

## Papaverine HCl USP

SDS Preparation Date 06/22/2017

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### SAFETY DATA SHEET

#### Section 1 Identification of the substance/mixture and of the company/undertaking

Product Identifier:  
Identification on the label/ Tradename: Papaverine Hydrochloride USP  
Identification of the Product: CAS# 61-25-6  
Formula:  $C_{14}H_{10}Cl_2NNaO_2$   
CI No.: Not Available  
Synonyms: 6,7-Dimethoxy-1-(3,4-dimethoxybenzyl)-isoquinoline hydrochloride, Cerespan, Pavabid, Pavatym

Relevant identified uses of the substance and uses advised against:  
Identified Uses: Pharma active ingredients  
Uses Advised Against: No information available

Name, address, and telephone number of the manufacturer:  
Refer to Supplier  
Name, address, and telephone number of the supplier:  
**Encore Scientific**      801 West New Orleans Street Broken Arrow, OK, USA 74011  
Supplier's Telephone #  
800-454-2304 Monday to Friday 8:00 am to 6:00 pm (Central time)  
24 Hr. Emergency Tel #  
INFOTRAC: (800) 535-5053 (Within Continental US and Canada); (352)323-3500 (International)

#### Section 2 Hazards Identification

##### Classification according to Regulation

Acute toxicity: Oral, Category 4 (H302-toxic if swallowed)

##### GHS Label elements, including precautionary statements (Labelling according to Regulation (EC) No. 1272/2008 [CLP])

**GHS SIGNAL WORD:** WARNING

**Results of PBT and vPvB assessment**

PBT: Not applicable  
vPvB: Not applicable

Pictogram:





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#### Section 2 Hazards Identification (Continued)

**GHS Hazard Phrases:** H302: Toxic if swallowed

**GHS Precaution Phrases:** P264: Wash skin thoroughly after handling.  
 P270: Do not eat, drink, or smoke when using this product  
 P301+312: IF SWALLOWED: Immediately call a POISON CONTROL CENTER or doctor/physician.  
 P321: Specific treatment (see supplemental first aid instructions)  
 P330: Rinse mouth  
 P501: Dispose of contents/container to an approved waste disposal plant

#### Section 3 Composition/information on ingredients

Components	CAS No.	Weight %
Papaverine Hydrochloride	61-25-6	100

#### Section 4 First aid measures

**General Advice:** Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If large quantities inhaled, keep airway open as possible. In case of shortness of breath, give oxygen. Get medical attention.

**Skin Contact:** Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

**Eye Contact:** 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.

**Ingestion:** Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt, or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

#### Section 5 Fire-Fighting measures

**Extinguishing Media**

Suitable extinguishing agents: Water spray, carbon dioxide, foam, fire-extinguishing powder

Special hazards arising from the substance or mixture: Formation of toxic gases is possible during heating or in case of fire  
 Nitrogen oxides (NOx)  
 Carbon monoxide (CO)  
 Hydrochloric Acid (HCl)

Advice for firefighters: Protective equipment: wear fully protective suit

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#### Section 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Not required

Environmental precautions:

Damp down dust with water spray.  
Do not allow to enter sewers/surface or ground water

Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

#### Reference to other sections:

See Section 7 for information on safe handling.  
 See Section 8 for information on personal protection equipment.  
 See Section 13 for disposal information.

#### Section 7 Handling and storage

Precautions for safe handling:

Prevent formation of dust.

Information about protection against explosions and fires:

No special measures required.

#### Conditions for safe storage, including any incompatibilities

##### Storage:

Requirements to be met by storerooms and receptacles:

No special requirements.

Information about storage in one common storage facility:

Not required.

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Specific end use:

No further relevant information available.

#### Section 8 Exposure Controls/Personal Protection

Components with limit values that require monitoring at the workplace:

Not required

Additional information:

The lists that were valid during the creation were used as basis.

#### Exposure Controls (PPE)

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work.

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#### Section 8 Exposure Controls/Personal Protection (Continued)

Breathing Equipment:	Suitable respiratory protective device recommended. In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
Protection of Hands:	The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests, no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
Material of gloves:	The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Penetration time of glove material:	The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye Protection:	Protective goggles
Body Protection:	Protective work clothing

#### Section 9 Physical and chemical properties

##### Information on basic physical and chemical properties:

Physical state:	Solid. (Solid crystalline powder.)
Color:	White. White to yellowish. Off-white.
Odor:	Odorless
Odor threshold:	No data available
pH (20 g/l @ 20 °C):	3.0-4.0
Evaporation rate:	No data available
Melting point:	280 °C (536 °F)
Freezing point:	No data available
Boiling point:	No data available



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#### Section 9 Physical and chemical properties *(continued)*

##### Information on basic physical and chemical properties *(continued)*:

Flash point:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	>280 °C (>536 °F)
Flammability (solid, gas):	Product is not flammable.
Vapor pressure:	No data available
Relative vapor density at 20 °C:	No data available
Relative density:	No data available
Solubility:	Slightly soluble in water
Water/Oil Dist. Coeff.:	Not determined
Viscosity:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available.
Explosive limits:	No data available

##### Other information

No additional information available

#### Section 10 Stability and reactivity

Stability:	The product is stable.
Conditions of Instability:	No decomposition if used according to specifications.
Incompatibility with various substances:	Reacts with strong oxidizing agents.
Special Remarks on Reactivity:	Not available.



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#### Section 11 Toxicological information

**Routes of Entry:** Inhalation. Ingestion.  
**Toxicity to Animals:** Acute oral toxicity (LD50): 360 mg/kg [Rat].  
**Other Toxic Effects on Humans:** Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of inhalation.

**Primary irritant effect:**

On the skin: No irritant effect  
On the eye: No irritating effect  
Sensitization: No sensitizing effects known

**Carcinogenic categories:**

**IARC (International Agency for Research on Cancer)** Substance is not listed.  
**NTP (National Toxicology Program)** Substance is not listed.  
**OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed

#### Section 12 Ecological information

**Toxicity:** No additional information 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 as toxic as the product itself.

**Special Remarks on the**

**Products of Biodegradation:** Not available

**General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

#### Section 13 Disposal considerations

**Waste treatment methods**

**Waste disposal recommendations**

Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

**Ecology - waste materials:** Empty containers should be taken for local recycling, recovery or waste disposal

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#### Section 14 Transport information

**UN Number (DOT, ADR, IMDG, IATA):** UN1544

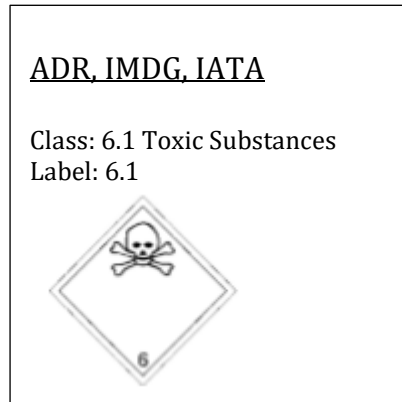
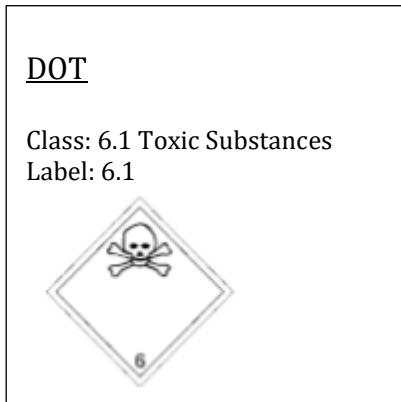
#### UN Proper Shipping Name

**DOT:** Alkaloids, solid, n.o.s. (Papaverine Hydrochloride)

**ADR:** 1544 Alkaloids, solid, n.o.s. (Papaverine Hydrochloride)

**IMDG, IATA:** ALKALOIDS, SOLID, N.O.S. (Papaverine Hydrochloride)

#### Transport Hazard Class(es)



Packing Group  
DOT, ADR, IMDG, IATA      III

Environmental Hazards:	Not applicable
Marine Pollutant:	Not applicable
Special Precautions for User:	Warning: Toxic Substances
EMS Number:	F-A,S-A

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable
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UN "Model Regulation: UN1544, Alkaloids, solid, n.o.s. (Papaverine Hydrochloride Papaverini hydrochloridum), 6.1, III



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#### Section 15 Regulation information

**Safety, health and environmental regulations/legislation specific for the substance or mixture:**

No further relevant information available.

#### Section 16 Other information

**Further information:** This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

**Notice to reader:**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
ICAO: International Civil Aviation Organisation  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
Acute Tox. 4: Acute toxicity, Hazard Category 4