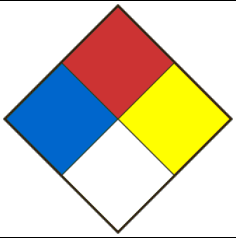
SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier PYRIDINE		**Product Use** Laboratory use	
Chemical formula C_5H_5N		**Product code** PR-0230	**Molar weight** 79,1
Chemical name / Commercial name / Synonymous AZABENZÈNE, AZINE, PYRIDIN			
Supplier's name Laboratoire MAT		**Address-Street** 610, Adanac Street	
City Québec		**Province** Québec	
Postal code G1C 7B7	**Internet** www.labmat.com	**Phone number** 418-660-8666 Lun-Ven 8h-16h	
Emergency phone 418-660-8666 Lun-Ven 8h-16h		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060	
Date SDS 2/4/2025	**SDS Prepared by** Laboratoire MAT	**E-Mail** labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Flammable liquids category 2 Acute toxicity - Inhalation category 4 Acute toxicity - Dermal category 4 Acute toxicity - Oral category 4 Skin corrosion/irritation - Skin irritation category 2 Serious eye damage/ Eye irritation category 2A
Signal Word	DANGER
Hazards statements (H)	H225 Highly flammable liquid and vapor. H312 Harmful in contact with skin. H332 Harmful if inhaled. H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation.
Precautionary statements (P)	P210 Keep away from heat, sparks, open flames, hot surfaces. — No smoking. P233 Keep container tightly closed. P240 Ground and bond container and receiving equipment. P241 Use explosion-proof equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P261 Avoid breathing mists, gases, vapors and other fumes, or the product itself. P264 Wash thoroughly after handling. P270 Do no eat, drink or smoke when using this product. P280 Wear protective gloves, protective clothing and eye and face protection. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P321 Specific treatment (see section 4 of the SDS and on this label). P370 + P378 In case of fire: Use dry powder or dry sand for extinction. P403 + P235 Store in a well-ventilated place. Keep cool. P501 Dispose of contents and container in accordance with local, regional and national regulations, or contact a specialist waste disposal company. P330 Rinse mouth. P362 + P364 Take off contaminated clothing and wash it before reuse. P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P332 + P313 If skin irritation occurs: Get medical advice/attention. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/attention.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	**Health** 3 **Fire** 3 **Reactivity** 0 **Special danger**

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%P/P)
Pyridine	110-86-1	<=100

SECTION 04 - FIRST AID MEASURES

Eye contact	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. If irritation persists, seek medical attention.
Skin contact	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
Inhalation	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
Ingestion	Do NOT induce vomiting. If the person is conscious, rinse the mouth with water. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Main symptoms of high exposure: Nausea and vomiting. Central nervous system depression. Headaches. Confusion. Ref. section 11.
Immediate medical attention and special treatment, if necessary	Treat according to symptoms. Show this sheet to the attending physician.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	Yes
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Do not use a heavy water stream.
Hazardous combustion products	Hazardous combustion products formed under fire conditions: Carbon oxides, Nitrogen oxides (NOx).
Specific hazards of the dangerous product	May react violently with incompatible products (Ref Section 10). Vapors can travel a great distance and ignite on sources of ignition such as heaters, electrical appliances, cigarettes, sparks, etc. Containers exposed to fire may explode. Vapors may form flammable or explosive mixtures with air. Contact with strong oxidizing agents may cause fire. Violent or explosive reactions may occur in contact with: chlorosulfonic acid, sulfuric acid, bromine trifluoride, chromium trioxide, diazotized tetroxide, fluorine, maleic anhydride (above 150 ° C), oleum, perchromates and beta-propiolactone.
Special protective equipment and precautions for firefighters	Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up / Personnal precautions, protective equipment	Evacuate personnel to safe areas. Absorb the product with sand or vermiculite. Dilute residues with water, clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. When handling, wear appropriate safety equipment. Use NIOSH cartridge respiratory protection for larger spills. (Reference Section 8 for protective equipment to be used.) Avoid breathing vapors, mist or gas. Avoid dust formation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Protect from the sun's rays. Keep away from heat and sources of ignition.
Methods of handling	Avoid contact with the skin, eyes and clothes. Avoid ingestion and inhalation. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Do not use tools that produce sparks. Wear personal protective equipment when handling. Always ensure good ventilation. Apply the usual standard hygiene rules: Wash your hands after use. Do not eat or drink during use.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Control	Value	Basis
PYRIDINE	110-86-1	TWA	1 ppm 3.2 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	1 ppm	Canada. British Columbia OEL
		VEMP	5 ppm 16 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

Data source	Sigma-Aldrich.
Ventilation	Use fan.
Respiratory	If work under the hood is not possible, or if the permissible levels are exceeded, use NIOSH cartridge respiratory protection, or an air-supplied respirator.
Gloves	Handle with gloves. Suggested material: Nitrile. Butyle. Viton® (Fluoroelastomer). The type, thickness and length of the glove must be chosen according to the use, the concentration of the product, as well as the duration of use. Replace gloves regularly for better protection.
Eyes	Safety goggles with safety shutters.
Shoes	Safety shoes.
Clothing	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Engineering control	Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid.
Appearance	Incolore/jaune pâle.
Odour	Déplaisante.
Odour threshold	0.66ppm
pH	Solution aqueuse 0.2 M = pH 8.5.
Melting point / Freezing point	-42°C
Initial boiling point	115°C
Boiling range	Data not available
Flash point	17°C
Evaporation rate	Data not available
Flammability	Yes
Lower flammable / Explosive limit	1.8%
Upper flammable / Explosive limit	12.4%
Vapour pressure	20.0 mmHg à 25.0 °C.
Vapour density	2.73-
Relative density	0.978g/cm³
Solubility	Miscible avec l'eau, l'alcool et l'éther.
Partition coefficient water/n-octanol	log Pow: 0.65.
Auto-ignition temperature	482°C
Decomposition temperature	Data not available
Viscosity	0.95 mPa.s à 20 °C.

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	May react violently with incompatible substances.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Stable under normal conditions. Vapors may form explosive mixture with air.
Conditions to avoid, including static discharge, shock or vibration	Avoid excessive heat. Heat, flames, sparks.
Incompatible materials	Strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates), acids and acid chlorides, bromine trifluoride, chloroformates, chromium trioxide, diazotized tetroxide, fluorine, maleic anhydride, oleum, perchromates, beta-propiolactone, heat and moisture.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx).

SECTION 11 - TOXICOLOGICAL INFORMATION

PYRIDINE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe irritation and may result in inflammation of the conjunctiva.
- Skin	Irritation and dermatitis.
- Inhalation	Spasms, irritation and inflammation of the nose, throat and lungs. Edema of the larynx and bronchi. Chemical pneumonitis and pulmonary edema that can lead to death.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Abdominal pain, liver and kidney damage, cramps, diarrhea, headache, dizziness, sweating, salivation, methemoglobinemia, convulsions, respiratory collapse, coma and can lead to death.
Chronic exposure effects / symptoms	Is recognized as a possible carcinogen for humans (class 2B) by IARC. Burning sensation, dermatitis, conjunctivitis, nervous disorders, liver and kidney damage, chest pain, cough, dyspnea, laryngitis, headache, dizziness, confusion, irritability, tearing, sweating, salivation, abdominal pain, frequent urination , fatigue, insomnia, weight loss and loss of appetite, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 1500 mg/kg. LD50 Dermal - Rabbit - > 1000 - 2000 mg/kg.
CL50 (specify species and route of entry)	CL50 inhalation - Rat Male - 17.1 mg/L - 4 h.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	LC50 - Pimephales promelas (fathead minnow) - Flow-through test - 99 mg/L - 96 h. LC50 - Cyprinus carpio (Carp) - Semi-Static - 26 mg/L - 96 h. LC50 - Oncorhynchus mykiss (rainbow trout) - Static test: 4.6 mg/L - 96 h. EC50 - Daphnia magna (Water flea) - 520 mg/L - 24 h.
Persistence and degradability	Aerobic Biodegradability - Exposure Duration 28 d Result: 97% - Readily biodegradable. (OECD Guideline 301 B).
Bioaccumulative potential	Data not available.
Mobility in soil	Soluble in water. Probable mobility in the environment due to its solubility in water.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life. Forms toxic mixtures with water despite dilution. All littering must be avoided in the environment.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of contents and container in accordance with local, regional and national regulations, or contact a specialist waste disposal company.
Contaminated Packaging	Dispose of as unused product.

SECTION 14 - TRANSPORT INFORMATION

UN Number	1282
UN Proper shipping name	PYRIDINE
Transport hazard class(es)	3 Flammable liquids
Packing group	II
Limited quantity index	1L
ERAP Index	-
Special precautions	-

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Flammable liquids category 2 Acute toxicity - Inhalation category 4 Acute toxicity - Dermal category 4 Acute toxicity - Oral category 4 Skin corrosion/irritation - Skin irritation category 2 Serious eye damage/ Eye irritation category 2A

SECTION 16 - OTHER INFORMATION

Further information

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

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