









**EMERGENCY NUMBERS:**

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 (CAN) CANUTEC : 1(613) 996-6666 (24hrs)  
 (USA) Anachemia : 1(518) 297-4444  
 (CAN) Anachemia : 1(514) 489-5711

WHMIS	Protective Clothing	TDG Road/Rail
WHMIS CLASS: D-1A D-2A		TDG CLASS: 6.1 PIN: UN1654 PG: II
 	    	

## Section I. Product Identification and Uses

<b>Product name</b>	<b>NICOTINE</b>	<b>CI#</b>	Not available.
<b>Chemical formula</b>	C10H14N2	<b>CAS#</b>	54-11-5
<b>Synonyms</b>	(S)-(-)-Nicotine, 1-Methyl-2-(3-pyridyl)pyrrolidine, 3-(1-Methyl-2-pyrrolidinyl)-pyridine, AC-6510, 62442	<b>Code</b>	AC-6510
<b>Supplier</b>	Anachemia Canada. 255 Norman. Lachine (Montreal), Que H8R 1A3	<b>Formula weight</b>	162.24
		<b>Supersedes</b>	
<b>Material uses</b>	For laboratory use only.		

## Section II. Ingredients

Name	CAS #	%	TLV
1) NICOTINE	54-11-5	98	Exposure limits: ACGIH TWA 0.5 mg/m3

**Toxicity values of the hazardous ingredients**

 NICOTINE:  
 ORAL (LD50): Acute: 17800 ug/kg (Bird). 9200 ug/kg (Dog). 3340 ug/kg (Mouse). 50 mg/kg (Rat).  
 DERMAL (LD50): Acute: 50 mg/kg (Rabbit). 140 mg/kg (Rat).

**Section III. Physical Data**

<b>Physical state and appearance / Odor</b>	Brown-orange liquid.
<b>pH (1% soln/water)</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>Percent volatile</b>	Not available.
<b>Freezing point</b>	Not available.
<b>Boiling point</b>	Decomposes.
<b>Specific gravity</b>	1.01 (Water = 1)
<b>Vapor density</b>	5.6 (Air = 1)
<b>Vapor pressure</b>	0.042 mm of Hg (@ 20°C)
<b>Water/oil dist. coeff.</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Solubility</b>	Miscible in water.

**Section IV. Fire and Explosion Data**

<b>Flash point</b>	CLOSED CUP: 101°C
<b>Flammable limits</b>	LOWER: 0.7% UPPER: 4%
<b>Auto-ignition temperature</b>	244°C
<b>Fire degradation products</b>	Oxides of carbon and nitrogen.
<b>Fire extinguishing procedures</b>	Use DRY chemical, carbon dioxide, or water spray. Water or foam may cause frothing. Wear adequate personal protection to prevent contact with material or its combustion products. Self contained breathing apparatus with a full facepiece operated in a pressure demand or other positive pressure mode. Cool containing vessels with flooding quantities of water until well after fire is out.
<b>Fire and Explosion Hazards</b>	The sensitivity to static discharge is not available. The sensitivity to impact is not available. Emits toxic fumes under fire conditions.

**Section V. Toxicological Properties**

<b>Routes of entry</b>	Ingestion and inhalation. Eye contact. Skin contact. Skin absorption.
<b>Effects of Acute Exposure</b>	Very toxic. May be fatal by ingestion, inhalation, or by skin absorption. Irritant. Target organs: central nervous system, cardiovascular system, gastrointestinal system, lungs, peripheral nervous system, skeletal muscle. 5 mg/m <sup>3</sup> (NICOTINE) is immediately dangerous to life or health.
<b>Eye</b>	Causes irritation.
<b>Skin</b>	Causes skin irritation. Readily absorbed through skin. See ingestion.
<b>Inhalation</b>	Very toxic. Material is irritating to mucous membranes and upper respiratory tract. See ingestion.
<b>Ingestion</b>	Very toxic. Causes gastrointestinal irritation. May cause headache, nausea, vomiting, visual disturbances, dizziness, dyspnea, stomach pains, diarrhea, salivation, incoordination, cyanosis, convulsions, unconsciousness and possibly death. 40 mg can be fatal.

**Section V. Toxicological Properties**

**Effects of Chronic Overexposure** May cause congenital malformations in the foetus. Human: passes through the placenta, excreted in maternal milk. Carcinogenic effects: Not available. Mutagenic effects: Not available. Toxicity of the product to the reproductive system: Not available. To the best of our knowledge, the chemical, physical, and toxicity of this substance has not been fully investigated.

**Section VI. First Aid Measures**

**Eye contact** Immediately flush eyes with copious quantities of water for at least 15 minutes holding lids apart to ensure flushing of the entire surface. Seek immediate medical attention.

**Skin contact** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Seek immediate medical attention. Wash clothing before reuse.

**Inhalation** Remove patient to fresh air. Administer approved oxygen supply if breathing is difficult. Administer artificial respiration or CPR if breathing has ceased. Seek immediate medical attention.

**Ingestion** If conscious, wash out mouth with water. Have conscious person drink several glasses of water to dilute. Induce vomiting. Seek immediate medical attention. Never give anything by mouth to an unconscious person.

**Section VII. Reactivity Data**

**Stability** Unstable. Air and light sensitive. Conditions to avoid: High temperatures, sparks, open flames and all other sources of ignition, contamination.

**Hazardous decomp. products** Not available.

**Incompatibility** Oxidizing agents, acids.

**Reaction Products** Not available. Hazardous polymerization will not occur.

## Section VIII. Preventive Measures

NICOTINE

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<b>Protective Clothing in case of spill and leak</b>	Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves.
<b>Spill and leak</b>	Evacuate the area. Eliminate all sources of ignition. Absorb on sand or vermiculite and place in a closed container for disposal. Ventilate area and wash spill site after material pick up is complete. DO NOT empty into drains. DO NOT touch damaged container or spilled material.
<b>Waste disposal</b>	Burn in a chemical incinerator equipped with an after burner and scrubber. According to all applicable regulations. Harmful to aquatic life at very low concentrations. Can be dangerous if allowed to enter drinking water intakes. Do not contaminate domestic or irrigation water supplies, lakes, streams, ponds, or rivers.
<b>Storage and Handling</b>	Store in a cool place away from heated areas, sparks, and flame. Store in a well ventilated area. Store away from incompatible materials. Do not add any other material to the container. Do not wash down the drain. Do not breathe gas/fumes/vapor/spray. In case of insufficient ventilation, wear suitable respiratory equipment. Keep away from direct sunlight or strong incandescent light. Keep container tightly closed and dry. Manipulate under an adequate fume hood. Product is highly hygroscopic. Empty containers may contain a hazardous residue. Handle and open container with care. Take off immediately all contaminated clothing. This product must be manipulated by qualified personnel. Do not get in eyes, on skin, or on clothing. Wash well after use. In accordance with good storage and handling practices. Do not allow smoking and food consumption while handling. In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible.).

## Section IX. Protective Measures

<b>Protective clothing</b>	Splash goggles. Impervious gloves, apron, coveralls, and/or other resistant protective clothing. Sufficient to protect skin. A OSHA/MSHA jointly approved respirator is advised in the absence of proper environmental controls. If more than TLV, do not breathe vapor. Wear self-contained breathing apparatus. Have available and use as appropriate: face shields, rubber suits, aprons, and boots. Do not wear contact lenses. Make eye bath and emergency shower available. Ensure that eyewash station and safety shower is proximal to the work-station location.
<b>Engineering controls</b>	Use only in a chemical fume hood to keep airborne levels below recommended exposure limits. Do not use in unventilated spaces.

## Section X. Other Information

<b>Special Precautions or comments</b>	Highly toxic! Possible teratogen! Irritant! Do not breathe vapor. Avoid all contact with the product. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Readily absorbed through skin. Keep away from heat, sparks and flame. To the best of our knowledge, the chemical, physical and toxicity of this substance has not been fully investigated. RTECS NO: QS5250000 (Nicotine).
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NFPA

Prepared by MSDS Department/Département de F.S..

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