

**SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

Version 4.0 Revision Date 13.03.2010

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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

Product name : Papaverine hydrochloride

Product Number : P3510

Brand : Sigma

Company : Sigma-Aldrich (Shanghai) Trading Co., Ltd  
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**2. HAZARDS IDENTIFICATION****Classification of the substance or mixture**

According to Regulation (EC) No1272/2008

Acute toxicity, Oral (Category 3)

According to European Directive 67/548/EEC as amended.

Harmful if swallowed.

**Label elements**

Pictogram



Signal word : Danger

Hazard statement(s)

H301 : Toxic if swallowed.

Precautionary statement(s)

P301 + P310 : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Hazard symbol(s)

Xn : Harmful

R-phrases)

R22 : Harmful if swallowed.

S-phrases)

S22 : Do not breathe dust.

**Other hazards** - none**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : 6,7-Dimethoxy-1-veratrylisoquinolinehydrochloride

Formula : C<sub>20</sub>H<sub>21</sub>NO<sub>4</sub> · HCl

Molecular Weight : 375,85 g/mol

CAS-No.	EC-No.	Index-No.	Classification	Concentration
<b>Papaverine hydrochloride</b>				
61-25-6	200-502-1	614-019-00-2	Acute Tox. 3; H301	-

For the full text of the H-Statements mentioned in this Section, see Section 16.

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#### 4. FIRST AID MEASURES

##### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

##### **If inhaled**

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

##### **In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

##### **In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

##### **If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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#### 5. FIRE-FIGHTING MEASURES

##### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

##### **Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

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#### 6. ACCIDENTAL RELEASE MEASURES

##### **Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

##### **Environmental precautions**

Do not let product enter drains.

##### **Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

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#### 7. HANDLING AND STORAGE

##### **Precautions for safe handling**

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

##### **Conditions for safe storage**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

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#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### **Personal protective equipment**

##### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Handle with gloves.

**Eye protection**

Face shield and safety glasses

**Skin and body protection**

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

Form	powder
Colour	white

**Safety data**

pH	no data available
Melting point	226 °C
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Water solubility	ca.50 g/l

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**10. STABILITY AND REACTIVITY****Chemical stability**

Stable under recommended storage conditions.

**Conditions to avoid**

no data available

**Materials to avoid**

Strong oxidizing agents

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas

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**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

LD50 Oral - rat - 68,8 mg/kg

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity**

Genotoxicity in vitro - Hamster - fibroblast  
Cytogenetic analysis

**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**

Developmental Toxicity - mouse - Subcutaneous  
Specific Developmental Abnormalities: Central nervous system.

**Specific target organ toxicity - single exposure**

no data available

**Specific target organ toxicity - repeated exposure**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Ingestion</b>	Harmful if swallowed.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Eyes</b>	May cause eye irritation.

**Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Additional Information**

RTECS: no data available

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**12. ECOLOGICAL INFORMATION****Toxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

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**13. DISPOSAL CONSIDERATIONS****Product**

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

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## 14. TRANSPORT INFORMATION

### ADR/RID

UN-Number: 1544 Class: 6.1 Packing group: III  
Proper shipping name: ALKALOID SALTS, SOLID, N.O.S. (Papaverine hydrochloride)

### IMDG

UN-Number: 1544 Class: 6.1 Packing group: III EMS-No: F-A, S-A  
Proper shipping name: ALKALOID SALTS, SOLID, N.O.S. (Papaverine hydrochloride)  
Marine pollutant: No

### IATA

UN-Number: 1544 Class: 6.1 Packing group: III  
Proper shipping name: Alkaloid salts, solid, n.o.s. (Papaverine hydrochloride)

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## 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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## 16. OTHER INFORMATION

### Text of H-code(s) and R-phrases mentioned in Section 3

Acute Tox.	Acute toxicity
H301	Toxic if swallowed.

### Further information

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