

Common Name: **QUINOLINE**

Synonyms: Benzo(b)Pyridine; Chinoline; Leukol

CAS No: 91-22-5

 Molecular Formula: C<sub>9</sub>H<sub>7</sub>N

RTK Substance No: 1628

Description: Colorless liquid with a strong, characteristic odor, which turns brown when exposed to light

## HAZARD DATA

Hazard Rating	Firefighting	Reactivity
<b>3 - Health</b> <b>2 - Fire</b> <b>0 - Reactivity</b> DOT#: UN 2656 ERG Guide #: 154 Hazard Class: 6.1 (Poisonous material)	<b>COMBUSTIBLE LIQUID</b> Use dry chemical, CO <sub>2</sub> , water spray or foam as extinguishing agents. <b>POISONOUS GASES ARE PRODUCED IN FIRE</b> , including <i>Nitrogen Oxides</i> . <b>CONTAINERS MAY EXPLODE IN FIRE.</b> Use water spray to keep fire-exposed containers cool.	<b>Quinoline</b> may explode and/or react violently with HYDROGEN PEROXIDE; PERCHROMATES; DINITROGEN TETROXIDE; and MALEIC ANHYDRIDE. Reactions with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE) and STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC) may be violent. <b>Quinoline</b> is not compatible with ORGANIC ANHYDRIDES; ALKYLENE OXIDES; EPICHLOROHYDRIN; ALDEHYDES; ALCOHOLS; GLYCOLS; PHENOLS; CRESOLS; CAPROLACTAM SOLUTION; and mixtures of LINSEED OIL and THIONYL CHLORIDE. <b>Quinoline</b> is hygroscopic.

## SPILL/LEAKS

**Isolation Distance:**

Spills: 50 meters (150 feet)

Fires: 800 meters (1/2 mile)

Absorb liquids in vermiculite, dry sand, earth, or a similar material and place into sealed containers for disposal.

DO NOT wash into sewer.

**Quinoline** is harmful to aquatic life in very low concentrations.

## PHYSICAL PROPERTIES

<b>Odor Threshold:</b>	0.015 to 71 ppm
<b>Flash Point:</b>	138° to 214°F (59° to 101°C)
<b>LEL:</b>	1.2%
<b>Auto Ignition Temp:</b>	896°F (480°C)
<b>Vapor Density:</b>	4.5 (air = 1)
<b>Vapor Pressure:</b>	5 mm Hg at 194°F (90°C)
<b>Specific Gravity:</b>	1.1 (water = 1)
<b>Water Solubility:</b>	Slightly soluble
<b>Boiling Point:</b>	460°F (238°C)
<b>Melting Point:</b>	5°F (-15°C)
<b>Molecular Weight:</b>	129

## EXPOSURE LIMITS

AIHA: 0.001 ppm, 8-hr TWA WEEL

The Protective Action Criteria values are:

PAC-1 = 0.6 ppm

PAC-2 = 5 ppm

PAC-3 = 25 ppm

## PROTECTIVE EQUIPMENT

<b>Gloves:</b>	Silver Shield®/4H® (>4-hr breakthrough)
<b>Coveralls:</b>	Tychem® BR, LV, Responder®, and TK (>4-hr breakthrough for <i>Heterocyclic compounds, Nitrogen</i> )
<b>Respirator:</b>	<0.01 - Full facepiece APR with Organic vapor cartridge >0.01 - Supplied air >0.6 - SCBA

## HEALTH EFFECTS

<b>Eyes:</b>	Irritation and burns
<b>Skin:</b>	Irritation and burns
<b>Inhalation:</b>	Nose, throat and lung irritation with coughing, wheezing and shortness of breath  Headache, nausea, vomiting, fever, fatigue and dizziness
<b>Chronic:</b>	Cancer (liver) in animals

## FIRST AID AND DECONTAMINATION

**Remove** the person from exposure.

**Flush** eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn. Seek medical attention

**Quickly** remove contaminated clothing and wash contaminated skin with large amounts of soap and water.

**Begin** artificial respiration if breathing has stopped and CPR if necessary.

**Transfer** promptly to a medical facility