

Material Safety Data Sheet Version 4.2

Preparation / Revision Date 5/6/2011

Expiry Date 5/4/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Chemical Name

Quinidine 1'-Oxide

Catalogue #	Q685010		
Company	Toronto Research Chemicals 2 Brisbane Road Toronto, ON M3J 2J8 CANADA		
Telephone	+14166659696		
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2. HAZARDS IDENTIFICATION

WHMIS Classification D1B

Toxic Material Causing Immediate and Serious Toxic Effects

HMIS ClassificationHealth hazard:2Chronic Health Hazard:*Flammability:0Physical hazards:0

Target Organs Heart

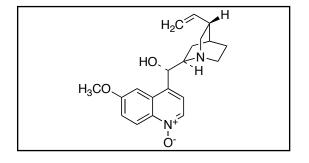
Potential Health Effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	Harmful if swallowed.

GHS Classification

Acute toxicity, Oral (Category 4) Skin irritation (Category 3) GHS Label elements, including precautionary statements Signal word Danger Hazard statements H302 Harmful if swallowed. H316 Causes mild skin irritation. Precautionary statements P301/P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. GHS Label Pictogram





Toxic by ingestion



3. COMPOSITION/INFORMATION ON INGREDIENTS

Molecular Formula:	$C_{20}H_{24}N_2O_3$	
Molecular Weight:	340.42	
CAS Registry #:	115730-97-7	
EC#:	6'-Methoxy-cinchonan-9-ol 1'-Oxide; Quinidine 1'-N-oxide; Quinidine 1'-oxide;	
Synonyms:	Quinidine N'-oxide; Quinidine ar-N-oxide; ICQ 17;	

4. FIRST AID MEASURES

General Advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid dust or aerosol formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust or aerosols. Provide appropriate exhaust ventilation at places where dust/aerosol is formed. Normal measures for preventative fire protection.

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Keep container tightly closed in a dry and well-ventilated place. Store at -20°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Specific engineering controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Off-white solid

Safety data

рН	N/A	Melting point	173-176°C
Boiling point	N/A	Flash point	N/A
Ignition temperature	N/A	Lower explosion limit	N/A
Upper explosion limit	N/A	Vapour pressure	N/A
Density	N/A	Water solubility	N/A
Upper explosion limit	N/A	Vapour pressure	N/A

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid no data available

Materials to avoid Strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions: carbon oxides, nitrogen oxides(NOx).

11. TOXICOLOGICAL INFORMATION

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Acute toxicity

no data available

Corrosion/irritation no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity/Teratogenicity

no data available

Potential health effects

Inhalation
IngestionMay be harmful if inhaled. May cause respiratory tract irritation.
Harmful if swallowed.
May be harmful if absorbed through skin. May cause skin irritation.
May cause eye irritation.EyesMay cause eye irritation.

Signs and Symptoms of Exposure

Prolonged or repeated exposure can cause:, Vomiting, Diarrhoea.

Additional Information

RTECS: not listed

12. ECOLOGICAL INFORMATION

Toxicity no data available	Persistence and degradability no data available	Bioaccumulative potential no data available
Mobility in soil no data available	PBT and vPvB assessment no data available	Other adverse effects no data available

13. DISPOSAL CONSIDERATIONS

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)/IMDG/IATA not dangerous goods

15. REGULATORY INFORMATION

DSL Status Product is not listed on the Canadian DSL or NDSL.

WHMIS Classification

D1B

Toxic Material Causing Immediate and Serious Toxic Effects

Toxic by ingestion

16. OTHER INFORMATION

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Further information

Copyright 2010 Toronto Research Chemicals Inc. Copies may be made for internal use only. The above information is believed to be correct to the best of our knowledge, but is not to be deemed as all-inclusive and is to be only used as a guide. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Please take all due care when handling this product.