



Safety Data Sheet

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

Quinidine Sulfate USP Dihydrate

30-1804

Section 1: Identification

Product Name Quinidine Sulfate USP Dihydrate
Commercial Name Not available.
Product Use Use as active ingredient in pharmaceuticals or as laboratory chemical
Restrictions On Use Not available.
Product Code 30-1804
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: Acute Tox. 4 Skin Sens. 1
CFR 1910.1200
Signal Word WARNING
Hazard Statement(s) Harmful if swallowed. May cause an allergic skin reaction.
Pictogram(s) or Symbol(s)



Precautionary Statement(s):

Prevention P261: Avoid breathing dust. P270: Do not eat, drink or smoke when using this product. P280: Wear protective gloves, protective clothing, eye protection.
Response P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P333 + P313: If skin irritation or rash occurs: Get medical advice/attention
Storage Not available.
Disposal Not available.

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance
Components Quinidine Sulfate USP Dihydrate
% By Weight 100
CAS# 50-54-4
Molecular Weight 782.96 g/mole
Chemical Formula (C₂₀H₂₄N₂O₂)₂.H₂SO₄.2H₂O
Synonym(s) 6'-Methoxycinchonan-9-ol sulfate

Mixtures

| Name | CAS# | % by Weight | TLV/PEL | LC50/LD50 |
|-----------------------------|---------|-------------|----------------|----------------|
| Quinidine sulfate dihydrate | 50-54-4 | 100 | Not available. | Not available. |

Section 4: First-Aid Measures

| | |
|-------------------------|---|
| Inhalation | Supply fresh air. In case of irritation of the respiratory tract or continuing discomfort consult a physician. |
| Skin Contact | Wash with soap and plenty of water; compensate the loss of skin fat by using suitable hand lotion. In case of continuing skin irritation consult a physician. |
| Eye Contact | Rinse opened eye for 10 minutes with running water, in case of continuing discomfort consult immediately an eye specialist. |
| Ingestion | Rinse mouth thoroughly and drink plenty of water (2 glasses). In case of acute poisoning or Indisposition consult immediately a physician. When indicated take advice by emergency telephone. |
| Symptoms/Effects | |
| Acute | Not available. |
| Delayed | Not available. |

Immediate Medical Attention

In case of poisoning call immediately an emergency physician

Section 5: Fire-Fighting Measures**Suitable Extinguishing Media**

water, foam, CO₂, powder

Unsuitable Extinguishing Media

Not available.

Products of Combustion

In case of fire hazardous gases may be produced (Carbon oxides, NO_x, SO₂).

Firefighters Special Equipment and Precautions

Self-contained breathing apparatus. Avoid escape of fire water into surface water, groundwater and soil.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Avoid skin and eye contact, use suitable personal protective equipment, avoid dust clouds. Environmental precautions: Avoid soil and groundwater contamination. Methods and material for containment and cleaning up: Take up spilled product with a vacuum cleaner or mop up wet. Avoid generation of dust clouds, final cleaning of affected area using water. Vacuum cleaner has to satisfy specification for combustible dusts (Class B1 or volume limited to 50 litre and power consumption < 1200 W). Reference to other sections: Consider advice in section 8 and 13.

Section 7: Handling and Storage

Precautions for safe handling: Avoid contact with the product, use suitable personal protective equipment, avoid generation of dust clouds, keep clean workplace, remove contaminations with product immediately. Precautions against fire and explosion: In case of dust forming production steps (such as filling, mixing) explosible dust/air mixtures might be generated. Exclude ignition sources / take measures against electrostatic charging. (Safety characteristics see section 09.) Risk assessment for hazards for explosible dust/air mixtures has to be performed for all production steps and appropriate protective measures have to be implemented by responsible person. Conditions for safe storage, including any incompatibilities: Technical measures and storage conditions: Keep containers tightly closed in a dry place. Store in the original package to protect from light. This product (API) does not require any special temperature storage conditions. Store separate from Food. Requirements for storage rooms and vessels: Protect containers from weather and humidity.

Section 8: Exposure Controls/Personal Protection

| | |
|-----------------------------|--|
| Exposure Limits | Not available. |
| Engineering Controls | Avoid dust formation by technical measures (closed equipment, local extraction). If the formation of dust can not be excluded, avoid the contact with the substance by appropriate personal protective equipment (protective clothing, inhalation protection, safety glasses). Follow the protective measures according TRGS 540 "Sensibilisierende Stoffe". (TRGS - Technical regulation for dangerous chemicals) |

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Personal Protection

Respiratory protection: Dust mask filter type FFP2 Hand protection: The glove material must be impermeable and resistant against the product Test the leak tightness before use. In case of longer wearing take measure against skin exposure by humidity (undergloves and skin care). Test results for different glove materials are not available at present. From experience glove materials as nitrile rubber, butyl rubber, chloroprene rubber, fluorine rubber are appropriate for protection against not dissolved solids.

Eye protection: Safety goggles with side frame, in case of dust formation use cover-typed safety goggles.

Body protection: Body covering protective clothing Measures for skin care: Apply appropriate skin protection lotion before and after work.

Section 9: Physical and Chemical Properties

| | | | |
|---|--------------------------|--|-------------------------------------|
| Appearance | white crystalline powder | | |
| Odor | Odorless. | | |
| Odor Threshold | Not available. | | |
| Melting Point | 204 °C | pH | 6.0 – 6.8 (1 % in H ₂ O) |
| Freezing Point | Not available. | Vapor Pressure | Not applicable. |
| Boiling Point/Range | Not available. | Vapor Density | Not available. |
| Decomposition temperature | Not available. | Viscosity | Not available. |
| Partition Coefficient: n-octanol/water | Not available. | Evaporation Rate | Not available. |
| Flash Point | Not available. | Autoignition temperature | 410 °C |
| Flammability | Not available. | Flammability or Explosive Limits: | |
| | | Lower | < 30 g/m |
| | | Upper | Not available. |

| | |
|------------------------|---|
| Solubility(ies) | Solubility in water: 1 g in 90 ml (25°C). Solubility in ethanol: 1 g in 10 ml (25°C) |
| Other | Bulk density: ca. 430 kg/m ³ Ignition temperature: 410 °C Minimum ignition energy: >1/<3 mJ (with and without electrostatic induction) Specific resistivity at 100 V: 4.1 x 10 ¹³ Ohm (Quinidine Base) Dust explosion class: 2 (modified Hartmann apparatus) Burning class: BC 2 (brief ignition, rapid extinction) |

Section 10: Stability and Reactivity

| | |
|---|---|
| Reactivity | Less reactive substance. |
| Chemical Stability | Stable under recommended storage conditions for a minimum of 5 years. |
| Hazardous Polymerization | Normally no hazardous reactions are expected. |
| Conditions to Avoid | At higher temperature and acid conditions the degradation product Quinidine is formed. |
| Incompatible Materials | Strong oxidizing agents lead to decomposition of the product. |
| Hazardous Decomposition Products | Hazardous decomposition products are not produced as a result of use, storage, spill and heating. |

Section 11: Toxicological Information
RTECS VA5950000

Acute Toxicity

LD₅₀, rat, oral: 456 mg/kg LD₅₀, rat, intravenous: 55 mg/kg LD₅₀, mouse, oral: 505 mg/kg LD₅₀, mouse, intravenous: 54 mg/kg
 Very hazardous in case of ingestion. Hazardous in case of inhalation. Human: passes through the placenta, excreted in maternal milk.

Skin Corrosion/Irritation

Not available.

Serious Eye Damage/Irritation

Not available.

Respiratory or Skin Sensitization

Due to repeated skin contact allergic skin reaction (skin rash, itching) is possible.

Germ Cell Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive Toxicity

Not available.

Routes of Entry

Eye contact. Inhalation. Ingestion.

Symptoms Related to Exposure

Not available.

Potential Health Effects

Not available.

Target Organ(s) Not available.**Section 12: Ecological Information****Ecotoxicity**

Not available.

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**

Disposal considerations Appropriate disposal / Product Wastes must be disposed of in compliance with the respective national regulations. Recommendation Request the applicable waste code from Hie waste disposal contractor. Waste codes / waste designations according to EWC / AW Classify waste to the group 0701 (wastes from the manufacture, formulation, supply and use of basic organic chemicals). Identify the waste group for hazardous or non-hazardous waste according §3, section 2 AW. Furthermore use waste code. 16 03 05 (organic wastes, containing dangerous substances) for off-specification batches or unusable product. Waste treatment methods Hazardous waste has to be delivered to an Incineration plant. Quinidine containing solutions should be not disposed through waste water. Contaminated packaging Contaminated packaging or containers have to be disposed as hazardous wastes. Waste code: 15 01 10 (packaging, containing residues of or contaminated by dangerous substances) Purified packaging Purified packaging can be recycled.

Disposal of Container

Not available.

Other Considerations

Not available.

Section 14: Transport Information**DOT Classification**

DOT Not a DOT controlled material (United States). Not subject to transport regulation. This material is not classified dangerous good according to international transportation regulations (ADR/RID-IMDG-ICAO/IATA).

Section 15: Regulatory Information**Regulations**

Not available.

Other

Not available.

Section 16: Other Information

Not available.