AlphaThera Inc.

oYo-Link® mIgG1 His12 Tag

MATERIAL SAFETY DATA SHEET

This document was prepared in accordance with the (US) Hazard Communication Standard (29 CFR 1910.1200) R*evision Date September 4 2023 Version 1.2*

Section 1: Product Identification

1.1 Product Identifiers

Product Name oYo-Link® mIgG1 His12 Tag

Product Catalog # AT2002-mIgG1

1.2 International Product Classification Harmonized Code (HS Code)

Harmonized Tariff Number 382219

Diagnostic or laboratory reagents on a backing, prepared diagnostic or laboratory reagents whether or not on a backing, whether or not put up in the form of kits (excl. for malaria, for Zika and other diseases transmitted by mosquitoes of the genus Aedes, for blood-grouping, and goods of 3006)

1.3 Recommended use of the chemical and restrictions on use

Identified uses: Laboratory chemicals, Synthesis of substances

For research purposes only. Not permitted or validated for use in humans.

1.4 Supplier Details

Company AlphaThera Inc.

Address 3401 Grays Ferry Avenue
Building 250
Philadelphia, PA 19146-2701

Email support@alphathera.com

1.5 Emergency phone number & contact

In the event of a chemical emergency, please dial 911 in the US or your country's emergency telephone number.

Section 2: Hazard(s) Identification

GHS Classification

Not a hazardous substance or mixture

OSHA (US) Hazards

Not a hazardous substance or mixture

Other hazards

None known. oYo-Link mIgG1 His12 Tag is a small adaptor protein that is engineered to contain the photoreactive non-natural amino acid benzoyl-phenylalanine. The production of oYo-Link mIgG1 His12 Tag does not involve the use of starting materials classified as hazardous substances.

Section 3: Composition/Information on Ingredients:

Component	CAS-No.	EC-No.	Weight %
oYo-Link mIgG1 His12 Tag	-	-	3
Sodium chloride	7647-14-5	231-598-3	79
Sodium phosphate dibasic dihydrate	10028-24-7	231-448-7	13
Sodium phosphate monobasic dihydrate	13472-35-0	231-449-2	5

Section 4: First Aid Measures

Description of first-aid measures

If inhaled

After inhalation, get fresh air. Consult a physician if feeling unwell.

Skin contact

In case of skin contact, remove contaminated clothing and wash skin with soap and water.

Eye contact

In case of eye contact, flush eyes with water. Remove contact lenses.

Ingestion

If swallowed, drink water (two glasses at most). Consult a physician if feeling unwell.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

No information available.

Section 5: Firefighting Measures

Extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special hazards arising from the substance or mixture

Oxides of phosphorus, Hydrogen chloride gas, Potassium oxides, Sodium oxides

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No information available

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Advice for non-emergency personnel: Avoid dust formation. Avoid inhalation. Use personal protective equipment. Avoid substance contact.

Advice for emergency responders: Protective equipment see section 8.

Environmental precautions

No special environmental precautions required.

Methods and materials for containment and cleaning up

Clean up with damp cloth. Dispose of contaminated materials following applicable regulations.

Section 7: Handling and Storage

Instructions for Safe Handling

Avoid formation of dust and aerosols. This product should be handled only by those properly qualified in the handling and use of potentially hazardous chemicals, who should take into account the fire, health and chemical hazard data given on this sheet.

Conditions for Safe Storage

Keep container tightly closed in a dry and well-ventilated space.

Section 8: Exposure Controls/Personal Protection

Exposure limit(s)

Contains no substances with occupational exposure limit values.

Engineering measures

Ensure adequate ventilation.

Individual protection measures

Hygiene measures: Follow general industrial hygiene practice. Wash hands before work breaks and at the end of workday.

Eye/face protection: Wear safety glasses tested and approved by local authorities.

Hand protection: Chemical-resistant, impervious gloves.

Other protective equipment: Lightweight, protective clothing.

Respiratory protection: None under normal use conditions.

Section 9: Physical and Chemical Properties

Physical state:	Pellet
Color:	White
Odor:	No strong odor known.
Odor Threshold:	No information available.
pH:	No information available.
Melting point :	No information available.
Boiling point:	No information available.
Flash point:	No information available.
Evaporation rate:	No information available.
Flammability (solid, gas):	No information available.
Lower explosion limit:	No information available.
Upper explosion limit	No information available.
Vapor pressure:	No information available.
Relative vapor density:	No information available.

Relative density:	No information available.
Water solubility:	No information available.
Autoignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity, dynamic:	No information available.
Explosive properties:	No information available.

Section 10: Stability and Reactivity

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No information available.

Conditions to avoid

Excessive heating. Microbial contamination.

Incompatible materials

Strong acids. Strong oxidizing agents.

Hazardous decomposition products

Under normal conditions, no data available.
In the event of fire, oxides of phosphorus, hydrogen chloride gas, potassium oxides, sodium oxides. See Section 5.

Section 11: Toxicological Information

Information on toxicological effects

Acute toxicity

Component	LD50 (oral,rat/mouse)	LD50 (dermal,rat/rabbit)	LC50 (inhalation, rat/mouse)
oYo-Link mIgG1 His12 Tag	No data available	No data available	No data available
Sodium chloride	No data available	> 10 g/kg (rabbit)	No data available
Sodium phosphate dibasic dihydrate	No data available	No data available	No data available
Sodium phosphate	No data available	No data available	No data available

monobasic dihydrate			

Skin corrosion/irritation

May cause skin irritation in susceptible persons

Serious eye damage/eye irritation

May be irritating to eyes

Respiratory or skin sensitization

No data available

Specific target organ systemic toxicity - single exposure

No data available

Specific target organ systemic toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Germ cell mutagenicity

Component	Animal testing	Ames test	OECD Test Guideline 475
oYo-Link mIgG1 His12 Tag	No data available	No data available	No data available
Sodium chloride	No mutagenic effects shown	Negative	Positive (female rat bone marrow)
Sodium phosphate dibasic dihydrate	No data available	Negative	No data available
Sodium phosphate monobasic dihydrate	No data available	No data available	No data available

Carcinogenicity

IARC - No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Reproductive toxicity

No data available.
No data available.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Handle in accordance with good industrial hygiene and safety practices.

Section 12: Ecological Information:

Ecotoxicity

No data available

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Section 13: Disposal Considerations

The information presented in this document only applies to the material as supplied. The hazard identification of this product based on characteristics or listings within this document may not apply if the material has been used or otherwise contaminated.

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: Transport Information

Land transport (DOT)

Not classified as dangerous in the meaning of transport regulations.

Air transport (IATA)

Not classified as dangerous in the meaning of transport regulations.

Sea transport (IMDG)

Not classified as dangerous in the meaning of transport regulations.

Section 15: Regulatory Information

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Section 16: Other Information

Training advice: Please read the product instruction manual before use and adequately train all end-users

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