

Revision number: 3 Revision date: 08/15/2016

1. IDENTIFICATION

Product name: Product code: (S)-(-)-N,N-Dimethyl-1-ferrocenylethylamine D2529

For laboratory research purposes.

Not for drug or household use.

Product use: Restrictions on use:

Company:

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2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:

Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 2A]

Signal word:

Warning!

None

Hazard Statement(s):

Causes serious eye irritation Causes skin irritation

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention] [Response]

> [Storage] [Disposal]

Wash hands and face thoroughly after handling. Wear protective gloves. Wear eye and face protection. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. 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. None

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SAFETY DATA SHEET

TCI AMERICA

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Components: Percent: CAS Number: Molecular Weight: Chemical Formula: Synonyms: Substance (S)-(-)-N,N-Dimethyl-1-ferrocenylethylamine >97.0%(GC) 31886-57-4 257.16 C₁₄H₁₉FeN (S)-(-)-[1-(Dimethylamino)ethyl]ferrocene

4. FIRST-AID MEASURES Inhalation: Call a poison center or doctor if you feel unwell. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. If skin irritation occurs get medical advice/attention. Remove and wash contaminated clothing before re-Skin contact: use. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Eye contact: IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Contact with material may irritate or burn eyes. Call emergency medical service. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Ingestion: Do not induce vomiting with out medical advice. If swallowed, seek medical advice immediately and show the container or label. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Symptoms/effects: Redness. Acute: No data available Delayed: If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the Immediate medical attention: injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves 5. FIRE-FIGHTING MEASURES Suitable extinguishing media: Dry chemical, CO₂, sand, earth, water spray or regular foam Consult with local fire authorities before attempting large scale fire fighting operations. Specific hazards arising from the chemical Hazardous combustion products: These products include: Carbon oxides Nitrogen oxides Metallic oxides Other specific hazards: Closed containers may explode from heat of a fire. Special precautions for fire-fighters: Use water spray or fog; do not use straight streams. Dike fire-control water for later disposal; do not scatter the material. Containers may explode when heated. Move containers from fire area if you can do it without risk. Special protective equipment for fire-fighters: Wear positive pressure self-contained breathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations ONLY; it may not be effective in spill situations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection. 6. ACCIDENTAL RELEASE MEASURES Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Do not touch **Personal precautions:** damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Wear eye protection (splash goggles) and face protection (full length face shield). Lab coat. Vapor Personal protective equipment: respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves

Emergency procedures:

(nitrile). In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and excercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.

Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material. **Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

Precautions for safe handling:	Do NOT breath gas, fumes, vapor, or spray. Avoid contact with skin and eyes. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke Kapa query from equipaes of ignition
Conditions for safe storage:	Keep away from sources of ignition. Keep only in the original container in a cool well-ventilated place. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid
Storage incompatibilities:	prolonged storage periods. Store under inert gas (e.g. Argon). Combustible substances, Store away from oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits: No data available

Appropriate engineering controls:

Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

Personal protective equipment	
Respiratory protection:	Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.
Hand protection:	Nitrile gloves.
Eye protection:	Wear eye protection (splash goggles) and face protection (full length face shield).
Skin and body protection:	Lab coat.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Color: Odor: Odor threshold:	Liquid Liquid Yellow - Deep reddish yellow No data available No data available		
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	No data available 121°C (250°F)/0.1kPa No data available 1.22 No data available	pH: Vapor pressure: Vapor density: Dynamic Viscosity:	No data available No data available No data available No data available
Partition coefficient: n-octanol/water (log P _{ow})	No data available	Evaporation rate: (Butyl Acetate = 1)	No data available
Flash point: Flammability (solid, gas):	95°C (203°F) No data available		

Solubility(ies):

10. STABILITY AND REACTIVITY

Reactivity: Chemical Stability: Possibility of Hazardous Reactions: Conditions to avoid: Incompatible materials: Hazardous Decomposition Products: Not Available. Air sensitive. No hazardous reactivity has been reported. Air sensitive. Exposure to air. Oxidizing agents No data available

11. TOXICOLOGICAL INFORMATION

(S)-(-)-N,N-Dimethyl-1-ferrocenylethylamine TCI AMERICA Page 4 of		
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 avail	able
Reproductive toxicity: No data available		
Routes of Exposure: Symptoms related to exposure: Skin contact may result in inflammation; cha or dry skin. Eye contact may result in rednes Potential Health Effects: Skin and eye contact may result in irritation.		sult in redness, pain
Target organ(s):	No data available	
12. ECOLOGICAL INFORMATION		
Ecotoxicity Fish:	No data available	
Crustacea: Algae:	No data available No data available	
Persistence and degradability: Bioaccumulative potential (BCF): Mobillity in soil: Partition coefficient: n-octanol/water (log Pow) Soil adsorption (Koc): Henry's Law: constant (PaM ³ /mol)	No data available No data available No data available No data available No data available No data available	
13. DISPOSAL CONSIDERATIONS Disposal of product:	Recycle to process if possible. It is the generator's responsibility to comply with Fede rules and regulations. You may be able to dissolve or mix material with a combustible chemical incinerator equipped with an afterburner and scrubber system. This section assistance but does not replace these laws, nor does compliance in accordance with regulatory compliance according to the law. US EPA guidelines for Identification and Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the	solvent and burn in a is intended to provide this section ensure Listing of Hazardous
Disposal of container:	water ways, or the soil. 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)	Non-hazardous for transportation.	
IATA	Non-hazardous for transportation.	
IMDG	Non-hazardous for transportation.	

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

Other Information

NFPA Rating:

Health:	2	Health:
Flammability:	1	Flammability:
Instability:	0	Physical:

International Inventories WHMIS hazard class:

D2B: Materials causing other toxic effects. (Toxic)

16. OTHER INFORMATION

Revision date: 08/15/2016

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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 gogles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.

HMIS Classification:

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