health effects:

General: Not available.

Carcinogenicity: Not available.
Mutagenicity: Not available.
Teratogenicity: Not available.
Developmental effects: Not available.

Fertility effects: Not available.

Numerical measures of toxicity Acute toxicity estimates: Not available.

Interactive effects: Not available. Other information: Not available.

#### Section 12. Ecological information

Toxicity: Not available.

Persistence and degradability: Not available. Bioaccumulative potential: Not available.

Mobility in soil

Soil/water partition: coefficient (Koc)

Not available. BioOcean® anti-Human IL-4 detect antibody(100X) BioOcean® Human IL-4 Standard (lyophilized) Not available. BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Not available. Washing buffer) Not available. BioOcean® Streptavidin-HRP (100x) and Substrate Reagent Not available. BioOcean® Stop Solution BioOcean® Amplification Reagent Not available BioOcean® Amplification Diluent Not available

Mobility: Not available.

Other adverse effects: No known significant effects or critical hazards.

## Section 13. Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

#### Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number UN proper shipping name	Not available. Not available.					
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-	-



Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not available.

# Section 15. Regulatory information

U.S. Federal regulations: TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): Not determined.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs): Not listed

Clean Air Act Section 602 Class I Substances: Not listed Clean Air Act Section 602 Class II Substances: Not listed DEA List I Chemicals (Precursor Chemicals): Not listed DEA List II Chemicals (Essential Chemicals): Not listed SARA 302/304 Composition/information on ingredients

Nama	% EHS	EUC	SARA 302 TPQ		SARA 304 RQ	
Name		EU2	(lbs)	(gallons)	(lbs)	(gallons)
BioOcean® Substrate Reagent with hydrogen peroxide	0-1	Yes.	1000	106.1	1000	106.1

SARA 304 RQ: 68292000 lbs / 31004568 kg SARA 311/312 Classification: Not applicable.

Composition/information on ingredients: No products were found.

State regulations

Massachusetts: None of the components are listed. New York: None of the components are listed. New Jersey: None of the components are listed. Pennsylvania: None of the components are listed.

## Section 15. Regulatory information

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

**Stockholm Convention on Persistent Organic Pollutants** 

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals** 

Not listed.

Canada

WHMIS (Canada)

BioOcean® anti-Human IL-4 detect

Not con

antibody(100X)

BioOcean® Human IL-4 Standard (lyophilized) BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate Reagent

BioOcean® Stop Solution
BioOcean® Amplification Reagent
BioOcean® Amplification Diluent

Not controlled under WHMIS (Canada).

Not controlled under WHMIS (Canada). Not controlled under WHMIS (Canada).

Not controlled under WHMIS (Canada).

Not controlled under WHMIS (Canada). Not controlled under WHMIS (Canada). Not controlled under WHMIS (Canada).

Canadian lists Canadian NPRI: None of the components are listed.

CEPA Toxic substances: None of the components are listed

Canada inventory: Not determined.

#### Section 16. Other information

Hazardous Material Information System (U.S.A.)





The customer is responsible for determining the PPE code for this material. National Fire Protection Association (U.S.A.)



#### History

Date of issue/Date of revision: 6/11/2016
Date of previous issue: No previous validation.

Version: 1

#### Section 16. Other information

## Key to abbreviations:

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.