

Common Name: **NICOTINE**

Synonyms: 1-Methyl-2-(3-Pyridyl)Pyrrolidine

CAS No: 54-11-5

Molecular Formula: C<sub>10</sub>H<sub>14</sub>N<sub>2</sub>

RTK Substance No: 1349

Description: Oily, colorless to pale yellow liquid, with a fishy odor, that turns brown with exposure to air

### HAZARD DATA

Hazard Rating	Firefighting	Reactivity
<p><b>3 - Health</b></p> <p><b>1 - Fire</b></p> <p><b>0 - Reactivity</b></p> <p><b>DOT#:</b> UN 1654</p> <p><b>ERG Guide #:</b> 151</p> <p><b>Hazard Class:</b> 6 (Poison)</p>	<p>COMBUSTIBLE LIQUID</p> <p>Use dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam as extinguishing agents.</p> <p>POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Nitrogen Oxides</i>.</p> <p>Use water spray to keep fire-exposed containers cool.</p> <p><b>Nicotine</b>, when heated above 203°F (95°C), may form an ignitable vapor/air mixture in closed tanks or containers.</p> <p>Vapor is heavier than air and may travel a distance to cause a fire or explosion far from the source.</p>	<p><b>Nicotine</b> is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE) and STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC).</p>

### SPILL/LEAKS

**Isolation Distance:**

Spill: 50 meter (150 feet)

Fire: 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.

**Nicotine** is very toxic to aquatic organisms.

### PHYSICAL PROPERTIES

<b>Odor Threshold:</b>	Fishy odor
<b>Flash Point:</b>	203°F (95°C)
<b>LEL:</b>	0.7%
<b>UEL:</b>	4%
<b>Auto Ignition Temp:</b>	471°F (244°C)
<b>Vapor Density:</b>	5.6 (air = 1)
<b>Vapor Pressure:</b>	0.08 mm Hg at 68°F (20°C)
<b>Specific Gravity:</b>	1.01 (water = 1)
<b>Water Solubility:</b>	Soluble
<b>Boiling Point:</b>	475°F (246°C) (Decomposes)
<b>Freezing Point:</b>	-110°F (-79°C)
<b>Ionization Potential:</b>	8.01 eV
<b>Molecular Weight:</b>	162.2

### EXPOSURE LIMITS

**OSHA:** 0.5 mg/m<sup>3</sup>, 8-hr TWA

**NIOSH:** 0.5 mg/m<sup>3</sup>, 10-hr TWA

**ACGIH:** 0.5 mg/m<sup>3</sup>, 8-hr TWA

**IDLH:** 5 mg/m<sup>3</sup>

The Protective Action Criteria values are:

PAC-1 = 1.5 mg/m<sup>3</sup> PAC-2 = 3.5 mg/m<sup>3</sup>

PAC-3 = 5 mg/m<sup>3</sup>

### PROTECTIVE EQUIPMENT

<b>Gloves:</b>	Butyl and SilverShield®/4H® (>4-hr breakthrough)
<b>Coveralls:</b>	Tychem® SL, CPF3, BR, Responder® and TK (>8-hr breakthrough)
<b>Respirator:</b>	>0.5 mg/m <sup>3</sup> - SCBA

### HEALTH EFFECTS

<b>Eyes:</b>	Irritation
<b>Skin:</b>	Irritation, rash, and burning feeling
<b>Inhalation:</b>	Nose, throat and lung irritation with coughing, wheezing and shortness of breath
	Headache, dizziness, convulsions, restlessness, confusion, and even death

### FIRST AID AND DECONTAMINATION

<b>Remove</b>	the person from exposure.
<b>Flush</b>	eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn. Seek medical attention.
<b>Quickly</b>	remove contaminated clothing and wash contaminated skin with large amounts of water. Seek medical attention.
<b>Begin</b>	artificial respiration if breathing has stopped and CPR if necessary.
<b>Transfer</b>	promptly to a medical facility.