

**MATERIAL SAFETY DATA SHEET**

23246344

**SECTION I-IDENTIFICATION**

Product Name: **Indole (Kovacs)**  
 Product No.: 21-227, 90-6403  
 Formula: Mixture

**SECTION II-HAZARDOUS INGREDIENTS**

Material:	Amyl Alcohol	Hydrochloric Acid
CAS #:	71-41-0	7647-01-0
% Weight:	75	25
NFPA Rating:	Health - 1	Health - 3
	Flammability - 3	Flammability - 0
	Reactivity - 0	Reactivity - 0

**SECTION III-PHYSICAL DATA**

	Amyl Alcohol	Hydrochloric Acid
Boiling Point:	273-280°F (134-138°C)	127°F (53°C)
Vapor Pressure:	1mm Hg @ 54°F (1.36°C)	190 mm Hg @ 77°F (25°C)
Vapor Density (air=1):	3.04	Data not available.
Water Solubility:	2.7 g/100 grams water at 71.6°F (22°C)	Infinite in water with slight evolution of heat.
Appearance and Odor:	Colorless liquid, characteristic odor.	Clear, colorless fuming liquid, pungent odor.
Melting Point:	-110°F (-79°C)	-101°F (-74°C)
Specific Gravity:	0.81	1.18
% Volatile by Volume:	Data not available.	100
Evaporation Rate: (BuAc=1)	0.18	Data not available.

**SECTION IV-FIRE AND EXPLOSION DATA**

	Amyl Alcohol	Hydrochloric Acid
Flash Point:	91°F	Data not available.
Explosive Limits:	LEL 1.2 UEL 10.0	Data not available.
Extinguishing Media:	Carbon dioxide, dry chemical or foam.	
Special Fire-fighting Procedures:	Combustible, keep away from heat and flame. Wear self-contained breathing apparatus and protective equipment.	
Unusual Fire and Explosive Data:	Gives off fumes of hydrogen chloride.	

**SECTION V-HEALTH HAZARD AND EMERGENCY**

	Amyl Alcohol	Hydrochloric Acid
Exposure Limits:		
OSHA TWA:	Data not available.	5 ppm, 7 mg/m <sup>3</sup>
OSHA Ceiling:	Data not available.	5 ppm, 7 mg/m <sup>3</sup>
ACGIH:	Data not available.	5 ppm, 7 mg/m <sup>3</sup>
ORAL RAT LD <sub>50</sub> :	2200 mg/kg	900 mg/kg
Acute Health Effects:	Poison, may be harmful or fatal if swallowed. Corrosive, may cause burns or irritation to skin, eyes or respiratory tract. Avoid breathing vapor and eye/skin contact.	

**Primary Routes of Entry/First Aid:**

Inhalation: Remove victim to fresh air. If not breathing, give artificial respiration. Call physician.

Eye/Skin Contact: Flush immediately with copious amounts of water for at least 15 minutes. Remove contaminated clothing. Call physician.

Ingestion: Dilute with water or milk. Call physician immediately.

Carcinogen Potential: Hydrochloric Acid-IARC, not classifiable as a human carcinogen (Group 3); human and animal evidence is inadequate.

Target Organ Effects: Amyl Alcohol - Repeated inhalation of aerosols may result in lung or kidney damage. Hydrochloric Acid - May cause erosion of teeth, but seldom occurs due to corrosive properties of the acid.

Medical Conditions Aggravated by Exposure: Persons with pre-existing eye, skin or respiratory disorders may be more susceptible to the effects of this substance.

**SECTION VI-REACTIVITY**

Stability: Stable.

Incompatibility: Strong oxidizers, strong bases, cyanides, sulfides, sulfites and formaldehyde.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Carbon monoxide and carbon dioxide can form aldehydes burning in limited air. Nitrogen oxide, and hydrogen chloride formed upon corrosion with metals.

**SECTION VII-SPILL AND DISPOSAL**

Spill Procedures: Wear protective equipment as specified in Section VIII. Ventilate area, remove all sources of ignition. Contain spill and absorb with inert material. Scoop up and with non-sparking tools, place in approved hazardous waste container.

Disposal Procedures: Ensure compliance with all local, state and federal regulations or contact an approved and licensed disposal agency.

**SECTION VIII-PROTECTION DATA**

Eyes: Chemical safety goggles.

Gloves: Chemical-resistant gloves.

Respiratory: Not required under normal conditions of use with ventilation.

Ventilation: Mechanical exhaust, fume hood.

Other: Protective apron or gown as required.

**SECTION IX-HANDLING AND STORAGE**

Store at 36-86°F (2-30°C) away from all sources of ignition. Keep container closed.

**SECTION X-MISCELLANEOUS DATA**

This information is believed to be correct, however no warranties are made with respect to this information and REMEL assumes no liability resulting from use. Make independent determinations of the suitability and completeness of information from all sources, to assure proper use and disposal of this product and personnel safety and health. Data for each component is specified where applicable as mixtures have not been tested.

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