

Safety Data Sheet

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)
Issue date: 09/10/2023



SECTION 1: Identification

1.1. Identification of the substance/mixture

Product form : Substance
Product name : TCO-NHS Ester (axial)
Product code : CCT-1509

1.2. Identified uses of the substance or mixture

Identified Uses : Laboratory chemicals, manufacture of substances

1.3. Company/undertaking identification

Manufacturer

Vector Laboratories, Inc.
8341 E. Gelding Drive
Scottsdale, AZ 85260
T: (480) 584-3340
customerservice@vectorlabs.com

1.4. Emergency telephone number

Emergency number : US only (800) 227-6666 or outside of the US +1 (650) 697-3600 (7:15 AM - 5:00 PM PST)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2. GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

Not a hazardous substance or mixture.

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name	Product identifier	%
TCO-NHS Ester (axial)	CAS-No.: 1610931-22-0	100

The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets.

This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

3.2. Mixtures

Not applicable

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SECTION 4: First-aid measures

4.1. Description of first aid measures

If inhaled	: Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
In case of skin contact	: Rinse with plenty of water. Immediate medical attention is not required.
In case of eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
If swallowed	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

4.2. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

4.3. Most important symptoms and effects, both acute and delayed

Not Applicable

4.4. Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Water spray. Carbon dioxide (CO₂). Foam. Dry chemical.

5.2. Advice from firefighters

Standard procedure for chemical fires.

5.3. Further information

No data available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment. See Section 8 for more detail.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

See Section 8 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Always wear recommended Personal Protective Equipment. No special handling advices are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place.

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7.3. Specific end use(s)

For research use only.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available

8.2. Appropriate engineering controls

Exposure Limits : Contains no substances with occupational exposure limit values
Engineering measures : Ensure adequate ventilation, especially in confined areas

8.3. Individual protection measures/ Personal protective equipment

Respiratory protection:

In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards

Hand protection:

Wear suitable gloves. Glove material: Compatible chemical-resistant gloves

Eye/Face protection:

Wear tight sealing safety goggles

Skin/Body Protection:

Wear suitable protective clothing

Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice

Control of Environmental exposure:

No special environmental precautions required

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance : Solid
Color : White to slightly grey
Odor : No data available
Odor threshold : No data available
pH : Not Applicable
Melting / Freezing points : °C and °F Mixture has not been tested
Initial boiling point & boiling range : °C and °F Mixture has not been tested
Flash point : °C and °F Mixture has not been tested
Evaporation rate : No data available

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Flammability (solid, gas)	: No data available
Explosive limits	: Mixture has not been tested
Vapor pressure	: Mixture has not been tested
Relative density	: Mixture has not been tested
Water solubility	: DMSO, DMF, DCM, THF, Chloroform
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other safety information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

None known

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

Hazardous reaction has not been reported

10.4. Conditions to avoid

No information available

10.5. Incompatible materials

No dangerous reaction known under conditions of normal use

10.6. Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: No data available
Irritation	: No data available
Corrosivity	: No data available
Sensitization	: No data available
STOT - Single Exposure	: No data available
STOT - Repeated Exposure	: No data available
Carcinogenicity	: No data available
Mutagenicity	: No data available
Reproductive toxicity	: No data available
Aspiration hazard	: No data available
Viscosity, kinematic	: No data available

SECTION 12: Ecological information

12.1. Toxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

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12.2. Persistence and degradability

No information available

12.3. Bioaccumulative potential

No information available

12.4. Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB

12.5. Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations.

UN number : Not applicable
UN proper shipping name : Not applicable
Transport hazard class(es) : Not applicable
Packing group : Not applicable
Environmental hazards : Not applicable
Special precautions for user : Not applicable
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

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15.2. SARA 313 Components

This product is not regulated by SARA

15.3. Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs

15.4. California Proposition 65

This product does not contain any Proposition 65 chemicals.

15.5. WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products

Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16: Other information

16.1. References

ECHA: <http://echa.europa.eu/>

TOXNET: <http://toxnet.nlm.nih.gov/>

eChemPortal: <http://www.echemportal.org/>

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.