Safety Data Sheet

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

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
PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: CFR 1910.1200 Acute toxicity, oral Category 4 Acute toxicity, dermal Category 4 Acute toxicity, inhalation 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 is 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 than 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/m3 DSEN,RSEN OEL (STEL) = 300 ug/m3 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.

Section 9: Physical and Chemical Properties

Appearance	White solid powder crystals
Odor	Odorless.
Odor Threshold	Not available.

Melting Point	250°C (482°F)	**pH**	Not available.
Freezing Point	Not available.	**Vapor Pressure**	Not applicable.
Boiling Point/Range	Not available.	**Vapor Density**	Not available.
Decomposition temperature	No decomposition.	**Viscosity**	Not available.
Partition Coefficient: n-octanol/water	Not available.	**Evaporation Rate**	Not available.
Flash Point	Not available.	**Autoignition temperature**	Not available.
Flammability	Combustible liquid. Avoid hea	**Flammability or Explosive Limits:**	
		Lower	Not available.
		Upper	Not available.

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	Alkalis, 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.

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 product 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.

Persistance 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.

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.