

Material Safety Data Sheet

Quinidine anhydrous, ca.95%, remainder dihydroquinidine

ACC# 64492

Section 1 - Chemical Product and Company Identification

MSDS Name: Quinidine anhydrous, ca.95%, remainder dihydroquinidine

Catalog Numbers: AC163680000, AC163680050, AC163680250

Synonyms: Cinchonan-9-ol, 6'-methoxy, (9S)-; Conchinin; Conquinine; (9S)-6'-Methoxycinchonan-9-ol; 6-Methoxy- α -95-vinyl-2-quinuclidinyl)-4-quinolinemethanol; Pitayine; (+)-Qinidine; (8R,9S)-Qinidine; beta-Quinine

Company Identification:

Acros Organics N.V.
One Reagent Lane
Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
56-54-2	Quinidine anhydrous, remainder dihydroquinidine	ca. 100	200-279-0

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white to off-white powder.

Caution! Toxic. Harmful if swallowed. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. May cause central nervous system effects. Light sensitive. May cause kidney damage. May cause cardiac disturbances.

Target Organs: Blood, heart, autonomic nervous system.

Potential Health Effects

Eye: May cause eye irritation.

Skin: Causes mild skin irritation.

Ingestion: Harmful if swallowed. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause cardiac effects such as heart blocks, arrhythmias, shock and possible death due to cardiovascular collapse. May result in severe disturbances of cardiac conduction and hypotension accompanied by central nervous system toxicity. May cause decreased kidney function resulting in severe intoxication. In patients with preexisting cardiovascular disease, pulmonary edema may occur.

Inhalation: May cause respiratory tract irritation.

Chronic: Chronic exposure may cause blood effects. Repeated exposure may cause stomach pains, vomiting, and diarrhea. People with preexisting heart conditions, asthma, muscle weakness, kidney or liver insufficiencies, infection or fever should avoid quinidine.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately. Induce vomiting only when instructed to do so by a physician.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to Physician: Treatment options include ipecac/lavage, activated charcoal, cathartics--administered within two hours of ingestion.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use carbon dioxide, dry chemical powder or water spray.

Flash Point: Not applicable.

Autoignition Temperature: Not applicable.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Wash area with soap and water. Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Do not ingest or inhale. Use only in a chemical fume hood. Do not breathe dust.

Storage: Keep containers tightly closed. Store protected from light. Store in a cool, dry area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Quinidine anhydrous, remainder dihydroquinidine	none listed	none listed	none listed

OSHA Vacated PELs: Quinidine anhydrous, remainder dihydroquinidine: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves and clothing to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Powder

Appearance: white to off-white

Odor: None reported.

pH: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: 174.00 - 175.00 deg C

Decomposition Temperature: Not available.

Solubility: 1g/2000ml cold water

Specific Gravity/Density: Not available.

Molecular Formula: C₂₀H₂₄N₂O₂

Molecular Weight: 324.41

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Darkens on exposure to light.

Conditions to Avoid: Incompatible materials, light, strong oxidants.

Incompatibilities with Other Materials: Strong oxidizing agents, direct light.

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 56-54-2: VA4725000

LD50/LC50:

CAS# 56-54-2:

Draize test, rabbit, skin: 3% Mild;

Oral, mouse: LD50 = 535 mg/kg;

Oral, rat: LD50 = 263 mg/kg;

Carcinogenicity:

CAS# 56-54-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found

Teratogenicity: No information found

Reproductive Effects: No information found

Mutagenicity: No information found

Neurotoxicity: No information found
Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.
Environmental: No data available.
Physical: No data available.
Other: None.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Not regulated as a hazardous material	No information available.
Hazard Class:		
UN Number:		
Packing Group:		

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 56-54-2 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 56-54-2 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XN

Risk Phrases:

R 22 Harmful if swallowed.

Safety Phrases:

S 22 Do not breathe dust.

S 36 Wear suitable protective clothing.

WGK (Water Danger/Protection)

CAS# 56-54-2: 2

Canada - DSL/NDSL

CAS# 56-54-2 is listed on Canada's NDSL List.

Canada - WHMIS

This product has a WHMIS classification of D1B, D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

Section 16 - Additional Information
--

MSDS Creation Date: 6/28/1999

Revision #3 Date: 10/03/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.