

Section 1: Identification			
<b>Common Name/Trade Name</b>	APOMORPHINE HCL		
<b>Supplier Information</b>	<table border="1"> <tr> <td>Letco Medical, LLC 1316 Commerce Drive NW Decatur, AL 35601 1 (800) 239-5288 +1 (734) 843-4693</td> <td><b>IN CASE OF EMERGENCY:</b> Chemtrec 1 (800) 424-9300 (24 hours)</td> </tr> </table>	Letco Medical, LLC 1316 Commerce Drive NW Decatur, AL 35601 1 (800) 239-5288 +1 (734) 843-4693	<b>IN CASE OF EMERGENCY:</b> Chemtrec 1 (800) 424-9300 (24 hours)
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<b>Product Synonym(s)</b>	Apomorphine hydrochloride; 4H-Dibenzo[de,g]quinoline-10,11-diol, 5,6,6a,7-tetrahydro-6-methyl-, hydrochloride, hydrate (2:1), (6aR)-		
<b>Relevant Use(s) of Product</b>	Manufacture or Compounding of Substances		

Section 2: Hazards Identification																													
<b>Classification of Substance or Mixture</b>	Acute toxicity, Oral (Category 4), Acute Dermal toxicity (Category 4), Acute Inhalation toxicity (Category 4), Respiratory Sensitization (Category 1), Skin sensitization (Category 1)																												
<b>Signal Word</b>	Danger																												
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<b>Hazards Not Otherwise Classified</b>	Fine dust clouds may form explosive mixtures with air.																												
<b>Ingredient(s) with Unknown Toxicity</b>	No data Available																												

Section 3: Composition/Information on Ingredients	
<b>Chemical Name</b>	Apomorphine hydrochloride
<b>Common Name</b>	Apomorphine HCl
<b>CAS Number</b>	4 1372-20-7
<b>Impurities and/or Stabilizing Additives</b>	No data available

## Section 4: First Aid Measures

<b>General Advice</b>	No data available.
<b>If Inhaled</b>	Remove person to fresh air. If breathing has stopped, perform artificial respiration. Get immediate medical attention.
<b>In Case of Skin Contact</b>	Flush with copious amounts of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get immediate medical attention. Dispose of contaminated clothing or shoes.
<b>In Case of Eye Contact</b>	Flush with plenty of water for at least 15 minutes including beneath eyelids. Remove contacts/glasses while flushing. Get immediate medical attention.
<b>If Swallowed</b>	Contact Poison Control Center and get immediate medical attention. Never make an unconscious person vomit. Do not give anything to an unconscious person.
<b>Most Important Symptoms and Effects</b>	Acute: May cause respiratory sensitization, asthma, skin and eye redness/irritation, allergic skin reaction, nausea/vomiting, drowsiness, unconsciousness, dizziness, confusion, headache, or stupor. Chronic: Repeated or prolonged inhalation may lead to chronic respiratory irritation. IMMEDIATE MEDICAL ATTENTION NEEDED: Treat symptoms.

## Section 5: Fire Fighting Measures

<b>Suitable Extinguishing Media</b>	Use extinguishing media-regular dry chemical, carbon dioxide, alcohol foam.
<b>Special Hazards Arising From the Substance/Mixture</b>	As with any organic solids, fire is possible at elevated temperature or by contact with an ignition source. Dust air mixtures may be explosive. Burning may produce carbon dioxide, carbon monoxide, nitrogen oxides, and halogenated compounds.
<b>Special PPE and/or Precautions for Firefighters</b>	Use regular foam or flood with fine water spray. Use normal procedures, which include wearing NIOSH/MSHA approved pressure-demand self-contained breathing apparatus, flame and chemical resistant clothing; hat, boots and gloves. Avoid contact and inhalation of material or combustion by-products. Use water spray to cool unopened containers.

## Section 6: Accidental Release Measures

<b>Personal Precautions, Protective Equipment and Emergency Procedures</b>	Personal precautions, protective equipment, and emergency procedures: Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8, and follow handling guidance appropriate for pharmaceutical compounds (see Section 7). Isolate hazard area. Keep unnecessary and unprotected personnel from entering.
<b>Methods and Materials Used for Containment</b>	Use a vacuum cleaner equipped with a high efficiency particulate filter to collect solid material into an appropriate container and save for reclamation or disposal. Do not sweep or shovel dry material. Use non-sparking tools and equipment. Do not flush to sewer!
<b>Cleanup Procedures</b>	Clean surfaces and equipment used with an appropriate decontamination solution. Absorb decontamination solution and dispose of in accordance with federal, state and local regulations.

## Section 7: Handling and Storage

<b>Precautions for Safe Handling</b>	Harmful by inhalation, if swallowed, and in contact with skin. Do not breathe dust. Wash thoroughly after use. Take precautions against static discharge. To prevent contamination and overexposure, no open handling of powder should be allowed. Powder handling operations are to be done in a powders weighing hood, a glove box, or other equivalent ventilated containment system. High-energy operations such as milling, particle sizing, spraying or fluidizing should be done within a containment device such as a glove box or isolator. In situations where these ventilated containment hoods have not been installed, a non-ventilated enclosed containment hood should be used. A NIOSH-certified respirator should be worn by all personnel in the immediate area in cases where non-ventilated containment is used, where significant amounts of material (e.g., more than 2 grams) are used, or where the material may become airborne (as through grinding, etc.). Powder should be put into solution or a closed or covered container after handling. If using a ventilated enclosure that has not been validated, wear an appropriate, NIOSH-certified respirator until the enclosure is validated for use. Wear an appropriate, NIOSH-certified respirator until processes have been monitored to show that respiratory protection is not required. Ensure gloves are protective against solvents in use.
<b>Conditions for Safe Storage</b>	Keep in a tightly closed container, stored in an area meeting USP requirements. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

## Section 8: Exposure Controls/Personal Protection

<b>Components with Workplace Control Parameters</b>	Occupational Exposure Limits: None established. Johnson Matthey has assigned Exposure Control Band 3 (10 Å?Åç?? 100 ug/m3) handling strategies, see Section 7.
<b>Appropriate Engineering Controls</b>	Where there is a possibility that an employee's eyes or skin may be exposed to the product, an emergency eyewash and a safety shower should be provided within the immediate work area. To prevent contamination and overexposure, no open handling of powder should be allowed. Powder handling operations are to be done in a powders weighing hood, a glove box, or other equivalent ventilated containment system. In situations where these ventilated containment hoods have not been installed, a non-ventilated enclosed containment hood should be used. Take all precautions to prevent inhalation, dermal exposure, or ingestion of this substance. Use rigorous decontamination procedures to prevent contamination spread to other areas.
<b>PPE - Eye/Face Protection</b>	OSHA, ANSI approved safety goggles/glasses. Contact lenses are not protective devices. Appropriate eye and face-protection must be worn instead of, or in conjunction with contact lenses. Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.
<b>PPE - Skin Protection</b>	Wear disposable protective clothing to prevent exposure. Protective clothing may include lab coat and/or apron, flame and chemical resistant coveralls, and boots/safety shoes to prevent prolonged or repeated skin contact. The actual protective clothing and equipment to be used must be determined by the user through a personal protective equipment assessment meeting the requirements of OSHA regulations at 29 CFR 1910.132(d). Wear appropriate gloves; lab coat, nylon coveralls or disposable Tyvek suit; safety glasses, safety shoes, and disposable booties.
<b>PPE - Body Protection</b>	Wear disposable protective clothing to prevent exposure. Protective clothing may include lab coat and/or apron, flame and chemical resistant coveralls, and boots/safety shoes to prevent prolonged or repeated skin contact. The actual protective clothing and equipment to be used must be determined by the user through a personal protective equipment assessment meeting the requirements of OSHA regulations at 29 CFR 1910.132(d).
<b>PPE - Respiratory Protection</b>	For Unknown Concentrations or Immediately Dangerous to Life or Health (IDLH) atmospheres: Å?Åç?? A NIOSH certified supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. - A NIOSH certified self-contained breathing apparatus with a full facepiece. Where concentrations are known, and an IDLH atmosphere does not exist, an air purifying respirator with N100 filters may be used if acceptable protection can be demonstrated.

## Section 9: Physical and Chemical Properties

<b>Appearance</b>	Solid, greyish-white, crystalline powder
<b>Upper/Lower Flammability or Explosive Limits</b>	Not established
<b>Odor</b>	Odorless
<b>Vapor Pressure</b>	Not established
<b>Odor Threshold</b>	Not established
<b>Vapor Density</b>	N/A
<b>pH</b>	pH (10 g/l; 20Å°C): 4 - 6
<b>Relative Density</b>	Not established
<b>Melting Point/Freezing Point</b>	195 Å° C
<b>Solubility</b>	Water Solubility: ca. 10 g/L @ 20 Å° C
<b>Initial Boiling Point and Boiling Range</b>	Not established
<b>Flash Point</b>	Not established
<b>Evaporation Rate</b>	Not established
<b>Flammability (Solid, Gas)</b>	Not established
<b>Partition Coefficient</b>	Not established
<b>Auto-Ignition Temperature</b>	Not established
<b>Decomposition Temperature</b>	225 Å° C
<b>Viscosity</b>	N/A

## Section 10: Stability and Reactivity

<b>Reactivity</b>	No data available
<b>Chemical Stability</b>	Stable at ambient temperatures. Sensitive to air, heat, light, and moisture
<b>Possibility of Hazardous Reactions</b>	No data available
<b>Conditions to Avoid</b>	Avoid creating dust clouds.
<b>Incompatible Materials</b>	Strong oxidizing agents, strong bases, iron and iron salts.
<b>Hazardous Decomposition Products</b>	Burning may produce carbon oxides, nitrogen oxides, hydrogen chloride. Hazardous Polymerization: Will not occur

## Section 11: Toxicological Information

<b>Acute Toxicity - LD50 Oral</b>	LD50 Oral - mouse - 300 mg/kg, LD50 IP - mouse - 160 mg/kg, LD50 IV - mouse - 56 mg/kg
<b>Acute Toxicity - Inhalation</b>	No data available
<b>Acute Toxicity - Dermal</b>	No data available
<b>Acute Toxicity - Eye</b>	No data available
<b>Skin Corrosion/Irritation</b>	May cause allergic skin reaction
<b>Serious Eye Damage/Irritation</b>	May cause eye redness/irritation
<b>Respiratory or Skin Sensitization</b>	May cause respiratory sensitization
<b>Germ Cell Mutagenicity</b>	No data available
<b>Carcinogenicity IARC</b>	Not identified as a carcinogen or potential carcinogen by the International Agency for Research on Cancer.
<b>Carcinogenicity ACGIH</b>	No data available
<b>Carcinogenicity NTP</b>	Not listed as a carcinogen or potential carcinogen in the Annual Report of the US National Toxicology Program
<b>Carcinogenicity OSHA</b>	Apomorphine HCl is not regulated as a carcinogen by OSHA
<b>Reproductive Toxicity</b>	No data available
<b>Specific Target Organ Toxicity - Single Exposure</b>	No data available
<b>Specific Target Organ Toxicity - Repeated Exposure</b>	Repeated or prolonged inhalation may lead to chronic respiratory irritation.
<b>Aspiration Hazard</b>	No data available

## Section 12: Ecological Information

<b>Toxicity</b>	No data available
<b>Persistence and Degradability</b>	No data available
<b>Bio-accumulative Potential</b>	No data available
<b>Mobility in Soil</b>	No data available
<b>Other Adverse Effects</b>	No data available

## Section 13: Disposal Considerations

<b>Waste Treatment Methods Product</b>	This material is not a hazardous waste under RCRA.
<b>Waste Treatment Methods Packaging</b>	May be regulated by various state requirements.
<b>Special Precautions Landfill or Incinerations</b>	No data available
<b>Other Information</b>	No data available

## Section 14: Transport Information

<b>UN Number</b>	Not dangerous goods.
<b>UN Proper Shipping Name</b>	N/A
<b>Transport Hazard Class(es)</b>	N/A
<b>Packaging Group</b>	N/A
<b>Environmental Hazards</b>	No data available

## Section 15: Regulatory Information

EPA Regulations: RCRA Hazardous Waste Number: N/A RCRA Hazardous Waste Classification (40 CFR 261): N/A CERCLA Reportable Quantity (RQ): Not listed SARA 311/312 Codes: Acute health hazard, chronic health hazard SARA Toxic Chemical (40 CFR 372.65): Not listed SARA EHS (Extremely Hazardous Substance)(40 CFR 355): Not listed TSCA: Not listed OSHA Hazards: Respiratory and dermal sensitizer, harmful if inhaled, ingested, or on skin. State Regulations: New Jersey Right to Know: Apomorphine HCl, 41372-20-7 Pennsylvania Right to Know: Apomorphine HCl, 41372-20-7 California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. Safety Phrases - Do not breathe dust (S22). - Wear suitable protective clothing, eye/face protection and gloves (S36/37/39). - If swallowed, seek medical advice immediately and show this container or label (S46). Risk Phrases - Harmful by inhalation, in contact with skin, and if swallowed (R20/21/22) -May cause sensitization by inhalation and by skin contact (R42/43)

## Section 16: Other Information

<b>Additional Information</b>	N/A
<b>Prepared By</b>	Lisa Russell
<b>Revision Date</b>	01/15/2019 14:55

### Disclaimer

Letco Medical, LLC believes that the above information is 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. If the product is used as a component in another product, this information may not be applicable. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED ABOVE. Letco Medical shall not be held liable for any loss or damage resulting from handling, storage, use or from contact with the above product.