

Section 1: Identification		
Common Name/Trade Name	APOMORPHINE HCL	
Supplier Information	Letco Medical, LLC 1316 Commerce Drive NW Decatur, AL 35601 1 (800) 239-5288 +1 (734) 843-4693	IN CASE OF EMERGENCY: Chemtrec 1 (800) 424-9300 (24 hours)
Product Synonym(s)	Apomorphine hydrochloride; 4H-Dibenzo[de,g]quinoline-1 (2:1), (6aR)-	0,11-diol, 5,6,6a,7-tetrahydro-6-methyl-, hydrochloride, hydrate
Relevant Use(s) of Product	Manufacture or Compounding of Substances	

	Sectio	n 2: Hazards Identification
Classification of Substance or Mixture	Acute toxicity, Oral (Category 4), Acute Dermal toxicity (Category 4), Acute Inhalation toxicity (Category 4), Respiratory Sensitization (Category 1), Skin sensitization (Category 1)	
Signal Word	Danger	
Hazard Statement(s)	H302 H312 H317 H332 H334	Harmful if swallowed Harmful in contact with skin May cause an allergic skin reaction Harmful if inhaled May cause allergy or asthma symptoms or breathing difficulties if inhaled
Pictogram(s)		
Precautionary Statement(s)	P261 P264 P270 P271 P272 P280 P285 P301+P312+P330 P302+P352 P304+P340 P312 P312 P362 P501	Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection. IF SWALLOWED Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. IF ON SKIN Wash with soap and water. IF INHALED Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Call a POISON CENTER or doctor/physician if you feel unwell. Take off contaminated clothing and wash before reuse. Dispose of contents/container to an approved waste disposal plant.
Hazards Not Otherwise Classified	Fine dust clouds may form explosive mixtures with air.	
Ingredient(s) with Unknown Toxicity	No data Available	

Section 3: Composition/Information on Ingredients	
Chemical Name	Apomorphine hydrochloride
Common Name	Apomorphine HCI
CAS Number	41372-20-7
Impurities and/or Stabilizing Additives	No data available

Section 4: First Aid Measures	
General Advice	No data available.
If Inhaled	Remove person to fresh air. If breathing has stopped, perform artificial respiration. Get immediate medical attention.
In Case of Skin Contact	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.
In Case of Eye Contact	Flush with plenty of water for at least 15 minutes including beneath eyelids. Remove contacts/glasses while flushing. Get immediate medical attention.
If Swallowed	Contact Poison Control Center and get immediate medical attention. Never make an unconscious person vomit. Do not give anything to an unconscious person.
Most Important Symptoms and Effects	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	
Suitable Extinguishing Media	Use extinguishing media-regular dry chemical, carbon dioxide, alcohol foam.
Special Hazards Arising From the Substance/Mixture	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.
Special PPE and/or Precautions for Firefighters	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	
Personal Precautions, Protective Equipment and Emergency Procedures	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.
Methods and Materials Used for Containment	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!
Cleanup Procedures	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
Precautions for Safe Handling	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 the enclosure protection is not required. Ensure gloves are protective against solvents in use.
Conditions for Safe Storage	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
Components with Workplace Control Parameters	Occupational Exposure Limits: None established. Johnson Matthey has assigned Exposure Control Band 3 (10 â?? 100 ug/m3) handling strategies, see Section 7.
Appropriate Engineering Controls	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.
PPE - Eye/Face Protection	OSHA, ANSI approved safety goggles/glasses. Contact lenses are not protective devices. Appropriate eyeand 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.
PPE - Skin Protection	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.
PPE - Body Protection	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).
PPE - Respiratory Protection	For Unknown Concentrations or Immediately Dangerous to Life or Health (IDLH) atmospheres: a?? 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
Appearance	Solid, greyish-white, crystalline powder
Upper/Lower Flammability or Explosive Limits	Not established
Odor	Odorless
Vapor Pressure	Not established
Odor Threshold	Not established
Vapor Density	N/A
рН	pH (10 g/l; 20°C): 4 - 6
Relative Density	Not established
Melting Point/Freezing Point	195 ° C
Solubility	Water Solubility: ca. 10 g/L @ 20 ° C
Initial Boiling Point and Boiling Range	Not established
Flash Point	Not established
Evaporation Rate	Not established
Flammability (Solid, Gas)	Not established
Partition Coefficient	Not established
Auto-Ignition Temperature	Not established
Decomposition Temperature	225 ° C
Viscosity	N/A

Section 10: Stability and Reactivity	
Reactivity	No data available
Chemical Stability	Stable at ambient temperatures. Sensitive to air, heat, light, and moisture
Possibility of Hazardous Reactions	No data available
Conditions to Avoid	Avoid creating dust clouds.
Incompatible Materials	Strong oxidizing agents, strong bases, iron and iron salts.
Hazardous Decomposition Products	Burning may produce carbon oxides, nitrogen oxides, hydrogen chloride. Hazardous Polymerization: Will not occur

	Section 11: Toxicological Information
Acute Toxicity - LD50 Oral	LD50 Oral - mouse - 300 mg/kg, LD50 IP - mouse - 160 mg/kg, LD50 IV - mouse - 56 mg/kg
Acute Toxicity - Inhalation	No data available
Acute Toxicity - Dermal	No data available
Acute Toxicity - Eye	No data available
Skin Corrosion/Irritation	May cause allergic skin reaction
Serious Eye Damage/Irritation	May cause eye redness/irritation
Respiratory or Skin Sensitazation	May cause respiratory sensitization
Germ Cell Mutagenicity	No data available
Carcinogenicity IARC	Not identified as a carcinogen or potential carcinogen by the International Agency for Research on Cancer.
Carcinogenicity ACGIH	No data available
Carcinogenicity NTP	Not listed as a carcinogen or potential carcinogen in the Annual Report of the US National Toxicology Program
Carcinogenicity OSHA	Apomorphine HCl is not regulated as a carcinogen by OSHA
Reproductive Toxicity	No data available
Specific Target Organ Toxicity - Single Exposure	No data available
Specific Targer Organ Toxicity - Repeated Exposure	Repeated or prolonged inhalation may lead to chronic respiratory irritation.
Aspiration Hazard	No data available

Section 12: Ecological Information	
Toxicity	No data available
Persistence and Degradability	No data available
Bio-accumulative Potential	No data available
Mobility in Soil	No data available
Other Adverse Effects	No data available

Section 13: Disposal Considerations		
Waste Treatment Methods Product	This material is not a hazardous waste under RCRA.	
Waste Treatment Methods Packaging	May be regulated by various state requirements.	
Special Precautions Landfill or Incinerations	No data available	
Other Information	No data available	

Section 14: Transport Information		
UN Number	Not dangerous goods.	
UN Proper Shipping Name	N/A	
Transport Hazard Class(es)	N/A	
Packaging Group	N/A	
Environmental Hazards	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		
Additional Information	N/A	
Prepared By	Scarlotte Smith	
Revision Date	12/29/2015 09:07	

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.