



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

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier ZINC (DUST<10 µm), stabilized		Product Use Laboratory use	
Chemical formula Zn / ZnO		Product code ZP-0101	Molar weight 65,37
Chemical name / Commercial name / Synonymous ZINC POWDER <10 µm, stabilised			
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 8/19/2020	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Combustible dusts category 1
Signal Word	DANGER
Hazards statements (H)	May form combustible dust concentrations in air.
Precautionary statements (P)	Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. No smoking. P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking. P222 Do not allow contact with air. P233 Keep container tightly closed.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	Health 1 Fire 2 Reactivity 1 Special danger

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Zinc	7440-66-6	>=97
Oxyde de zinc (Comme stabilisant)	1314-13-2	<=3

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. The use of EDTA as an antidote may be recommended, but first notify the medical staff.
Most important symptoms and effects (acute and delayed)	Ref. section 11.
Immediate medical attention and special treatment, if necessary	In case of medical consultation, keep this sheet available.
General advice	Show this safety data sheet to the doctor in attendance.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	No
Ignition conditions	Fine dust in sufficient concentration may be combustible, or explode if confined to a small space and subject to a source of ignition.
Suitable extinguishing media	Use only a class D fire extinguisher to extinguish the fire. Flames can also be smothered with sand or soda ash.
Unsuitable extinguishing media	Do not use water.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. - Zinc/zinc oxides.
Special fire and explosion hazards	In contact with acids, releases hydrogen: a flammable gas. Dust may form explosive mixtures with air. May react violently with incompatible products (Ref Section 10). Metal powders and some alloys may react violently with molten ammonium nitrate, mainly: stainless steel, aluminum, antimony, bismuth, cadmium, chromium, cobalt, copper, tin, iron, brass, magnesium, manganese, nickel, lead, potassium, sodium, titanium and zinc.
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. Cut off all sources of ignition. Keep away from shock, friction, and sources of ignition. Pick up with a broom, taking care not to scatter dust. When handling, wear appropriate safety equipment. Avoid dust formation. Ensure adequate ventilation. Avoid breathing dust. Do NOT rinse with water. 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	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Keep container tightly closed and store away from heat, water, moisture, and incompatible products.
Methods of handling	Provide appropriate exhaust ventilation at places where dust is formed. Avoid dust formation. Avoid contact with the skin, eyes and clothes. 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.	Value	Control parameters	Basis
Zinc oxide	1314-13-2	TWA	2.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		STEL	10.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	2.000000 mg/m3	Canada. British Columbia OEL
		STEL	10.000000 mg/m3	Canada. British Columbia OEL
		TWAEV	10.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
Remarks	The standard corresponds to dust containing no asbestos and the percentage in crystalline silica is less than 1 %.			
		TWAEV	5.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		STEV	10.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWAEV	5.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
	The standard corresponds to dust containing no asbestos and the percentage in crystalline silica is less than 1 %.			
	TWAEV 10.000000 mg/m3 Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants			
	The standard corresponds to dust containing no asbestos and the percentage in crystalline silica is less than 1 %.			
		STEV	10.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
	The standard corresponds to dust containing no asbestos and the percentage in crystalline silica is less than 1 %.			
		TWA	2.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		STEL	10.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
Components	CAS-No.	Value	Control parameters	Basis
Zinc	7440-66-6	No data available	TLV, TWA, STEL	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		No data available	TLV, TWA, STEL	Canada. British Columbia OEL
		No data available	TLV, TWA, STEL	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 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	Use 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

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid.
Appearance	Poudre gris foncé. Granulométrie <10 µm.
Odour	Donnée non disponible.
Odour threshold	Data not available
pH	Donnée non-disponible.
Melting point / Freezing point	419.5°C
Initial boiling point	908°C
Boiling range	Data not available
Flash point	Data not available
Evaporation rate	Data not available
Flammability	No
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Vapour pressure	1.3 mbar @ 478°C.
Vapour density	Data not available
Relative density	7.14g/cm ³
Solubility	Insoluble dans l'eau. Soluble dans les acides.
Partition coefficient water/n-octanol	Data not available
Auto-ignition temperature	460°C
Decomposition temperature	Data not available
Viscosity	Data not available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Non-reactive under normal conditions. Material may react violently with water.
Chemical stability	Stable under recommended storage conditions. Reacts with water. Contains the following stabilizer: Zinc oxide (<=3%).
Possibility of hazardous reactions	Reacts violently with water. Avoid dust formation. May form combustible dust concentrations in the air. In contact with an acid, releases hydrogen, a flammable gas.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Exposure to moist air or water. The presence of water or a source of moisture near this product can generate enough heat to ignite combustible materials nearby. Avoid contact with incompatible materials.
Incompatible material	Strong acids and bases, amines, chlorates, chlorides, chlorine, carbon disulfide, fluorine, hydroxylamine, alkali metals, nitrates, chromic oxide, chlorinated solvents, sulfur, water and humidity.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Zinc/zinc oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

ZINC (DUST<10 µM), STABILIZED

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation. To our knowledge, the product has not been fully studied.
- Skin	Irritation. To our knowledge, the product has not been fully studied.
- Inhalation	Metal fume fever results from inhalation of fumes of zinc oxide produced when zinc is heated to high temperatures, such as during welding, metal cutting, or smelting zinc alloys. Nausea and vomiting, chills and fever, muscular aches and pains, and weakness. To our knowledge, the product has not been fully studied.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Acute ingestion of 2g or more of zinc produces gastro-intestinal irritation and vomiting. To our knowledge, the product has not been fully studied.
Chronic exposure effects / symptoms	Burning sensation and irritation. Continual excessive Zinc intake results in reductions in serum levels of copper (hypocupremia), sideroblastic anemia, and neutropenia. To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 630 mg/kg. LD50 Dermal - Data not available.
CL50 (specify species and route of entry)	LC50 - Inhalation - Data not available.

SECTION 12 - ECOLOGICAL INFORMATION

Available ecological information	No
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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	3077
UN Proper shipping name	MATIÈRE DANGEREUSE DU POINT DE VUE DE L'ENVIRONNEMENT, SOLIDE, N.S.A.
Transport hazard class(es)	9 Miscellaneous dangerous goods/hazardous material
Packing group	III
Limited quantity index	5kg
ERAP Index	-
Special precautions	16, 99 (Zinc)

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Combustible dusts category 1
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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.

Last Update: 8/19/2020