

# TCI AMERICA SAFETY DATA SHEET

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

## 1. IDENTIFICATION

**Product name:** 2-Vinylpyridine (stabilized with TBC)

Product code: V0022

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

Company: TCI America

9211 N. Harborgate Street Portland, OR 97203 U.S.A.

Telephone:

+1-800-423-8616 / +1-503-283-1681

Fax:

+1-888-520-1075 / +1-503-283-1987

e-mail:

sales-US@TCIchemicals.com www.TCIchemicals.com

Emergency telephone number:

Chemical Emergencies:

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: Acut

WHMIS 2015:

Acute Toxicity - Oral [Category 3] Acute Toxicity - Dermal [Category 2] Eye Damage/Irritation [Category 1] Sensitization - Skin [Category 1] Germ Cell Mutagenicity [Category 2]

Specific Target Organ Toxicity (Single Exposure) [Category 1] Specific Target Organ Toxicity (Single Exposure) [Category 3] Specific Target Organ Toxicity (Repeated Exposure) [Category 2]

Flammable Liquids [Category 3]
Aquatic Hazard (Acute) [Category 2]
Aquatic Hazard (Long-Term) [Category 2]
Skin Corrosion/Irritation [Category 1B]

Signal word: Danger!

Hazard Statement(s): Flammable liquid and vapor

Toxic if swallowed Fatal in contact with skin

Causes severe skin burns and eye damage May cause an allergic skin reaction Suspected of causing genetic defects

Toxic to aquatic life

Toxic to aquatic life with long lasting effects Causes damage to: Nervous System May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure: Respiratory System Nervous

System

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames and hot surfaces. – No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist, vapors or spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of

the workplace. Wash hands and face thoroughly after handling. Wear protective gloves, protective

clothing, face protection.

[Response] If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If on

skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a poison center or doctor. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor. If exposed: Call a poison center or doctor. In case of fire: Use dry chemical, dry sand or foam to extinguish. Collect spillage.

[Storage] Store in a well-ventilated place. Keep container tightly closed. Store locked up.

[Disposal] Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40

CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

Hazards not otherwise classified:

[HNOC]

May cause polymerization. Lachrymator

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

**Components:** 2-Vinylpyridine (stabilized with TBC)

 Percent:
 >97.0%(GC)

 CAS RN:
 100-69-6

 Molecular Weight:
 105.14

 Chemical Formula:
 C<sub>7</sub>H<sub>7</sub>N

Stabilizers: 4-tert-butylcatechol

#### 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. Immediately call a

POISON CENTER or doctor/physician.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.

Immediately call a POISON CENTER or doctor/physician.

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

Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

Symptoms/effects:

Ingestion:

Acute: Pain. Redness.

Delayed: May cause heritable genetic damage in humans. May cause skin sensitization. May have effects on the

respiratory tract.

Indication of any immediate medical attention:

Not available.

Notes to physician:
No data available

# 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, foam, carbon dioxide.
Unsuitable extinguishing media: Water (It may scatter and spread fire.)

Specific hazards arising from the

Other specific hazards:

chemical: Hazardous combustion products:

This substance may polimerize explosively when heated or involved in a fire. Container may explode

when heated. Combat fire from a sheltered position.
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:

Use extra personal protective equipment (self-contained breathing apparatus). Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

Environmental precautions:

Methods and materials for containment

and cleaning up:

Be careful not to let it flow into rivers, etc., since adverse effects on the environment are concerned. Absorb spilled material in dry sand or inert absorbent before recovering it into a covered container. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

Prevention of secondary hazards:

Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.

## 7. HANDLING AND STORAGE

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

> generation of vapour or mist. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands

and face thoroughly after handling.

Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated.

Avoid all contact!

Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in an explosion-poof freezer. Storage conditions:

Store under inert gas. Store locked up.

Store away from incompatible materials such as oxidizing agents.

Heat-sensitive Air-sensitive

Packaging material: Comply with laws.

## EXPOSURE CONTROLS / PERSONAL PROTECTION

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

system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc.

Use respirators approved under appropriate government standards and follow local and national

regulations.

Hand protection: Impervious gloves.

Eye protection: Safety goggles. A face-shield, if the situation requires.

Impervious protective clothing. Protective boots, if the situation requires. Skin and body protection:

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Liquid Form: Clear

Colorless - Yellow red Colour:

Odour: Pungent

Odor threshold: No data available **Odour threshold:** No data available

Melting point/freezing point: -50°C (-58°F) No data available pH: Boiling point/range: 158°C (316°F) Vapour pressure: No data available. Decomposition temperature: No data available Vapour density: No data available **Dynamic Viscosity:** No data available

Relative density: 0.98

Kinematic viscosity: No data available

No data available Evaporation rate(Butvl No data available Log Pow:

Acetate=1):

Flash point: 46°C (115°F) Autoignition temperature: No data available

No data available Flammability(solid, gas): Flammability or explosive limits:

No data available Lower: Upper: No data available

Solubility(ies):

Slightly soluble (2.75g/100mL, 20°C) [Water]

[Other solvents] Very soluble: Ether, Alcohols, Acetone, Chloroform, Many organic solvents

#### 10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Polymerization may occur under the influences of heat, light or on contact with polymerization initiators

such as peroxides etc.

Possibility of hazardous reactions:

No special reactivity has been reported. Conditions to avoid: Heat, Spark, Open flame, Static discharge, Light Incompatible materials: Oxidizing agents, Strong acids, Strong bases

Carbon monoxide, carbon dioxide etc Hazardous decomposition products:

## 11. TOXICOLOGICAL INFORMATION

RTECS Number: UU1040000

**Acute Toxicity:** 

ihl-rat LC50:610 mg/m3 orl-mus LD50:420 mg/kg orl-rat LD50:100 mg/kg skn-gpg LDLo:500 mg/kg

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):

Causes damage to: Nervous System May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure: Respiratory System Nervous System

# 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** 

96h LC50:6.5 mg/L (Oryzias latipes) Fish: Crustacea: 48h EC50:9.5 mg/L (Daphnia magna)

72h EC50:51mg/L (Selenastrum capricornutum) Algae:

Persistence / degradability: 0% (by BOD), 0% (by HPLC), 2% (by TOC)

Bioaccumulative potential(BCF):

Mobility in soil

No data available

Log Pow: 1.54 Soil adsorption (Koc): 160 Henry's Law (PaM 3/mol): 0.36

# 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. Do not re-use empty containers.

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

#### 14. TRANSPORT INFORMATION

DOT (US)

**UN number: Proper Shipping Name:** Class or Division: Subrisk(s): **Packing Group:** UN3073

Vinylpyridines, stabilized 6.1 Toxic material. 3 Flammable liquid

8 Corrosive material

IATA

Subrisk(s): UN number: **Proper Shipping Name:** Class or Division: **Packing Group:** 

UN3073 Vinylpyridines, stabilized 6.1 Toxic material. 3 Flammable liquid

8 Corrosive material

<u>IMDG</u>

er:

Class or Division: UN3073 **Proper Shipping Name:** Subrisk(s): **Packing Group:** UN numb

3 Flammable liquid Vinylpyridines, stabilized 6.1 Toxic material.

8 Corrosive material

EmS number: F-E, S-C

## 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

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

Other Information

**HMIS Classification:** NFPA Rating:

Health: Health: 3 2 Flammability: 2 Flammability: 0 Instability: Physical:

International Inventories

Canada: NDSL On NDSL EC-No: 202-879-8

## 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.