

TCI AMERICA SAFETY DATA SHEET

Revision number: 1 Revision date: 07/06/2018

1. IDENTIFICATION

Product name: 3,4,7,8-Tetramethyl-1,10-phenanthroline

Product code: T084

Product use:For laboratory research purposes.Restrictions on use:Not for drug or household use.

Company: TCI America

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TCI America (8:00am - 5:00pm) PST

+1-503-286-7624

Transportation Emergencies:

Chemtrec 24-Hour

+1-800-424-9300 (U.S.A.)

+1-703-527-3887 (International) Responsible department:

TCI America

Environmental Health Safety and Security

+1-503-286-7624

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:

WHMIS 2015:

Not classifiable

Signal word:

None

Hazard Statement(s):

None

Pictogram(s) or Symbol(s):

None

Precautionary Statement(s):

None

Hazards not otherwise classified:

[HNOC]

None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Components: 3,4,7,8-Tetramethyl-1,10-phenanthroline

Percent: >98.0%(HPLC)(T) **CAS RN:** 1660-93-1

Molecular Weight: 236.32 Chemical Formula: $C_{16}H_{16}N_2$

4. FIRST-AID MEASURES

Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical

advice/attention if you feel unwell.

Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation Skin contact:

or rash occurs: Get medical advice/attention.

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Eye contact:

Continue rinsing. If eye irritation persists: Get medical advice/attention.

Get medical advice/attention if you feel unwell. Rinse mouth. Ingestion:

Symptoms/effects:

Acute: No data available No data available Delayed:

Indication of any immediate medical attention:

Not available.

Notes to physician: No data available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, foam, water spray, carbon dioxide.

Specific hazards arising from the

chemical:

Hazardous combustion products:

Other specific hazards:

These products include: Carbon oxides Nitrogen oxides Closed containers may explode from heat of a fire.

Advice for firefighters: Wear self-contained breathing apparatus if possible.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: **Environmental precautions:**

Methods and materials for containment and cleaning up:

Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc. Prevent product from entering drains.

Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.

7. HANDLING AND STORAGE

Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent Precautions for safe handling:

dispersion of dust. Wash hands and face thoroughly after handling.

Use a local exhaust if dust or aerosol will be generated.

Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a cool and dark place.

Store away from incompatible materials such as oxidizing agents.

Packaging material: Comply with laws.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed Appropriate engineering controls:

system or local exhaust as possible so that workers should not be exposed directly. Also install safety

shower and eye bath.

Personal protective equipment

Respiratory protection: Dust respirator. Follow local and national regulations.

Hand protection: Protective gloves.

Eye protection: Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires. Skin and body protection:

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C):

Solid

Form: Crystal - Powder

Colour: White - Slightly pale yellow

Odour:No data availableOdor threshold:No data availableOdour threshold:No data available

Melting point/freezing point:
Boiling point/range:
Decomposition temperature:
Relative density:
Kinematic viscosity:
No data available

Vapour density:No data availableDynamic Viscosity:No data available

Evaporation rate(Butyl

Vapour pressure:

Acetate=1):

рН:

No data available

No data available

No data available.

Flash point: No data available

Flammability(solid, gas): No data available

Autoignition temperature: No data available

Flammability or explosive limits:

Lower: No data available Upper: No data available

Solubility(ies):

[Water] No data available
[Other solvents]
Soluble: Hot methanol

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under proper conditions. Possibility of hazardous reactions: No special reactivity has been reported.

Incompatible materials: Oxidizing agents

Hazardous decomposition products: Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

No data available

Skin corrosion/irritation:

No data available

Serious eye damage/irritation:

No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

No data available

Carcinogenicity:

No data available

IARC: No data available NTP: No data available OSHA: No data available

Reproductive toxicity:

No data available

Target organ(s): No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: No data available No data available Crustacea: Algae: No data available

Persistence / degradability: Bioaccumulative potential(BCF):

Mobility in soil

No data available No data available

Log Pow: No data available Soil adsorption (Koc): No data available Henry's Law (PaM 3/mol): No data available

13. DISPOSAL CONSIDERATIONS

Disposal of product:

Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for

Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not

be allowed to enter the environment, drains, water ways, or the soil. Dispose of as unused product.

Disposal of container:

Observe all federal, state and local regulations when disposing of the substance. Other considerations:

14. TRANSPORT INFORMATION

DOT (US) Non-hazardous for transportation.

Non-hazardous for transportation. <u>IATA</u>

IMDG Non-hazardous for transportation.

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity: SARA 313: Not Listed

SARA 302: Not Listed

State Regulations

State Right-to-Know

Massachusetts Not Listed **New Jersey** Not Listed Pennsylvania Not Listed California Proposition 65: Not Listed

Other Information

HMIS Classification: NFPA Rating: Health: Health: Flammability: Flammability: 0 0 Instability: Physical: 0

International Inventories

On NDSL Canada: NDSL 216-762-4 EC-No:

16. OTHER INFORMATION

Revision date: 07/06/2018 Revision number: 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or 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 chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.