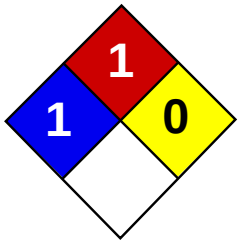

Health	1
Fire	1
Reactivity	0
Personal Protection	E

Material Safety Data Sheet
Chloroquine phosphate MSDS

Section 1: Chemical Product and Company Identification

Product Name: Chloroquine phosphate

Catalog Codes: SLC4450

CAS#: 50-63-5

RTECS: VB2450000

TSCA: TSCA 8(b) inventory: No products were found.

CI#: Not available.

Synonym: 7-Chloro-4-((4'-diethylamino-1-methylbutyl)amino)quinoline diphosphate; Alermine; Aralen diphosphate; Aralen phosphate; Arechin; Avloclor; Chingamin; Chingamin phosphate; Chloroquin diphosphate; Chloroquine diphosphate; Resoquine; Sanoquin; Tanakan

Chemical Name: Quinoline, 7-chloro-4-(4-diethylamino-1-methyl-butylamino)- diphosphate

Chemical Formula: C18H26ClN3.2H3PO4

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Chloroquine phosphate	50-63-5	100

Toxicological Data on Ingredients: Chloroquine phosphate: ORAL (LD50): Acute: 500 mg/kg [Mouse]. 623 mg/kg [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to liver. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

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.

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

Serious Skin Contact: Not available.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion:
These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...), halogenated compounds, phosphates.

Fire Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of heat.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Slightly explosive in presence of open flames and sparks.

Fire Fighting Media and Instructions:
SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: As with most organic solids, fire is possible at elevated temperatures

Special Remarks on Explosion Hazards:
Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Section 6: Accidental Release Measures

Small Spill:
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7: Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

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.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Solid crystalline powder.)

Odor: Odorless.

Taste: Not available.

Molecular Weight: 515.87 g/mole

Color: White to yellowish.

pH (1% soln/water): Not available.

Boiling Point: Not available.

Melting Point: 194°C (381.2°F) - 213 C.

Critical Temperature: Not available.

Specific Gravity: Not available.

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water.

Solubility:
Easily soluble in cold water. Solubility in Water: 50 mg/ml

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat

Incompatibility with various substances: Not available.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 500 mg/kg [Mouse].

Chronic Effects on Humans: May cause damage to the following organs: liver.

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:
May cause adverse reproductive effects and birth defects (teratogenic) based on animal test data. No human data found. May affect genetic material (mutagenic)

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation. Inhalation: May cause respiratory tract and mucous membrane irritation. Ingestion: May be harmful if swallowed. May cause nausea, vomiting, anorexia, diarrhea, abdominal cramps, ulceration or bleeding from the duodenum. May affect respiration (respiratory depression), peripheral nervous system, behavior/central nervous system/peripheral nervous system (somnolence, mild and transient headache, psychosis, delirium, personality changes and depression, ataxia, tremor, seizures, coma, muscle weakness, depression of tendon reflexes, spastic paralysis with or without sensory change), hearing (nerve type deafness, tinnitus, reduced hearing in people with preexisting auditory damage), and rarely the blood (aplastic anemia, reversible agranulocytosis, thrombocytopenia, and neutropenia), and cardiovascular system (hypotension, electrocardiographic change). It may also cause retinal damage, blurring of vision and difficulty of focusing or accomodation and other visual disturbances, pleomorphic skin eruptions, skin and mucosal pigmentary changes, photosensitivity, bleaching of hair pigment, lichen planus-like erruptions. Chronic Potential Health Effects: Ingestion: Prolonged or repeated ingestion may cause weight loss, affect behavior/central nervous system/peripheral nervous system (symptoms similar to acute ingestion), kidneys, liver (hepatic necrosis, fatty liver degeneration), cardiovascular system. Long-term exposure may also cause irreversible retinal damage, skin (symptoms similar to that of acute ingestion). Medical Conditions Aggravated By Exposure: Liver disease, hypersensitivity to 4-aminoquinoline compounds, presence of retinal or visual changes, preexisting auditory damage, Epilepsy.

Section 12: Ecological Information

Ecotoxicity: Not 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.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:
California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found. California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.

Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances. It is not listed on the Canadian DSL or NDSL.

Other Classifications:

WHMIS (Canada):
Not available. It has not been evaluated by Service du repertoire toxicologique. Although it has not yet been classified, it has been shown to be embryotoxic to rats and has shown mutagenic effects on non-reproductive cell so it could possibly be classified as a D2A and D2B. However, that remains to be determined.

DSCL (EEC):
R22- Harmful if swallowed. S22- Do not breathe dust. S24/25- Avoid contact with skin and eyes.

HMIS (U.S.A.):

Health Hazard: 1

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Created: 10/09/2005 04:53 PM

Last Updated: 11/06/2008 12:00 PM

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