



# MATERIAL SAFETY DATA SHEET

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Approved by: Darius Nicpon

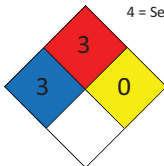
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Section 1 Chemical Product and Company Name		
Product	<b>SOLUTION A</b>	ITEM No: CASE-B006
Synonyms	Denatured alcohol and hydrochloric acid solution.	
CHEMTREC	24 Hour Emergency Phone Number (800) 424-9300	

Section 2 Composition/Ingredients Information			
Chemical Name	CAS#	%	TLV Units
Ethanol	64-17-5	N/A	TWA: 1000ppm
Hydrochloric Acid	7647-01-0	N/A	STEL: 5mg/m <sup>3</sup>

Section 3 Hazards Identification			
<b>DANGER! FLAMMABLE! CORROSIVE!</b> TOXIC BY INGESTION AND INHALATION. CORROSIVE TO EYES, SKIN AND MUCOUS MEMBRANE. HARMFUL IF INGESTED INHALED AND IF ABSORBED THROUGH SKIN. <b>Target organs:</b> liver, kidneys, CNS depressant		0 = Minimal	<b>Health</b> 3
		1 = Slight	<b>Flammability</b> 3
		2 = Moderate	<b>Physical Hazard</b> 0
		3 = Serious	<b>Personal Protection</b> C
		4 = Severe	
HMIS			

Section 4 First Aid Measures	
<b>INGESTION:</b> Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.	
<b>INHALATION:</b> Remove to fresh air. Get medical attention if necessary.	
<b>EYE CONTACT:</b> Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if irritation develops.	
<b>SKIN CONTACT:</b> Remove contaminated clothing. Flush thoroughly with mild soap and water. Get medical attention if irritation develops.	

Section 5 Fire Fighting Measures	
Flammable and corrosive liquid.	
<b>Extinguishing Media:</b> Use TriClass, dry chemical extinguisher or water spray for small fires. Water spray to cool fire-exposed containers and structures. Firefighters should use self-contained breathing apparatus and protective clothing.	
<b>Flash point:</b> 58°F <b>Autoignition temperature:</b> 683°F <b>Explosion limits: Lower:</b> 3.3% <b>Upper:</b> 19.0%	

Section 6 Accidental Release Measures	
Restrict unprotected personnel from the area. Contain the spill with an inert absorbent material and deposit in a sealed bag or container. For small spill use paper towel. Place the wet medium under the hood or outside the building to minimize a vapor concentration in the area. Do not leave it unattended. Dry material place in trash. Ventilate and wash spill area with soap and water.	

Section 7 Handling and Storage	
Read label on container before using. Do not wear contact lenses when working with chemicals. Keep container tightly closed. For laboratory use only. Not for drug, food, or household use. Use only under adult supervision. Vapor forms from this product and may travel, or be moved by air currents and ignited by pilot lights, static discharges, flames, sparks, heaters or other ignition sources.	
<b>Handling:</b> Use hood or with adequate ventilation. Keep away from heat, sparks and flame. Avoid breathing vapor. Wash hands thoroughly after handling.	
<b>Storage:</b> Flammable cabinet. Keep container in cool, well-ventilated area.	

Section 8 Exposure Controls/ Personal Protection	
<b>Engineering controls:</b> Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. <b>Respiratory protection:</b> Non should be needed if normal laboratory handling at room temperature. Use NIOSH approved respiratory protection in high vapor concentrations.	

Section 9 Physical and Chemical Properties	
<b>Physical state:</b> Liquid <b>Appearance:</b> Transparent, Colorless, Clear. <b>Odor:</b> Strong alcohol odor. Fragrant <b>pH:</b> Acidic <b>Vapor Pressure ( mm Hg):</b> Not available <b>Vapor Density:</b> Not available <b>Evaporation Rate:</b> Not available <b>Viscosity:</b> Not available	<b>Boiling point:</b> Not available <b>Melting point:</b> N/A <b>Freezing point:</b> Not available <b>Decomposition temp:</b> N/A <b>Solubility:</b> Miscible in water and many organic solvents. <b>Specific gravity (H<sub>2</sub>O = 1):</b> Not available <b>Percent volatile (%):</b> Not available <b>Molecular formula:</b> Mixture <b>Molecular weight:</b> N/A

Section 10 Stability and Reactivity	
<b>Chemical Stability:</b> Stable <b>Conditions to Avoid:</b> High temperatures, sparks open flames and incompatible materials. <b>Incompatibilities:</b> Strong oxidizing agents, acids, peroxides, acid chlorides, acid anhydrides, alkali metals, ammonia. Alkali metals, metals, organic materials, amines. <b>Hazardous decomposition:</b> Not available <b>Hazardous polymerization:</b> Will not occur.	

Section 11 Toxicological Information	
<b>Effects of overexposure:</b> Eyes: Corrosive to eyes. Splashes may cause severe burns and permanent eye damage. Skin: Corrosive to skin. Can cause redness, pain and severe skin burns if not washed off immediately. Inhalation: Vapors are irritating to mucous membrane and eyes. Inhalation of vapors can cause coughing, choking. Inflammation of the nose, throat, and upper respiratory tract. Ingestion: Toxic. Harmful if swallowed. Swallowing hydrochloric acid can cause immediate pain and burns of the mouth, throat, esophagus and gastrointestinal tract. Ingested doses of alcohol will produce nausea, dizziness and headache.	
ORAL LD <sub>50</sub> Ethanol: 7060mg/kg [Rat]. 3450mg/kg [Mouse] VAPOR LC <sub>50</sub> Ethanol: 20000ppm 8h [Rat]. 39000 mg/m <sup>3</sup> 4h [Mouse] Acute oral toxicity ORAL LD <sub>50</sub> : 900mg/kg[Rabbit], as hydrochloric acid Acute vapor toxicity IHL-LC <sub>50</sub> : 3124ppm [Rat]/1h, as hydrochloric acid DERMAL LD <sub>50</sub> : not available	

Section 12 Ecological Information	
Data not available.	

Section 13 Disposal Considerations	
Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.	

Section 14 Transport Information	
<b>UN number:</b> 2924 <b>Shipping name:</b> Flammable liquid, corrosive, n.o.s. <b>Hazard Class:</b> 3, 8 <b>Packing group:</b> PG II <b>Exceptions:</b> Lty Qty ≤1L	

Section 15 Regulatory Information	
TSCA-listed, EINECS-listed (200-578-6) as alcohol. TSCA-listed, EINECS-listed (231-595-7)as hydrochloric acid. WHMIS (Canada): CLASS E: Corrosive liquid. DSCL (EEC) R34-Causes burns,	

Section 16 Other Information	
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