



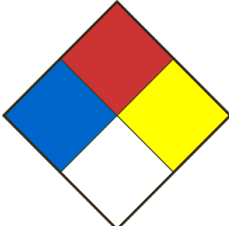
Centre Anti-Poison pour le Québec: (800) 463-5060  
 Tél. (Qc): (418) 660-8666 / 800-890-8666  
 Fax. (Qc): (418) 660-8998

## SAFETY DATA SHEET

### SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier OXYDE DE ZINC (A.C.S.)		Product Use Laboratory use	
Chemical formula ZnO		Product code ZR-0104	Molar weight 81,37
Chemical name / Commercial name / Synonymous CHINESE WHITE, ZINC WHITE, C.I. PIGMENT WHITE 4, ZINC (II) OXIDE, OZIDE, PERMANENT WHITE			
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 8/30/2019	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

### SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Not a hazardous substance according to WHMIS 2015
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	<b>Health</b> 1 <b>Fire</b> 0 <b>Reactivity</b> 0 <b>Special danger</b>

### SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Oxyde de zinc A.C.S.	1314-13-2	<=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, give water to drink. Never give anything by mouth to an unconscious person. Consult a physician.
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

<b>Flammability</b>	No
<b>Ignition conditions</b>	Not flammable or combustible.
<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	Data not available.
<b>Hazardous combustion / decomposition products</b>	Hazardous decomposition products formed under fire conditions. - Zinc/zinc oxides.
<b>Special fire and explosion hazards</b>	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>Methods and materials for containment and cleaning up / Personal precautions, protective equipment</b>	Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. 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. Discharge into the environment must be avoided.
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## SECTION 07 - HANDLING AND STORAGE

<b>Conditions for safe storage</b>	Keep container tightly closed in a dry and well-ventilated place. Store in cool place.
<b>Methods of handling</b>	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.

## 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)

<b>Data source</b>	Sigma-Aldrich.
<b>Ventilation</b>	Use fan.
<b>Respiratory</b>	If the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
<b>Gloves</b>	Handle with gloves.
<b>Eyes</b>	Safety goggles with safety shutters.
<b>Shoes</b>	Use safety shoes.
<b>Clothing</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>	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	Poudre blanche.
Odour	inodore.
Odour threshold	Data not available
pH	7 (50g/L solution aqueuse).
Melting point / Freezing point	1975°C
Initial boiling point	Data not available
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	Data not available
Vapour density	Data not available
Relative density	5.610g/cm <sup>3</sup>
Solubility	Insoluble dans l'eau et l'alcool. Soluble dans une dilution d'acide..
Partition coefficient water/n-octanol	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	Data not available
Viscosity	Data not available

## SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Non-reactive under normal conditions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Stable under normal conditions.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid dust formation.
Incompatible material	Strong acids, strong oxidants.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Zinc/zinc oxides.

## SECTION 11 - TOXICOLOGICAL INFORMATION

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and conjunctivitis.
- Skin	Irritation and dermatitis. May be harmful if absorbed through skin.
- Inhalation	Irritation of the mucous membranes and respiratory tract. May be harmful if inhaled.
Acute toxicity (Ingestion)	May be harmful if swallowed.
Chronic exposure effects / symptoms	Zinc oxide powder or vapor may irritate the respiratory tract. Prolonged skin contact may produce severe dermatitis called vesicular disease of the oxide. Exposure to high levels of powder or may cause metallic taste, considerable thirst, cough, tiredness, weakness, muscle aches and nausea followed by fever and chills. Severe overexposure may result in bronchitis or pneumonia with a bluish tinge of the skin., repeated or prolonged exposure may cause: abnormalities reversible liver enzymes, diarrhea.
DL50 (specify species and route of entry)	LD50 Oral - Rat - >5000 mg/kg LD50 Dermal - Rat - 2000 mg/kg
CL50 (specify species and route of entry)	LC50 - Inhalation - Mouse - 2500 mg/m <sup>3</sup>

## SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	LC50 - Oncorhynchus mykiss (rainbow trout) - 1.1 mg/L - 96 h EC50 - Daphnia magna (Water flea) - 0.098 mg/L - 48 h
<b>Persistence and degradability</b>	Soluble in water. Persistence is unlikely based on information available.
<b>Bioaccumulative potential</b>	Data not available.
<b>Mobility in soil</b>	Probable mobility due to its solubility in water.
<b>Other adverse effects</b>	Very toxic to aquatic life. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## SECTION 13 - DISPOSAL CONSIDERATIONS

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

## SECTION 14 - TRANSPORT INFORMATION

<b>UN Number</b>	N/R
<b>UN Proper shipping name</b>	
<b>Transport hazard class(es)</b>	
<b>Packing group</b>	
<b>Limited quantity index</b>	
<b>ERAP Index</b>	-
<b>Special precautions</b>	

## SECTION 15 - REGULATORY INFORMATION

<b>WHIMS CANADA</b>	Not a hazardous substance according to WHMIS 2015
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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: 8/30/2019