

\*\*\*Betahistine Hydrochloride\*\*\*

# Safety Data Sheet

<b>NFPA</b>	<b>HMIS</b>	<b>Personal Protective Equipment</b>						
	<table border="1"> <tr> <td>Health Hazard</td> <td align="center"><b>1</b></td> </tr> <tr> <td>Fire Hazard</td> <td align="center"><b>1</b></td> </tr> <tr> <td>Reactivity</td> <td align="center"><b>0</b></td> </tr> </table>	Health Hazard	<b>1</b>	Fire Hazard	<b>1</b>	Reactivity	<b>0</b>	
Health Hazard	<b>1</b>							
Fire Hazard	<b>1</b>							
Reactivity	<b>0</b>							
		See Section 15.						

<b>Section 1. Chemical Product and Company Identification</b>		<i>Page Number: 1</i>
<b>Common Name/ Trade Name</b>	<b>Betahistine hydrochloride</b>	<b>Catalog Number(s).</b> 684560,6845621,691668
<b>Supplier</b>	Letco Medical 1316 Commerce Dr. NW Decatur, AL 35601 800-239-5288	<b>CAS#</b> 5579-84-0
<b>Commercial Name(s)</b>	Antivom, Betahist, Betaserc, Betistine, By-Vertin, Evolis (FM), Fidium, Katabexin, Labirin, Lectil, Meniero, Meniex, Vasomotal, Vergo, Vetigirex (FM), Vertigon, Vertin (DI), Vertiserc	<b>RTECS</b> UT2969000
<b>Synonym</b>	Methyl(2-[2-pyridyl]ethyl)amine dihydrochloride; Betahistine dihydrochloride; N-Methyl-2-(2-pyridyl)ethylamine dihydrochloride	<b>TSCA</b> TSCA 8(b) inventory: No products were found.
<b>Chemical Name</b>	2-Pyridineethanamine, N-methyl-, dihydrochloride	<b>CI#</b> Not available.
<b>Chemical Family</b>	Not available.	<b>IN CASE OF EMERGENCY</b>  CALL CHEMTREC: 1-800-424-9300
<b>Chemical Formula</b>	C8-H14-Cl2-N2 or C8-H12-N2.2HCl	

<b>Section 2. Hazards Identification</b>	
<b>Potential Acute Health Effects</b>	Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.
<b>Potential Chronic Health Effects</b>	<b>CARCINOGENIC EFFECTS:</b> Not available. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

<b>Section 3. Composition and Information on Ingredients</b>					
		<i>Exposure Limits</i>			
<b>Name</b>	<b>CAS #</b>	<b>TWA (mg/m<sup>3</sup>)</b>	<b>STEL (mg/m<sup>3</sup>)</b>	<b>CEIL (mg/m<sup>3</sup>)</b>	<b>% by Weight</b>
1) Betahistine hydrochloride	5579-84-0				100
<b>Toxicological Data on Ingredients</b>	Not applicable.				

**Continued on Next Page**

**Section 4. First Aid Measures**

<b>Eye Contact</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.
<b>Skin Contact</b>	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.
<b>Serious Skin Contact</b>	Not available.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Serious Inhalation</b>	Not available.
<b>Ingestion</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
<b>Serious Ingestion</b>	Not available.

**Section 5. Fire and Explosion Data**

<b>Flammability of the Product</b>	May be combustible at high temperature.
<b>Auto-Ignition Temperature</b>	Not available.
<b>Flash Points</b>	Not available.
<b>Flammable Limits</b>	Not available.
<b>Products of Combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides (NO, NO <sub>2</sub> ...), halogenated compounds.
<b>Fire Hazards in Presence of Various Substances</b>	Slightly flammable to flammable in presence of heat.
<b>Explosion Hazards in Presence of Various Substances</b>	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
<b>Fire Fighting Media and Instructions</b>	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
<b>Special Remarks on Fire Hazards</b>	As with most organic solids, fire is possible at elevated temperatures
<b>Special Remarks on Explosion Hazards</b>	Not available.

**Section 6. Accidental Release Measures**

<b>Small Spill</b>	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
<b>Large Spill</b>	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

**Section 7. Handling and Storage**

<b>Precautions</b>	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not breathe dust. Keep away from incompatibles such as oxidizing agents, acids.
<b>Storage</b>	Keep container tightly closed, and store in a cool, dry, well-ventilated area. Avoid moisture (material hygroscopic.)

**Section 8. Exposure Controls/Personal Protection**

<b>Engineering Controls</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
<b>Personal Protection</b>	Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
<b>Exposure Limits</b>	Not available.

**Section 9. Physical and Chemical Properties**

<b>Physical state and appearance</b>	Solid. (crystalline powder)	<b>Odor</b>	Not available.
<b>Molecular Weight</b>	209.12 g/mole	<b>Taste</b>	Not available.
<b>pH (10% soln/water)</b>	2.0 to 3.0	<b>Color</b>	White to almost yellow
<b>Boiling Point</b>	Not available.		
<b>Melting Point</b>	151°C - 154°C.		
<b>Critical Temperature</b>	Not available.		
<b>Specific Gravity</b>	Not available.		
<b>Vapor Pressure</b>	Not applicable.		
<b>Vapor Density</b>	Not available.		
<b>Volatility</b>	Not available.		
<b>Odor Threshold</b>	Not available.		
<b>Water/Oil Dist. Coeff.</b>	Not available.		
<b>Ionicity (in Water)</b>	Not available.		
<b>Dispersion Properties</b>	See solubility in water.		
<b>Solubility</b>	Very soluble in water; freely soluble in alcohol; practically insoluble in isopropyl alcohol.		

**Section 10. Stability and Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Instability Temperature</b>	Not available.
<b>Conditions of Instability</b>	Excess heat, incompatible materials
<b>Incompatibility with various substances</b>	Reactive with oxidizing agents, acids.
<b>Corrosivity</b>	Not available.

Continued on Next Page

**Special Remarks on Reactivity** Incompatible with acids, acid chlorides, acid anhydrides, oxidizing agents.

**Special Remarks on Corrosivity** Not available.

**Polymerization** Will not occur.

**Section 11. Toxicological Information**

**Routes of Entry** Inhalation. Ingestion.

**Toxicity to Animals** LD50: Not available.  
LC50: Not available.

**Chronic Effects on Humans** Not available.

**Other Toxic Effects on Humans** Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

**Special Remarks on Toxicity to Animals** Not available.

**Special Remarks on Chronic Effects on Humans** Not available.

**Special Remarks on other Toxic Effects on Humans** Acute Potential Health Effects:  
Skin: May cause skin irritation.  
Eyes: May cause eye irritation.  
Inhalation: May cause respiratory tract irritation.  
Ingestion: May cause gastrointestinal tract irritation/disturbances with diarrhea, hypermotility. May affect behavior/central nervous system (headache, somnolence). May cause skin rashes.  
Medical Conditions Aggravated by Exposure: Phaeochromocytoma, asthma, peptic ulcer disease or history of peptic ulcer disease, porphyria.

**Section 12. Ecological Information**

**Ecotoxicity** Not available.

**BOD5 and COD** Not available.

**Products of Biodegradation** Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation** The products of degradation are more toxic than the product itself.

**Special Remarks on the Products of Biodegradation** Not available.

**Section 13. Disposal Considerations**

**Waste Disposal** Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**Section 14. Transport Information**

**DOT Classification** Not a DOT controlled material (United States).

**Identification** Not applicable.

**Special Provisions for Transport** Not applicable.

**Continued on Next Page**

DOT (Pictograms)



**Section 15. Other Regulatory Information and Pictograms**

Federal and State Regulations

No products were found.

California Proposition 65 Warnings

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications

WHMIS (Canada) Not controlled under WHMIS (Canada).

DSCL (EEC) This product is not classified according to the EU regulations. Not applicable.

HMIS (U.S.A.)

Health Hazard	1
Fire Hazard	1
Reactivity	0
Personal Protection	E

National Fire Protection Association (U.S.A.)



WHMIS (Canada) (Pictograms)



DSCL (Europe) (Pictograms)



TDG (Canada) (Pictograms)



ADR (Europe) (Pictograms)



Protective Equipment



Gloves.



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent.

Safety glasses.

**Section 16. Other Information****MSDS Code** 0376**References** Not available.**Other Special Considerations** Not available.**Prepared** on 8/11/2013**Verified** on 8/22/2013.**Notice to Reader**

*All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Letco Medical assumes no responsibility for the completeness or accuracy of the information contained herein.*