



## SAFETY DATA SHEET

### SECTION 01 - IDENTIFICATION

<b>Product Identifier</b>	2,4-DINITROPHENYLHYDRAZINE
<b>Other identification (Chemical name, Commercial name, Synonymous)</b>	(2,4-DINITROPHENYL)HYDRAZINE; DINITRO-2,4 PHENYLHYDRAZINE; HYDRAZINE, (2,4-DINITROPHENYL)-.
<b>Product code</b>	DR-0132; DP-0434
<b>Chemical formula</b>	$C_6H_6N_4O_4$
<b>Molar weight</b>	198.14
<b>Recommended use and Restrictions on use</b>	For laboratory, school, commercial or industrial use. Not for medical or household use. Do not use for medical, food or household purposes.
<b>Supplier</b>	LABORATOIRE MAT 610, rue Adanac Québec Québec G1C 7B7 418-660-8666 Mon-Fri 8h-16h www.labmat.com labmat@labmat.com
<b>Emergency phone</b>	418-660-8666 Mon-Fri 8h-16h CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
<b>Date SDS</b>	2025-05-13

## SECTION 02 - HAZARDS IDENTIFICATION

### WHIMS CANADA

- Flammable solids - category 1
- Acute toxicity - Oral - category 4

### PICTOGRAMS



### Signal Word

DANGER

### Hazards statements (H)

- Flammable solid
- Harmful if swallowed

### Precautionary statements (P)

- Keep away from heat, sparks, open flames, hot surfaces. — No smoking.
- Ground and bond container and receiving equipment.
- Use explosion-proof equipment.
- Wear protective gloves (nitrile, butyl, neoprene), protective clothing and eye and face protection.
- In case of fire: Use water spray or alcohol-resistant foam, or dry powder or carbon dioxide to extinguish.
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- IF SWALLOWED: Call a POISON CENTER or a physician if you feel unwell.
- Rinse mouth.
- Dispose of contents and container in accordance with local, regional and national regulations, or contact a specialist waste disposal company.

### Other dangers

NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Significant; 4=Extreme)

**Health** 1  
**Fire** 1  
**Reactivity** 3  
**Special danger**

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Component	No. CAS	% Weight
Dinitro-2,4-phénylhydrazine	119-26-6	60-80*
Water(as a stabilizater)	7732-18-5	>=30*

\*Actual concentrations retained as an industrial secret.

## SECTION 04 - FIRST AID MEASURE

<b>Eye contact</b>	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.
<b>Skin contact</b>	Wash skin with plenty of water for at least 15 minutes. Remove contaminated clothing. If irritation persists, seek medical attention.
<b>Inhalation</b>	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
<b>Ingestion</b>	If the person is conscious, give water to drink. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Consult a physician.
<b>Most important symptoms and effects (acute and delayed)</b>	Main symptoms of high exposure: Eyes irritation. Ref. section 11.
<b>Immediate medical attention and special treatment, if necessary</b>	Treat according to symptoms. Show this sheet to the attending physician.

## SECTION 05 - FIREFIGHTING MEASURES

<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	Do not use a jet of water.
<b>Combustion products</b>	Hazardous combustion products formed under fire conditions: Carbon oxides. Nitrogen oxides (NOx).
<b>Specific hazards of the dangerous product</b>	The dry product is explosive. Keep the product and empty containers away from heat and ignition sources. May react violently with incompatible products (Ref Section 10).
<b>Special protective equipment and precautions for firefighters</b>	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

<b>Personal precautions, protective equipment and emergency measures</b>	Evacuate personnel to safe areas. Cut off all sources of ignition. Use anti-spark tools and anti-explosion equipment. Avoid the accumulation of charges electrostatic. When handling, wear appropriate safety equipment (reference Section 8 for protective equipment to be used). Ensure a good ventilation. Use NIOSH cartridge respiratory protection for larger spills.
<b>Methods and materials for containment and cleaning up</b>	Pick up with a shovel or broom, taking care not to scatter dust. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. Discharge into the environment must be avoided.

## SECTION 07 - HANDLING AND STORAGE

<b>Conditions for safe storage</b>	Keep moist with water. Keep container tightly closed and store away from heat, moisture, and incompatible products (ref. section 10). Keep away from sources of ignition - No smoking. Take measures to prevent the accumulation of electrostatic charges. Use venting and electrical equipment that is grounded and does not produce ignition sources (sparks). Keep container tightly closed in a dry, well-ventilated place. Protect from the sun's rays.
<b>Methods of handling</b>	Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation. Wear personal protective equipment (ref. section 8) when handling. Always ensure good ventilation. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. 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

Component	CAS-No.	Value
2,4-dinitrophénylhydrazine	119-26-6	No occupational exposure limits established by region-specific regulators - Quebec, Alberta, Ontario, British Columbia.

<b>Respiratory</b>	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.
<b>Gloves</b>	Handle with protective gloves. Suggested material: Nitrile. Butyl. Neoprene. 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.
<b>Eyes</b>	Safety goggles with safety shutters.
<b>Shoes</b>	Use safety shoes.
<b>Clothes</b>	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Engineering control</b>	Use fan. 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

<b>Physical state</b>	Solid.
<b>Color</b>	Dark orange, red.
<b>Odour</b>	Data not available.
<b>Odour threshold</b>	Data not available.
<b>Melting point and freezing point</b>	197 - 200 °C / 386.6 - 392 °F
<b>Boiling point</b>	Data not available.
<b>Flammability</b>	Yes.
<b>Lower flammable / Explosive limit</b>	Data not available.
<b>Upper flammable / Explosive limit</b>	Data not available.
<b>Flash point</b>	Data not available.
<b>Auto-ignition temperature</b>	Data not available.
<b>Decomposition temperature</b>	Data not available.
<b>pH</b>	Data not applicable.
<b>Kinematic viscosity</b>	Data not available.
<b>Solubility</b>	Data not available.
<b>Partition coefficient water/n-octanol</b>	Data not available.
<b>Vapour pressure</b>	Data not available.
<b>Relative density</b>	Data not available.
<b>Vapour density</b>	Data not available.
<b>Particle characteristics</b>	Crystalline powder.

## SECTION 10 - STABILITY AND REACTIVITY

<b>Reactivity</b>	Explosive in the dry state. Fine dusts of organic materials have the potential to form a combustible or explosive mixture with air if confined in a small space and subjected to an ignition source. Flammable product, may ignite with source of ignition, if temperature above flash point. May react violently with incompatible substances.
<b>Chemical stability</b>	Stable under recommended storage conditions. Sensitive to heat.
<b>Possibility of hazardous reactions</b>	May react violently with incompatible substances.
<b>Conditions to avoid</b>	Heat, flames and sparks. Avoid the build-up of static electricity. Avoid contact with incompatible materials and extreme temperatures.
<b>Incompatible materials</b>	Strong oxidizers.
<b>Hazardous decomposition products</b>	Carbon monoxide. Nitrogen oxides (NO <sub>x</sub> ). To our knowledge, the products of decomposition have not been fully studied.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### 2,4-DINITROPHÉNYLHYDRAZINE

<b>Routes of exposure</b>	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
<b>Acute exposition effects / symptoms:</b>	By exposure route below.
- Eyes	Irritation.
- Skin	To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
- Inhalation	To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
<b>Acute toxicity (Ingestion)</b>	To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
<b>Chronic exposure effects / symptoms</b>	To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
<b>DL50 (specify species and route of entry)</b>	LD50 Oral - Rat - >500 mg/kg. LD50 Dermal - Data not available.
<b>CL50 (specify species and route of entry)</b>	LC50 Inhalation - Data not available.

## SECTION 12 - ECOLOGICAL INFORMATION

### 2,4-DINITROPHÉNYLHYDRAZINE

<b>Ecotoxicity</b>	Data not available.
<b>Persistence and degradability</b>	Data not available.
<b>Bioaccumulative potential</b>	Data not available.
<b>Mobility in soil</b>	Data not available.
<b>Other adverse effects</b>	Data not available.

## SECTION 13 - DISPOSAL CONSIDERATIONS

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

## SECTION 14 - TRANSPORT INFORMATION

UN Number	1325
UN Proper shipping name	SOLIDE ORGANIQUE INFLAMMABLE, N.S.A. (2,4-Dinitrophénylhydrazine)
Transport hazard class(es)	Solides inflammables 4.1
Packing group	II
Limited quantity index	1 kg
ERAP Index	1000
Special precautions	16

## SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	- Flammable solids - category 1 - Acute toxicity - Oral - category 4
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## SECTION 16 - OTHER INFORMATION

CNESST: Commission des normes, de l'équité et de la santé et sécurité au travail  
NIH: National institute of health (U.S. National Library of Medicine)  
ECHA: Agence Européenne de Chimie  
ACGIH : American Conference of Governmental Industrial Hygienists  
AIHA : American Industrial Hygiene Association  
VECD: Valeur d'exposition courte durée  
VEMP: Valeur d'exposition moyenne pondérée  
CMRG : Chemical Manufacturer's Recommended Guidelines  
OSHA : United States Department of Labor - Occupational Safety and Health Administration  
TLV : Threshold limit value  
TWA: Time-Weighted-Average  
STEL: Short Term Exposure Limit  
CEIL: Ceiling  
RSST: Règlement sur la santé et sécurité au travail (Québec)  
INRS: l'Institut national de recherche et de sécurité pour la prévention des accidents du travail et des maladies professionnelles (France)

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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