



Centre Anti-Poison pour le Québec: (800) 463-5060

Tél. (Qc): (418) 660-8666 / 800-890-8666


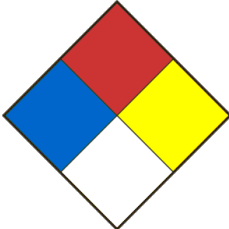
Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier 4-NITROPHENOL		Product Use Laboratory use	
Chemical formula <chem>O2NC6H4OH</chem>		Product code NR-0127	Molar weight 139,11
Chemical name / Commercial name / Synonymous 4-NITRO-PHENOL, p-NITROPHÉNOL, 4-HYDROXYNITROBENZÈNE, NIPHEN, PARANITROPHENOL			
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 / 800-890-8666	
Emergency phone	CANUTEC: 613-996-6666		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
Date SDS 8/17/2021	SDS Prepared by Laboratoire MAT		E-Mail labmat@labmat.com

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Acute toxicity - Inhalation category 4 Acute toxicity - Dermal category 4 Specific Target Organ Toxicity - Repeated exposure category 2 Acute toxicity - Oral category 4
Signal Word	WARNING
Hazards statements (H)	H312 Harmful in contact with skin. H332 Harmful if inhaled. H302 Harmful if swallowed. H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary statements (P)	P261 Avoid breathing dust / fume / gas / mist / vapors / spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302 + P352 IF ON SKIN: Wash with plenty of soap and 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). P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company. P362 + P364 Take off contaminated clothing and wash it before reuse. P260 Do not breathe dust / fume / gas / mist / vapors / spray. P264 Wash the areas of the body that have been in contact with the product after handling. P270 Do not eat, drink or smoke when using this product. P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P314 Get medical advice/attention if you feel unwell. P330 Rinse mouth.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	Health 3 Fire 1 Reactivity 1 Special danger

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
4-nitrophénol	100-02-7	<=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	If the person is conscious, rinse the mouth with water. Do NOT induce vomiting. 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: Headaches. Drowsiness. Nausea. Cyanosis (blue to black coloring of the skin and nails). Ref. section 11.
Immediate medical attention and special treatment, if necessary	In case of medical consultation, keep this sheet available. In case of poisoning, the following can be administered as an antidote: Milk. Activated charcoal. Beaten egg whites.
General advice	Show this safety data sheet to the doctor in attendance.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	No
Ignition conditions	Non flammable.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Data not available.
Hazardous combustion products	Hazardous combustion products formed under fire conditions: - Carbon oxides, nitrogen oxides (NOx).
Special fire and explosion hazards	The exothermic decomposition of 4-nitrophenol (279 °C) generates a lot of pressure and may explode if the product is confined. Fine dust in the air can ignite. Dust can form an explosive mixture with air. May react violently with incompatible products (Ref Section 10).
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 / Personnel precautions, protective equipment	Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Avoid breathing dust. Use a respirator as needed. Pick up with a shovel or broom, taking care not to scatter dust. Dispose of residues in a container provided for the disposal of hazardous materials. Do not let product enter drains.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Keep container tightly closed in a dry and well-ventilated place. Keep container tightly closed and store away from heat, air, moisture and incompatible products. Protect from light and sunlight.
Methods of handling	Avoid contact with the skin, eyes and clothes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust or vapor is formed. Avoid ingestion and inhalation. Wear personal protective equipment when handling. Always ensure good ventilation. Transport according to TDG (ref Section 14)

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Control	Value	Basis
4-NITROPHENOL	100-02-7	TLV, TWA, STEL	No data available	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TLV, TWA, STEL	No data available	Canada. British Columbia OEL
		TLV, TWA, STEL	No data available	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

Ventilation	Use fan.
Respiratory	If the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
Gloves	Handle with gloves.
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	Solid.
Appearance	Cristalline jaune/brun clair.
Odour	Aromatique.
Odour threshold	Data not available
pH	4.4 5 g/L (solution aqueuse).
Melting point / Freezing point	113-115°C
Initial boiling point	279°C (dec)
Boiling range	Data not available
Flash point	169°C
Evaporation rate	Data not available
Flammability	No
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Vapour pressure	0.6 mmHg @ 120°C.
Vapour density	Data not available
Relative density	1.479 g/cm ³ @ 20°C.
Solubility	Modérément soluble dans l'eau froide 15g/L. Très soluble dans l'alcool, le chloroforme et l'éther.
Partition coefficient water/n-octanol	log Pow : 1.91-
Auto-ignition temperature	283°C
Decomposition temperature	279°C
Viscosity	Data not available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	May react violently with incompatible substances.
Chemical stability	Stable under recommended storage conditions. Sensitive to light.
Possibility of hazardous reactions	May react violently with incompatible substances.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid dust formation. Heat, flames and sparks. Exposure to light.
Incompatible material	Strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates), strong bases, heat and moisture. Reducing agents. Combustible materials (paper, wool, oil). May explode if mixed and heated with diethyl phosphite.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO _x).

SECTION 11 - TOXICOLOGICAL INFORMATION

4-NITROPHENOL

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe irritation and may lead to inflammatory lesions, especially if the exposure is intense and prolonged.
- Skin	Irritation and dermatitis.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Nervous disorders, chest pain, cough, dyspnea, headache, dizziness, nausea and vomiting, methemoglobinemia and cyanosis.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Abdominal pain, cramps, diarrhea, headache, dizziness, sweating, salivation, nausea and vomiting, convulsions, methemoglobinemia, tachycardia, cyanosis, unconsciousness, coma and can lead to death.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, nervous disorders, chest pain, cough, dyspnoea, laryngitis, headache, dizziness, confusion, irritability, sweating, salivation, tachycardia, fatigue, methemoglobinemia, cyanosis, weight loss and loss of appetite, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 230 mg/kg LD50 Dermal - Rat - 1024 mg/kg
CL50 (specify species and route of entry)	CL50 inhalation - Rat >4.7 mg/L - 4 h

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	EC50 - Daphnia magna (Water flea) - 3.10-24.00 - 48 h EC50 - Pseudokirchneriella subcapitata (green algae) - 2.3-7.71 mg/L - 96 h EC50 - Desmodesmus subspicatus (green algae) - 23.7 mg/L - 96 h LC50 - Lepomis macrochirus - 6.6 mg/L - 96 h - Static. LC50 - Oncorhynchus mykiss (rainbow trout) - 3.8 mg/L - 96 h - Static. 7.9 mg/L - 96 h Flow-through
Persistence and degradability	Biodegradability aerobic. Duration of exposure 28 days - Result: 90 % - Readily biodegradable.
Bioaccumulative potential	Bioaccumulation Pimephales promelas (fathead minnow) - 28 d. - 0.0441 mg/l(p-Nitrophenol) - Bioconcentration factor (BCF): 280.
Mobility in soil	Probable mobility in the environment due to its solubility in water.
Other adverse effects	Do not throw residues in the sewer.

SECTION 13 - DISPOSAL CONSIDERATIONS

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

SECTION 14 - TRANSPORT INFORMATION

UN Number	1663
UN Proper shipping name	NITROPHÉNOLS (o-, m-, p-)
Transport hazard class(es)	6.1 Toxic substances
Packing group	III
Limited quantity index	5kg
ERAP Index	-
Special precautions	43

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Acute toxicity - Inhalation category 4 Acute toxicity - Dermal category 4 Specific Target Organ Toxicity - Repeated exposure category 2 Acute toxicity - Oral category 4
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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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