

TCI AMERICA SAFETY DATA SHEET

Revision number: 1 Revision date: 08/17/2021

1. IDENTIFICATION

Product name: (S)-5,5-Diphenyl-2-methyl-3,4-propano-1,3,2-oxazaborolidine (ca. 1mol/L in Toluene)

Product code: D59

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

Company: TCI America

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Emergency telephone number:

Chemical Emergencies:

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

+1-503-286-7624

Transportation Emergencies: Chemtrec 24-Hour

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TCI America

Environmental Health Safety and Security

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2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: Acute Toxicity - Inhalation [Category 4] WHMIS 2015: Skin Corrosion/Irritation [Category 2]

Skin Corrosion/Irritation [Category 2]
Eye Damage/Irritation [Category 2B]
Toxic to Reproduction [Category 1A]

Toxic to Reproduction [Category 1A]
Specific Target Organ Toxicity (Single Exposure) [Category 1]
Specific Target Organ Toxicity (Single Exposure) [Category 3]
Specific Target Organ Toxicity (Repeated Exposure) [Category 1]

Aspiration Hazard [Category 1]
Flammable Liquids [Category 2]
Aquatic Hazard (Acute) [Category 2]

Signal word: Danger!

Hazard Statement(s): Highly flammable liquid and vapor

Harmful if inhaled Causes skin irritation Causes eye irritation

May damage fertility or the unborn child May be fatal if swallowed and enters airways

Toxic to aquatic life

Causes damage to: Central Nervous System

May cause respiratory irritation.

Causes damage to organs through prolonged or repeated exposure: Liver Kidney Central 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. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear protective gloves, protective clothing, face protection

[Response]

If swallowed: Immediately call a poison center or doctor. Do NOT induce vomiting. If on skin: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice or attention. Take off

contaminated clothing and wash it before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. If exposed: Call a poison center or doctor. In

case of fire: Use dry chemical, dry sand or foam to extinguish.

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

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

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

Hazards not otherwise classified:

[HNOC]

May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture:

(S)-5,5-Diphenyl-2-methyl-3,4-propano-1,3,2-oxazaborolidine (ca. 1mol/L in Toluene) Components:

Percent:

CAS RN: 112022-81-8 Molecular Weight: 277.17 C18H20BNO **Chemical Formula:**

Synonyms: (S)-3,3-Diphenyl-1-methyltetrahydro-1H,3H-pyrrolo[1,2-c][1,3,2]oxazaborole (ca. 1mol/L in Toluene),

(S)-Me-CBS Catalyst (ca. 1mol/L in Toluene), (S)-(-)-2-Methyl-CBS-oxazaborolidine (ca. 1mol/L in

Toluene)

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. Call a POISON

CENTER or doctor/physician.

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

Call a POISON CENTER or doctor/physician.

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

Call a POISON CENTER or doctor/physician.

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

Symptoms/effects:

Acute: No data available Delayed: No data available

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 chemical:

Hazardous combustion products:

Closed containers may explode from heat of a fire. Other specific hazards:

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.

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

Environmental precautions:

Methods and materials for containment and cleaning up:

Prevent product from entering drains.

Absorb spilled material in dry sand or inert absorbent before recovering it into an airtight 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

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

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 a cool, dark and well-ventilated place. Storage conditions:

Store under inert gas. Protect from moisture. Store locked up. Store away from incompatible materials such as oxidizing agents.

Moisture-sensitive

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. 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.

pH:

Vapour pressure:

Dynamic Viscosity:

Vapour density:

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

No data available

No data available.

No data available

No data available

regulations.

Hand protection: Impervious gloves.

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

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Liquid Colour: Colorless

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

Melting point/freezing point: No data available

111°C Boiling point/range:

Decomposition temperature: No data available

Relative density: 0.95

No data available Kinematic viscosity:

Log Pow:

No data available **Evaporation rate(Butyl** No data available

Acetate=1):

No data available Flash point: Autoignition temperature: No data available

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

No data available Lower: No data available Upper:

Solubility(ies):

Conditions to avoid:

[Water] No data available No data available [Other solvents]

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 monoxide, Carbon dioxide, Nitrogen oxides (NOx), Boron oxides

Spark, Open flame, Static discharge

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

Aspiration hazard: May be fatal if swallowed and enters airways.

Target organ(s):

Causes damage to: Central Nervous System

May cause respiratory irritation.

Causes damage to organs through prolonged or repeated exposure: Liver Kidney Central Nervous System

12. ECOLOGICAL INFORMATION

Ecotoxicity:

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

Persistence / degradability: No data available Bioaccumulative potential(BCF): No data available

Mobility in soil

Log Pow:No data availableSoil adsorption (Koc):No data availableHenry'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.

Disposal of container: Dispose of as unused product. Do not re-use empty containers.

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: Packing Group:

UN1294 Toluene 3 Flammable liquid

<u>IATA</u>

UN number: Proper Shipping Name: Class or Division: Packing Group:

UN1294 Toluene 3 Flammable liquid

<u>IMDG</u>

UN UN1294 Proper Shipping Name: Class or Division: Packing Group:

numb Toluene 3 Flammable liquid II

er:

EmS number: F-E, S-D

Reportable Quantitiy: 1000 Pounds (454 Kilograms)

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:

- (i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.
- (ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:

SARA 313: Not Listed SARA 302: Not Listed

State Regulations

State Right-to-Know

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

Other Information

NFPA Rating:
Health: 2
Flammability: 3
Instability: 0
HMIS Classification:
Health: 4
Flammability: 3
Flammability: 3
Physical: 0

International Inventories

16. OTHER INFORMATION

Revision date: 08/17/2021 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.