

Section 1: Identification

Product Name	MORPHINE SULFATE USP CII (PENTAHYDRATE)
Commercial Name	Morphine Sulfate Pentahydrate
Product Use	Used in medicine as a narcotic analgesic with applications similar to morphine
Restrictions On Use	None
Product Code	20-1000
Company	<p>PCCA 9901 South Wilcrest Houston, TX 77099 Phone: 1-800-331-2498 Fax: 1-800-874-5760</p>
	<p>In case of emergency contact: CHEMTREC (24hr) 1-800-424-9300</p>

Section 2: Hazard(s) Identification

OSHA Haz Com:	Acute toxicity, oral Category 4
CFR 1910.1200	Acute toxicity, dermal Category 4
	Sensitization, respiratory Category 1
	Sensitization, skin Category 1
	Specific target organ toxicity, single exposure Category 3
	narcotic effects
	Combustible Dust
Signal Word	DANGER
Hazard Statement(s)	Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause drowsiness or dizziness. May form combustible dust concentrations in air.

Pictogram(s) or Symbol(s)

Precautionary Statement(s):
Prevention

Avoid breathing dust. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Wear protective gloves/protective clothing. Contaminated work clothing must not be allowed out of the workplace. Dust accumulation from this product may present an explosion hazard in the presence of an ignition source.

Response

If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center/doctor. Rinse mouth. If skin irritation or rash occurs: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Take off contaminated clothing and wash it before reuse.

Storage

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3: Composition/Information on Ingredients

Substance/Mixture	Substance
Components	Morphine sulfate pentahydrate
% By Weight	100
CAS#	6211-15-0
Molecular Weight	758.92 g/mole
Chemical Formula	Not available
Synonym(s)	Not available

Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Morphine Sulfate USP CII (Pentahydrate)	6211-15-0	100	Not available.	LD 50/oral Rat (mg/kg)= 973; LD 50 Oral/Mouse (mg/kg)= 1125

Section 4: First-Aid Measures

Inhalation	Move to fresh air. If breathing becomes difficult administer oxygen. Administer artificial respiration and/or CPR if breathing stops. Get immediate medical attention.
Skin Contact	After contact with skin, wash immediately with plenty of water. Immediately remove contaminated clothing and shoes. Wash contaminated clothing before re-use. Seek medical attention if symptoms appear.
Eye Contact	In the case of contact with eyes, rinse immediately with plenty of water for 15 minutes and seek medical attention.
Ingestion	If ingested, seek medical attention immediately and show the label. Rinse mouth with water. Never give anything by mouth to an unconscious person.

Symptoms/Effects

Acute	Toxic if swallowed. Do not breathe dust. Avoid contact with eyes and skin.
Delayed	None

Immediate Medical Attention

Notes to Physician: Treat symptomatically for a narcotic analgesic.

Section 5: Fire-Fighting Measures
Suitable Extinguishing Media

Use any extinguishing media which is suitable for the surrounding fire. Use dry chemical, CO₂, water fog or alcohol foam.

Unsuitable Extinguishing Media

Do not use water jet.

Products of Combustion

Carbon dioxide, carbon monoxide, oxides of nitrogen.

Firefighters Special Equipment and Precautions

Wear a self-contained breathing apparatus and full protective gear.

Section 6: Accidental Release Measures

Avoid dust formation. Wear appropriate eye, skin, respiratory protection, disposable dust impervious suit and shoe covers. Keep people away from and upwind of spill/leak. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. All waste must be placed in a sealable, properly labeled waste disposal bag. Use HEPA vacuum to remove dust followed by a wet clean-up. Handle and store as a controlled substance.

Section 7: Handling and Storage

Use only in well-ventilated areas. Provide appropriate exhaust ventilation at places where dust is formed. Handle and Store according to labeled instructions. Handle and Store as a controlled substance. A "regulated" area must be established for handling and storage. Wear appropriate personal protection. Clean work surfaces at the end of each day. Minimize dust during storage and handling. Fine dust dispersed in air may ignite. Store and transport in sealed bags contained within rigid drums or appropriate closed containers in a manner that minimizes the potential for spillage or container damage. Handle and store as a controlled substance. Avoid strong oxidizing agents.

Section 8: Exposure Controls/Personal Protection

Exposure Limits	OEL (TWA-8hr) = 40 ug/m ³ DSEN,RSEN OEL (STEL) = 300 ug/m ³ PBOEL = Category 2, DSEN, RSEN DSEN= Dermal sensitizer RSEN= Respiratory Sensitizer Ensure adequate ventilation. Use appropriate engineering controls based on a comprehensive industrial hygiene risk assessment.
Engineering Controls	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.
Personal Protection	Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Personal Protection in Case of a Large Spill: 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.



Safety Data Sheet

MORPHINE SULFATE USP CII (PENTAHYDRATE)

20-1000

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 9: Physical and Chemical Properties

Appearance	White solid powder crystals	pH	Not available.
Odor	Odorless.	Vapor Pressure	Not applicable.
Odor Threshold	Not available.	Vapor Density	Not available.
Melting Point	250°C (482°F)	Viscosity	Not available.
Freezing Point	Not available.	Evaporation Rate	Not available.
Boiling Point/Range	Not available.	Autoignition temperature	Not available.
Decomposition temperature	No decomposition.	Flammability or Explosive Limits:	
Partition Coefficient: n-octanol/water	Not available.	Lower	Not available.
Flash Point	Not available.	Upper	Not available.
Flammability	Combustible liquid. Avoid heat.		
Solubility(ies)	Soluble in cold water.		
Other	Not available.		

Section 10: Stability and Reactivity

Reactivity	Not available.
Chemical Stability	The product is stable.
Hazardous Polymerization	Corrosivity: Non-corrosive in presence of glass. Hazardous polymerization will not occur.
Conditions to Avoid	Light stability: discoloration, no decomposition.
Incompatible Materials	Alkalies, tannin, strong oxidizing agents, borax, ferric chloride, iodides, lead acetate, mercuric chloride, gold salts.
Hazardous Decomposition Products	No decomposition.

Section 11: Toxicological Information

RTECS	Not available.
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Acute Toxicity

Acute Toxicity Eye Contact: May cause eye irritation. Skin Contact: May cause skin irritation. May cause sensitization by skin contact. Ingestion: Central nervous system effects. Cardiovascular effects. Respiratory depression. May produce narcotic-like effects. Inhalation: May be harmful if inhaled. May cause sensitization by inhalation. Cardiovascular effects may produce narcotic-like effects. LD50/Oral/Rat (mg/kg) = Morphine Sulfate pentahydrate: 973 LD50/Oral/Mouse (mg/kg) = Morphine Sulfate pentahydrate: 1125 Sub-chronic/Chronic toxicity Principal routes of exposure are accidental skin and eye contact and inhalation of generated dusts. Chronic morphine poisoning or addiction causes pin-point pupils, rapid mood changes and poor social adaptation. As dependence and tolerance occurs, there is an overwhelming need to continue taking the drug or similar drugs and to increase the dose. Prolonged therapy or abuse may cause abnormal lung function, increased body temperature, and kidney failure. Withdrawal symptoms can last for months. Abrupt withdrawal of the opiates may produce yawning, dilated pupils, tears, runny nose, sneezing, muscle tremor, headache, weakness, sweating, anxiety, irritability, disturbed sleep or insomnia, restlessness, loss of appetite, nausea, vomiting, loss of weight, diarrhea, dehydration, increase in the number of white blood cells, bone pain, abdominal and muscle cramps, increase in heart rate, breathing rate and blood pressure, rise in temperature and goosebumps and blood vessel dilation or constriction. Specific Effects Target Organ(s): Liver, Central nervous system, blood, kidney Reproductive effects: Narcotic analgesics cross the placenta and are excreted in human breast milk. Developmental effects: Not available Carcinogenic effects: Not available Genotoxic effects: Not available

Skin Corrosion/Irritation

Not available.

Serious Eye Damage/Irritation

Not available.

Respiratory or Skin Sensitization

Not available.

Germ Cell Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive Toxicity

Narcotic analgesics cross the placenta and are excreted in human breast milk.

Routes of Entry

Inhalation. Ingestion.

Symptoms Related to Exposure

Principal routes of exposure are by accidental skin and eye contact and inhalation of generated dusts. Chronic morphine poisoning or addiction causes pin-point pupils, rapid mood changes and poor social adaptation. As dependence and tolerance occurs, there is an overwhelming need to continue taking the drug or similar drugs and to increase the dose. Prolonged therapy or abuse may cause abnormal lung function, increased body temperature, and kidney failure. Withdrawal symptoms can last for months. Abrupt withdrawal of the opiates may produce yawning, dilated pupils, tears, runny nose, sneezing, muscle tremor, headache, weakness, sweating, anxiety, irritability, disturbed sleep or Insomnia, restlessness, loss of appetite, nausea, vomiting, loss of weight, diarrhea, dehydration, pressure, rise in temperature and goosebumps and blood vessel dilation or constriction.

Potential Health Effects

Prolonged exposure = sensitization

Target Organ(s) Liver, Central nervous system, Blood, Kidney.

Section 12: Ecological Information**Ecotoxicity**

Studies have shown morphine sulfate to have toxic effects on birds.

Persistence and Degradability

Not available.

Bioaccumulative Potential

Not available.

Mobility in Soil

Not available.

Other Adverse Effects

Not available.

Section 13: Disposal Considerations**Waste Disposal**

Waste disposal must be in accordance with appropriate US, Federal, State and International regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Handle and store as a controlled substance.

Disposal of Container

Not available.

Other Considerations

Not available.

Section 14: Transport Information**DOT Classification**

Not DOT regulated.



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Section 15: Regulatory Information

Regulations

Indication of danger: Xn- Harmful R-Phrase(s) R22- Harmful if swallowed R42/43- May cause sensitization by inhalation and skin contact. S-Phrase(s) S7- Keep container tightly closed S16- Keep away from sources of ignition- No smoking. S33- Take precautionary measures against static discharges. S24- Avoid contact with skin S22- Do not breathe dust

Other

WHMIS Not controlled under WHMIS (Canada). (Canada);DSCL (EEC) R22- Harmful if swallowed. R36- Irritating to eyes.;Gloves.;Lab coat.;Dust respirator. Be sure to use an approved/certified respirator or equivalent.;Splash goggles.

Section 16: Other Information

Not available.