

Product name Chloroquine
(M)SDS Number 14774
Version 1

Issuing Date: 2024-10-29

1. Identification

Product identifier

Product name Chloroquine

Other means of identification

(M)SDS Number 14774

Contains

Chemical name	English chemical name	CAS No
chloroquine bis(phosphate)	chloroquine bis(phosphate)	50-63-5

Synonyms Chloroquine diphosphate;
1,4-pentanediamine, N(4)-(7-chloro-4-quinoliny)-N(1),N(1)-diethyl-, phosphate (1:2);
7-Chloro-4-(4-diethylamino-1-methylbutyl-amino)-quinoline, diphosphate;
chloroquine bis(dihydrogenphosphate) dihydrate.

Molecular Weight 515.92 g/mol

Details of the supplier of the safety data sheet

Manufacturer

Cell Signaling Technology, Inc.
3 Trask Lane
Danvers, MA 01923
United States
TEL: +1 978 867 2300
FAX: +1 978 867 2400

Importer

Cell Signaling Technology, Inc.
Building 7
A-SUN Science & Technology Park
399 Shengxia Road
Pudong Shanghai 201210
China
TEL: 4006-473287
FAX: (86) 21-5835-6116

Supplier

No information available

E-mail address support@cellsignal.com

Emergency telephone number

Emergency telephone 400 120 4937

Recommended use of the chemical and restrictions on use

Identified uses For Research Use Only. Not for Use in Diagnostic Procedures.

Restrictions on use No information available

2. Hazard(s) identification

Emergency Overview

May damage fertility or the unborn child. Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure.

Appearance Crystalline Powder /
White to off-white

Physical state Solid

Odor See section 9

Classification of the substance or mixture

Acute toxicity - Oral	Category 4
Reproductive toxicity	Category 1A
Specific target organ toxicity - Repeated exposure	Category 2

Label elements



Signal Word

Danger

Hazard Statements

Harmful if swallowed

May damage fertility or the unborn child

May cause damage to organs through prolonged or repeated exposure

Prevention

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash face, hands and any exposed skin thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

Response

IF exposed or concerned: Get medical advice/attention.

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

Rinse mouth.

Storage

Store locked up.

Disposal

Dispose of contents/container to an approved waste disposal plant

Physical and chemical hazards

Not applicable.

Health hazards

Immediate Health Effects: Not applicable.

Chronic effects: Not applicable.

Environmental hazards

Not applicable.

Other hazards which do not result in classification

No information available.

3. Composition/information on ingredients**Synonyms**

Chloroquine diphosphate;
1,4-pentanediamine, N(4)-(7-chloro-4-quinolinyl)-N(1),N(1)-diethyl-, phosphate (1:2);
7-Chloro-4-(4-diethylamino-1-methylbutyl-amino)-quinoline, diphosphate;
chloroquine bis(dihydrogenphosphate) dihydrate.

Chemical name	Weight-%	CAS No
chloroquine bis(phosphate)	100	50-63-5

4. First-aid measures**Description of necessary first aid measures**

Inhalation	Move to fresh air. Consult a physician. If not breathing, give artificial respiration.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.
Skin contact	Consult a physician if necessary. Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
Ingestion	Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.
Most important symptoms/effects, acute and delayed	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
For emergency responders	No information available.
Note to physicians	Treat symptomatically.

5. Fire-fighting measures**Extinguishing media**

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
Unsuitable Extinguishing Media	No information available
Specific hazards arising from the chemical	No information available.
Special protective actions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation.
For emergency responders	Use personal protection recommended in Section 8.
<u>Environmental precautions</u>	Do not flush into surface water or sanitary sewer system.
<u>Methods and material for containment and cleaning up</u>	Prevent further leakage or spillage if safe to do so. Use personal protective equipment. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid dust formation. Clean contaminated surface thoroughly.
<u>Precautions to prevent secondary hazards</u>	Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

<u>Precautions for safe handling</u>	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. See Section 8 for information on appropriate personal protective equipment.
<u>Conditions for safe storage, including any incompatibilities</u>	Keep containers tightly closed in a dry, cool and well-ventilated place.
<u>Incompatible materials</u>	None known based on information supplied.

8. Exposure controls/personal protection**Occupational exposure limits**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits

No data available

Monitoring and observation processes

No applicable information was found.

<u>Engineering controls</u>	Showers Eyewash stations Ventilation systems
------------------------------------	--

Individual protection measures, such as personal protective equipment

Eye/face protection	Tightly fitting safety goggles.
Skin and body protection	Wear protective gloves/clothing.
Hand protection	Impervious gloves.
Respiratory protection	In case of insufficient ventilation wear suitable respiratory equipment.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Crystalline Powder
Color	White to off-white
Physical state	Solid
Odor	No information available
Odor Threshold	No information available

Property	Values	Remarks • Method
pH	no data available	None known
Melting point/freezing point	no data available	None known
Boiling point or initial boiling point and boiling range	no data available	None known
Flash point	no data available	None known
Evaporation rate	no data available	None known
Flammability	no data available	None known
Flammability Limits in Air		None known
Upper explosion limit	no data available	
Lower explosion limit	no data available	
Vapor pressure	no data available	None known
Relative vapor density	No data available	None known
Relative density	no data available	None known
Solubility	no data available	None known
Solubility in other solvents	no data available	None known
Partition coefficient: n-octanol/water	no data available	None known
Autoignition temperature	no data available	None known
Decomposition temperature	no data available	None known
Viscosity	no data available	None known
Viscosity, dynamic	no data available	None known

Additional information

Explosive properties	No information available
Oxidizing properties	No information available
Molecular Weight	515.92 g/mol

10. Stability and reactivity

Stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to Avoid Extremes of temperature and direct sunlight

Incompatible products No information available

Hazardous Decomposition Products None known based on information supplied

11. Toxicological information

Acute Toxicity**Numerical measures of toxicity**

No information available

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
chloroquine bis(phosphate)	= 623 mg/kg (Rat)	-	-

Skin corrosion/irritation No information available**Serious eye damage/eye irritation** No information available**Respiratory or skin sensitization** No information available**Mutagenic effects** No information available**Carcinogenicity** No information available**Reproductive toxicity** Product is or contains a chemical which is a known or suspected reproductive hazard**Specific target organ toxicity (single exposure)** No information available**Specific target organ toxicity (repeated exposure)** May cause disorder and damage to the: Cardiovascular system, Central nervous system, Eyes, Ears**Aspiration hazard** No information available**12. Ecological information****Ecotoxicity** The environmental impact of this product has not been fully investigated.**Persistence and degradability** No information available.**Bioaccumulative potential** No information available.**Mobility in soil** No information available.**13. Disposal considerations****Waste chemicals** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Do not empty into drains; dispose of this material and its container in a safe way.**Contaminated packaging** Do not reuse empty containers.**14. Transport information****IMDG/IMO** Not regulated**IATA** Not regulated

China

Not regulated

Special precautions for user

Please refer to the applicable dangerous goods regulations for additional information

15. Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Law of the People's Republic of China on Prevention and Control of Occupational Diseases**

Catalog of occupational hazard factors:

Not applicable

Catalog of occupational diseases:

Not applicable

Regulations on the Control over Safety of Hazardous ChemicalsInventory of hazardous chemicals

Not applicable

GB 18218-2009 Identification of major hazard installations for dangerous chemicals

Not applicable

List of hazardous chemicals under priority management

Not applicable

Regulations on Labor Protection in Workplaces Where Toxic Substances Are Used

Inventory of highly toxic goods

Not applicable

Regulations for Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

List of toxic chemicals severely restricted for import and export in China

Not applicable

Measures for the Environmental Management of New Chemical Substances**IECSC - China Inventory of Existing Chemical Substances** Contact supplier for inventory compliance status.**International Regulations****The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable**The Stockholm Convention on Persistent Organic Pollutants** Not applicable**The Rotterdam Convention** Not applicable**16. Other information****Issuing Date:** 2024-10-29**Revision Note** The symbol (*) in the margin of this SDS indicates that this line has been revised.**Abbreviations and acronyms**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA: Time weighted average

STEL:

Short term exposure limit

Ceiling: Maximum limit value:

*

Skin designation

C Carcinogen

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet