Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 1: Identification

Product Name Dalfampridine USP (4-Aminopyridine)
Commercial Name N/A
Product Use Potassium channel blocker and used as a treatment to improve walking in patients with multiple scler
Restrictions On Use N/A

Product Code 50-5030

Company
PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: CFR 1910.1200 Acute toxicity (oral) Category 2 Acute toxicity (dermal) Category 3 STOT-SE (single exposure) Category 3 (Nervous system)

Signal Word DANGER

Hazard Statement(s) Fatal if swallowed. Toxic in contact with skin. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Pictogram(s) or Symbol(s)

Precautionary Statement(s):

Prevention Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response If swallowed: Immediately call a poison center/doctor. Rinse mouth. If on skin: Wash with plenty of water. Call a poison center/doctor if you feel unwell. Take off immediately all contaminated clothing and wash it before reuse. If exposed: Call a poison center/doctor

Storage Store locked up

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance
Components Dalfampridine USP
% By Weight Between 98.8% and 102.0%
CAS# 504-24-5
Molecular Weight 94.11
Chemical Formula C5H6N2
Synonym(s) Fampridine 4-Aminopyridine 4-Pyridinamine

Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Dalfampridine USP	504-24-5	98.8-102	N/A	N/A

Section 4: First-Aid Measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin Contact IF ON SKIN: Rinse with water. Call a POISON CENTER or doctor/physician if you feel unwell. Take off contaminated clothing and wash before reuse

Eye Contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion If swallowed: Immediately call a poison center or doctor/physician. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs

Symptoms/Effects

Acute Behavioral changes. Nervous system stimulation. Pharmacologically active material. Occupational exposure may cause physiological effects

Delayed Behavioral changes. Nervous system stimulation. Pharmacologically active material. Occupational exposure may cause physiological effects

Immediate Medical Attention

Provide general supportive measures and treat symptomatically

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media

Water. Foam. Dry chemical or CO2. Use fire-extinguishing media appropriate for surrounding materials

Unsuitable Extinguishing Media

Not available

Products of Combustion

No unusual fire or explosion hazards noted

Firefighters Special Equipment and Precautions

Wear suitable protective equipment. Use water spray to cool unopened containers. As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing. Cool containers exposed to flames with water until well after the fire is out.

Section 6: Accidental Release Measures

Keep unnecessary personnel away. Wear appropriate personal protective equipment. Avoid inhalation of dust from the spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Methods and materials for containment and cleaning up: Avoid the generation of dusts during clean-up. This product is miscible in water. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination. Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

Section 7: Handling and Storage

Handling: As a general rule, when handling USP materials, avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Clean equipment and work surfaces with suitable detergent or solvent after use. After removing gloves, wash hands and other exposed skin thoroughly. Select and use containment devices and personal protective equipment based on a risk assessment of material potency and exposure potential. Storage: Store in tight container. This material should be handled and stored per label instructions to ensure product integrity.

Section 8: Exposure Controls/Personal Protection

Exposure Limits Not available.

Engineering Controls For laboratory operations, use local exhaust ventilation or a ventilated enclosure for high energy operations such as particle sizing. Control exposures to below the occupational exposure level (if available). Select and use containment devices and personal protective equipment based on a risk assessment of exposure potential. Cover all containers for solutions and slurries while being transferred.

Personal Protection

Eye/face protection: Wear safety glasses with side shields, chemical splash goggles, or full face shield, if necessary. Base the choice of protection on the job activity and potential for contact with eyes or face. An emergency eye wash station should be available. Skin protection Hand protection: Wear nitrile or other impervious gloves if skin contact is possible. When the material is dissolved or suspended in an organic solvent, wear gloves that provide protection against the solvent. Other: Train employees in proper gowning and degowning practices. Wear lab coat. Base the choice of skin protection on the job activity, potential for skin contact and solvents and reagents in use. Do not wear protective garments in common areas (e.g., cafeterias) or out-of-doors. Respiratory protection: Respirators are generally not required for laboratory operations. Use a tight-fitting full-face respirator with HEPA filters for spill cleanup. Choose respiratory protection appropriate to the task and the level of existing engineering controls. Thermal hazards: Wear appropriate thermal protective clothing, when necessary. General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice. Handling practices in this SDS are recommendations for laboratory use of USP materials.

Section 9: Physical and Chemical Properties

Appearance	White. Cream. Light yellow. Crystalline powder Solid.
Odor	N/A
Odor Threshold	N/A

Melting Point	317.3 °F (158.5 °C)	**pH**	N/A
Freezing Point	N/A	**Vapor Pressure**	0.00005 kPa (77 °F (25 °C))
Boiling Point/Range	523.4 °F (273 °C)	**Vapor Density**	N/A
Decomposition temperature	N/A	**Viscosity**	N/A
Partition Coefficient: n-octanol/water	0.32	**Evaporation Rate**	N/A
Flash Point	N/A	**Autoignition temperature**	1184 °F (640 °C)
Flammability	N/A	**Flammability or Explosive Limits:**	
		Lower	N/A
		Upper	N/A

Solubility(ies)	Soluble in water
Other	Ethanol: Very soluble. Methanol: Freely soluble Ethyl ether: Soluble. Benzene: Soluble Chemical family Pyridine. Molecular formula C5H6N2 Molecular weight 94.12 g/mol

Section 10: Stability and Reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical Stability	Material is stable under normal conditions
Hazardous Polymerization	No dangerous reaction known under conditions of normal use.
Conditions to Avoid	Contact with incompatible materials
Incompatible Materials	Strong acids. Strong oxidizing agents. Peroxides. Phenols. Acid chlorides. Acid anhydrides.
Hazardous Decomposition Products	NOx. Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions.

Section 11: Toxicological Information

RTECS N/A

Acute Toxicity
Fatal if swallowed. Toxic in contact with skin. Acute Dermal: LD50 Rabbit 326 mg/kg Oral: LD50 Mouse 19 mg/kg Rat 21 mg/kg, 20 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
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive Toxicity
no data available

Routes of Entry
Skin. Ingestion.

Symptoms Related to Exposure
Central nervous system stimulation. Behavior, mood, or mental changes. Headache. Back pain. Seizures. Gastrointestinal disturbances.

Potential Health Effects
Not available.

Target Organ(s) Causes damage to organs (nervous system).

Section 12: Ecological Information

Ecotoxicity
Aquatic Crustacea EC50 Water flea (Daphnia magna) 2.3 - 4.5 mg/l, 48 hours Fish LC50 Bluegill (Lepomis macrochirus) 2.7 - 3.8 mg/l, 96 hours

Persistance and Degradability
Not available

Bioaccumulative Potential
Octanol/water partition coefficient log Kow 0.32

Mobility in Soil
Not available

Other Adverse Effects
Not available

Section 13: Disposal Considerations

Waste Disposal
Dispose in accordance with all applicable regulations. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. The waste code should be assigned in discussion between the user, the producer and the waste disposal company. Hazardous waste code US RCRA Hazardous Waste P List: Reference Dalfampridine (CAS 504-24-5) P008

Disposal of Container
Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner

Other Considerations
Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Section 14: Transport Information

DOT Classification
UN number: UN2671 UN proper shipping name: Aminopyridines (Dalfampridine) Transport hazard class(es) Class 6.1 Subsidiary risk - Packing group II Packaging exceptions 153 Packaging non bulk 212 Packaging bulk 242

Section 15: Regulatory Information

Regulations

US federal regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200 Toxic Substances Control Act (TSCA) TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) Dalfampridine (CAS 504-24-5) Listed. SARA 304 Emergency release notification Pyridine, 4-amino- (CAS 504-24-5) 1000 LBS OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) Not listed. Superfund Amendments and Reauthorization Act of 1986 (SARA) Chemical name CAS number Reportable quantity (pounds) Threshold planning quantity (pounds) Threshold planning quantity, lower value (pounds) Threshold planning quantity, upper value (pounds) Dalfampridine 504-24-5 1000 500 10000 YesSARA 311/312 Hazardous chemical Acute toxicity (any route of exposure) Specific target organ toxicity (single or repeated exposure) Classified hazard categories SARA 313 (TRI reporting) Not regulated. Other federal regulations Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Not regulated. Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated. Not regulated.Safe Drinking Water Act (SDWA) US state regulations California Proposition 65 California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov

Other

no data available

Section 16: Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.