

MATERIAL SAFETY DATA SHEET

Chemical Product

Product Name : QUINALDINE 98% (For Synthesis)

CAS#: 91-63-4

C.I. No.:

Not
available.

Synonym : 2-Methylquinoline

Chemical Name : Quinaldine

Chemical Formula: C₁₀-H₉-N

Composition and Information on Ingredients

Name	S.K.U	% by Weight
QUINALDINE	GCS-6475	100

Hazards Identification

Potential Acute Health Effects:

Hazardous in case of eye contact (irritant), of ingestion, of inhalation (lung irritant).
Slightly hazardous in case of skin contact (irritant, permeator).

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to central nervous system (CNS).
Repeated or prolonged exposure to the substance can produce target organs damage.

First Aid Measures

Eye Contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

Skin Contact:

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

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.

Fire and Explosion Data

Flammability of the Product: Combustible.

Auto-Ignition Temperature: Not available.

Flash Points: CLOSED CUP: 79.4°C (174.9°F).

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO₂).

Fire Hazards in Presence of Various Substances : Flammable in presence of open flames and sparks, of heat. Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

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: Not available.

Special Remarks on Explosion Hazards: Not available.

Accidental Release Measures

Small Spill:

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority Requirements.

Large Spill:

Combustible material. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Handling and Storage

Precautions:

Keep locked up.. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids.

Storage:

Air and Moisture Sensitive. Light Sensitive. Store in light-resistant container. Keep container in a cool, well- ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Do not store above 24°C (75.2°F).

Exposure Controls/Personal Protection

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection :

Splash goggles. 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.

Physical and Chemical Properties

Physical state and appearance	: Liquid. (Oily liquid.)
Odor	: Not available.
Taste	: Not available.
Molecular Weight	: 143.19 g/mole
Color	: Colorless to light yellow.
pH (1% soln/water)	: Not available.
Boiling Point	: 248.5°C (479.3°F)
Melting Point	: Not available.
Critical Temperature	: Not available.
Specific Gravity	: 1.058 (Water = 1)
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	: Partially soluble in cold water.

Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Ignition Sources, excess heat, incompatibles, moisture, air.

Incompatibility with various substances: Reactive with oxidizing agents, acids.

Slightly reactive to reactive with moisture.

Corrosivity: Not available.

Special Remarks on Reactivity: Air and Moisture Sensitive. Light Sensitive. Incompatible with strong oxidizing, agents, acids, and acid chlorides, and acid anhydrides.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact.

Toxicity to Animals: Acute oral toxicity (LD50): 1230 mg/kg [Rat]. Acute dermal toxicity (LD50): 1978.5 mg/kg [Rabbit (converted from the actual figure of 1870 ul/kg reported in RTECS)].

Chronic Effects on Humans : MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. May cause damage to the following organs: central nervous system (CNS).

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

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: To the best of our knowledge, the toxicological properties of this substance have not been thoroughly investigated.

Special Remarks on other Toxic Effects on Humans: Acute Potential Health Effects:

Skin: May cause skin irritation. May be harmful if absorbed through skin. Eyes:

Causes eye irritation. Ingestion: May be harmful if swallowed. Causes

gastrointestinal tract irritation. Inhalation: Causes respiratory tract and mucous membrane irritation. May affect Central Nervous System. Inhalation may have an anesthetic effect on the central nervous system which is characterized by loss of sensation. Preliminary excitement is the initial effect followed by relaxation, dizziness, stupor or sleep. Chronic Potential Health Effects: no information found at this time.

Toxicological Data on Ingredients : Quinaldine: ORAL (LD50): Acute: 1230 mg/kg

[Rat]. DERMAL (LD50): Acute: 1978.5 mg/kg [Rabbit (converted from the actual figure of 1870 ul/kg reported in RTECS)].

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 less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Disposal Considerations

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

Transformation Information

Land transport (ADR-RID)

General information : Not regulated.

Sea transport (IMDG) [English only]

General
information :
Not
regulated.

Air transport (ICAO-IATA) [English only]

General information : Not regulated.

Other Regulatory Information

Federal and State Regulations: TSCA 8(b) inventory: Quinaldine

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.

Other Classifications:

WHMIS (Canada): CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).

DSCL (EEC): R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.

R37/38- Irritating to respiratory system and skin. R40- Possible risks of irreversible effects. R41- Risk of serious damage to eyes. S23- Do not breathe gas/fumes/vapour/spray [***] S24/25- Avoid contact with skin and eyes. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36- Wear suitable protective clothing.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 2

Reactivity: 0

Personal Protection: H

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

Health: 2

Flammability: 2

Reactivity: 0

Specific hazard:

Protective Equipment: Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Additional Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

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