Azinsa Óxidos	***CHEMICAL PRODUCT SAFETY DATA SHEET*** **Minium**	Clave:	HSMI1872
		Revisión:	4
		Fecha de Revisión:	February, 2025
		Paginas:	1 de 12

SECCTION I IDENTIFICATION OF THE HAZARDOUS CHEMICAL SUBSTANCE

1) CHEMICAL NAME	*2) OTHER MEANS OF IDENTIFICATION*	*3) RECOMMENDED USE OF THE SUBSTANCE*
Minium	Red Lead Oxide, Lead Tetraoxide, Lead Orthoplumbate	Analytical use

4) *SUPPLIER OR MANUFACTURER DATA*	5) *SETIQ EMERGENCY NUMBERS*
AZINSA OXIDOS, S.A. DE C.V. FERNANDO MONTES DE OCA No. 21 EDIF. B P2, SAN NICOLÁS TLALNEPANTLA MÉXICO C.P. 54030.	55 59 15 88 (CDMX) 01 (800) 00 214 24 hours a day, 365 days a year. Provides technical and specific information by telephone to assist emergencies and incidents

SECCTION II HAZARD IDENTIFICATION

1) CLASSIFICATION OF HAZARDOUS CHEMICAL SUBSTANCE OR MIXTURE

Classification SGA

Secction	*Hazard Class*	*Class and category*	*Danger Indication*
4.1.C	*Dangerous for the environment aquatic – acute danger*	(Aquatic Acute 1)	*H400*
4.1.C	*Dangerous for the environment aquatic – chronic dange*	(Aquatic Chronic 1)	*H410*

2) *ELEMENTS OF SIGNAGE, INCLUDING PRECAUTIONARY STATEMENTS AND CAUTION PICTOGRAMS*

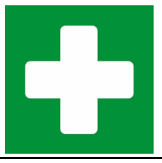
Identification: Zinc Powder
Signal word: Attention
Hazard statements: H400 + H410.- Very toxic to aquatic organisms, with long-lasting harmful effects.
Precautionary advice:
P273.- Avoid dispersion into the environment P391.- collect spills

3) *HAZARDS WHICH DO NOT CONTRIBUTE TO THE CLASSIFICATION*

There is no additional information

SECCTION III COMPOSITION / INFORMATION ON COMPONENTS				
IDENTIFICATION OF THE SUBSTANCE	CAS No.	%	IDLH/IPVS (ppm)	OSHA (PEL-TWA) mg/m^3
Minium	1314-41-6	100	0.15 mg/m^3	Not avaliable

SECCTION IV. FIRST AID



1) DESCRIPTION OF FIRST AID	
INHALATION	Remove the affected person to a cool and ventilated place, if not breathing, give artificial respiration, and if breathing is difficult, administer oxygen and provide medical attention.
INGESTION	If ingested and the person is conscious, immediately induce vomiting, never administer anything orally to an unconscious person, give medical attention.
SKIN	Inmediatamente lavar con abundante agua y jabón el área expuesta por 15 minutos o más, quitar y lavar la ropa y los zapatos contaminados antes de volver a utilizarlos, dar atención médica.
EYES	Wash with plenty of water for 15 minutes or more and occasionally open the eyelids during washing, give medical attention.
2) MOST IMPORTANT SYMPTOMS AND EFFECTS, ACUTE OR CHRONIC	
ACUTE	Ingestion can cause abdominal pain, spasms, nausea, headaches, dizziness and irritation, in the eyes it is local irritation or abrasion, in the skin if absorbed it causes poisoning, inhalation causes irritation in the bronchi and lungs.
CHRONICLE	None identified

3) INDICATION OF THE NEED TO RECEIVE IMMEDIATE MEDICAL ATTENTION AND, IF APPROPRIATE, SPECIAL TREATMENT

Notes to physician Treat symptomatically. Contact a poison treatment specialist immediately if a large amount has been swallowed or inhaled. In case of inhalation of decomposition products in a fire, symptoms may appear later. The exposed person may need to be under medical surveillance for a period of 48 hours

Specific treatment: There is no specific treatment
Personnel protection: No action should be taken that poses a personal risk or without adequate training. It can be dangerous for the person providing help by giving mouth-to-mouth resuscitation. Wash contaminated clothing with water before removing it or use gloves.

SECCTION V. FIRE FIGHTING MEASURES

1) SUITABLE EXTINGUISHING MEDIA

Suitable extinguishing media: water fog, foam, CO2 and dry chemical.
Use an extinguishing agent suitable for the surrounding fire. Spray the area with water from a distance and cool until long after the fire has been extinguished / Immediately ventilate the area and avoid breathing gases.

Unsuitable extinguishing media: Avoid using plenty of water as this may cause contamination.

2) SPECIFIC HAZARDS OF THE HAZARDOUS CHEMICAL SUBSTANCE OR MIXTURE

It is a stable substance.
Conditions to Avoid: Heating in the presence of other metals may react with oxidizing materials.
Avoid contact with strong oxidizing agents, combustible materials, chemically active metals, aluminum, metallic sodium
Decomposition of Hazardous Components. Toxic Lead Fumes or Vapors

3) SPECIAL MEASURES TO BE FOLLOWED BY FIRE FIGHTING GROUPS

In case of fire, wear full protective clothing and breathing apparatus with air supplies. Use any of the extinguishing media in spray form to attack the fire.

SECCTION VI. MEASURES TO BE TAKEN IN THE EVENT OF AN ACCIDENTAL SPILL OR LEAK

1) PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURE

Ventilate area of leak or spill. Use personal protective equipment, in case of spill: sweep up and place in a container for later disposal. It can be collected by vacuum cleaner or wet sweeping to avoid its dispersion. It is required to report spills or discharges to soil, water and air to the authorities to report the excess quantity.

2) PRECAUTIONS RELATING TO THE ENVIRONMENT

Para plomo y compuestos inorgánicos de plomo: cuando son desechados en el suelo con certeza, estos materiales pueden ser filtrados a través del suelo hasta los mantos acuíferos subterráneos. Este material puede bioacumularse a cierta distancia.

3) METHODS AND MATERIALS FOR CONTAINING AND CLEANING UP SPILLS OR LEAKS

For lead and inorganic lead compounds: When safely disposed of in the ground, these materials can leach through the soil into underground aquifers. This material can bioaccumulate over some distance.

SECCTION VII. HANDLING AND STORAGE

1) PRECAUTIONS TO BE TAKEN TO ENSURE SAFE HANDLING

- • Store in an airtight container while not in use.
- • Store in a cool, dry and ventilated place.
- • Protect the container against physical damage.
- • Isolate from incompatible substances.
- • Areas in which exposure to metallic lead or lead compounds can be identified by appropriate signs or routes, and access can be limited to authorized personnel only.
- • The containers where this material is stored can be dangerous when they are unoccupied and have residual material (dust, solid) left, due to the toxic nature and risks of this type of materials.

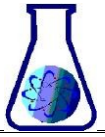
2) CONDITIONS OF SECURE STORAGE, INCLUDING ANY INCOMPATIBILITY
Eating, smoking or drinking is not permitted in areas where solid or liquid materials containing lead compounds are processed, stored or handled.

SECCTION VIII. PERSONAL EXPOSURE CONTROLS/PERSONAL PROTECTION	
1) CONTROL PARAMETERS (NOM-010-STPS-2014)	
(Like zinc oxide)) PPT: 2 mg/m^3	***(Like zinc oxide) CT o P:*** 10 mg/m^3
2) CONTROL PARAMETERS (NOM-010-STPS-2014)	
If this product contains limited exposure ingredients, use process enclosures, local ventilation, or other engineering controls to keep worker exposure below all recommended limits.	
3) INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT, PPE	
VENTILATION	Local or general extraction system that keeps the work area below the limits Permissible.
RESPIRATORY	When exposure limits are exceeded, use respirators with high-efficiency fog/dust filters. This respirator must withstand more than 10 exposure times, if the concentration exceeds the capacity of the respirator, then it is recommended to use a device with an air (oxygen) reservoir. Caution, purified air respirators do not protect workers in hazardous atmospheres. oxygen deficient.
EYE PROTECTION	Use safety glasses or a full face mask to protect yourself from dust or possible splashes of solutions. Keep an eyewash fountain and purgative accessible in the work area.
PROTECTIVE GLOVES	Use safety clothing, gloves, boots, gown or apron to avoid contact with skin. Use safety clothing, gloves, boots, gown or apron to avoid contact with skin.
OTHERS	Total cleanliness after having been in contact with this type of material. Avoid breathing dust, avoid contact with skin, eyes and mouth.

SECTION IX PHYSICAL AND CHEMICAL PROPERTIES

1) APPEARANCE (PHYSICAL STATE AND COLOR Red powder	***2) SMELL;*** Odorless	***3) ODOR THRESHOLD;*** Not available	***4) PH;*** *N/A*
5) MELTING POINT/FREEZING POINT; Melting: 888 °C Freezing: Not available	***6) INITIAL POINT AND BOILING INTERVAL*** 1470 °C	***7) FLASHPOINT;*** Not aplicable	***8) EVAPORATION RATE;*** Not aplicable
9) FLAMMABILITY (SOLID OR GAS); Flammable Stabilized	***10) UPPER/LOWER LIMITS OF FLAMMABILITY OR EXPLOSIVITY;*** LIE; NOT AVAILABLE LSE; NOT AVAILABLE	***11) VAPOR PRESSURE;*** 10 atm a 1069 °C	***12) VAPOR DENSITY;*** Not aplicable
13) APPARENT RELATIVE DENSITY; 8.9	***14) SOLUBILITY(IES);*** 0.05	***15) 15) PARTITION COEFFICIENT: N-OCTANOL/WATER;*** Not available	***16) SPONTANEOUS IGNITION TEMPERATURE;*** Not available
17) DECOMPOSITION TEMPERATURE; Not aplicable	***18) VISCOSITY;*** Not relevant (solid matter)	***19) MOLECULAR WEIGHT*** 685.63 g/mol	***20) OTHER RELEVANT DATA*** It is not classified as explosive or oxidizing

SECCTION X. STABILITY AND REACTIVITY



1) REACTIVITY	May react with oxidizing materials.
2) HAZARDOUS CHEMICAL STABILITY	It is a stable substance.
3) POSSIBILITY OF HAZARDOUS REACTIONS	Strong reactions with: Risk of fire or explosion.
4) CONDITIONS TO BE AVOID	Heating in the presence of other metals.
5) INCOMPATIBLE MATERIALS	Avoid contact with strong oxidizing agents, combustible materials, metals chemically active, aluminum, metallic sodium.
6) HAZARDOUS DECOMPOSITION PRODUCTS	Toxic Lead Fumes or Vapors.

SECCTION XI. TOXICOLOGICAL INFORMATION

1) PRIMARY ENTRY ROUTE: Inhalation	***ORGANS ATTACKED:*** Respiratory system

2) SYMPTOMS RELATED TO PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

- In case of ingestion; abdominal pain, spasms, headache, dizziness, gastrointestinal irritation and nausea.
- In case of contact with eyes; local irritation or abrasion.
- In case of inhalation; local irritation of bronchi and lungs.
- In case of contact with the skin; Symptoms of lead poisoning may occur

3) IMMEDIATE AND DELAYED EFFECTS, AS WELL AS CHRONIC EFFECTS PRODUCED BY SHORT- AND LONG-TERM EXPOSURE

Based on studies carried out in animals, lead and some compounds are considered possible carcinogens, mutagens and teratogenic, but there is still not enough evidence.

4) NUMERICAL MEASURES OF TOXICITY (SUCH AS ACUTE TOXICITY ESTIMATES)

Will not be classified as acute toxicity

SECCTION XII. ECOTOXICOLOGICAL INFORMATION

1) TOXICITY

Result	Species	Exposition	Reference
Acute EC50 >1000 mg/l fresh water	Fish – Daphnia magna	48 h	Environmental Fate and Effects, US, EPA.
Acute CL50 1,1 mg/l fresh water	Fish – Oncorhynchu	96 h	Environmental Fate and Effects, US, EPA.
Acute CL50 >320 mg/l fresh water	Fish – Lepomis macrochirus	96 h	Environmental Fate and Effects, US, EPA.
Acute NOEC 0,026-0,075 mg/l fresh water	Fish – Jordanella floridae	720	Iucluid
Acute CL50 0,136 mg/l fresh water	Aquatic plants	72 h	

2) PERSISTENCE AND BIODEGRADABILITY

Methods to determine disintegration cannot be applied to inorganic materials.

3) BIOACCUMULATIVE POTENTIAL

Substance name	No. Cas	FBC	Log KOW
Zinc Powder (stabilized)	7440-66-6	69,48	
Zinc Oxide	1314-13-2	250	<4

4) GROUND MOBILITY

When disposed of in the ground, these materials can certainly leach through the soil into the aquifers. underground, this material can bioaccumulate at some distance.

5) OTHER ADVERSE EFFECTS

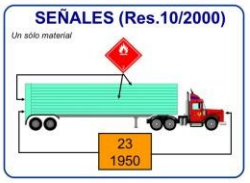
Ozone depletion;	*Not avaliable*
Photochemical ozone creation;	*Not avaliable*
Endocrine disruptor,	*Not avaliable*
Global warming.	*Not avaliable*

SECCTION XIII. INFORMATION REGARDING THE DISPOSAL OF PRODUCTS

1) DISPOSAL METHODS

- Waste treatment methods: Dispose of the product and its container as hazardous waste,
- Dispose of the contents in accordance with local, regional or national regulations.
- Do not throw waste down the drain, avoid its release into the environment
- It is a dangerous waste, only containers that have been approved can be used.

SECCTION XIV. RELATING TO TRANSPORTATION



No. ONU	***3077***
Official shipping designation	Substancia peligrosa para el medio ambiente - ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUIS N.O.S. (Óxido de zinc)
Class(es) relating to transport (IMO)	
Packing group/packaging, if applicable	*III (matter that presents a lower degree of danger)*
Environmental risks	*hazardous to the aquatic environment (zinc powder (stabilized)*
Special precautions for user	*Environmental risk*
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	*In progress*

SECCTION XV. REGULATORY INFORMATION

Specific safety, health and environmental provisions for substances hazardous chemicals or mixtures involved	*Regulation 649/2012/EU on the export and import of hazardous chemicals (PIC): Not included in the list.* *Regulation 1001/2009/EC on substances that deplete the ozone layer (ODS): Not included in the list.* *Regulation 850/2004/EC on persistent organic pollutants (POP): Not included in the list.* • *Restrictions according to REACH, Annex XVII: Not included in the list.*

SECCTION XVI. OTHER INFORMATION INCLUDING THOSE REGARDING THE PREPARATION AND UPDATING OF SAFETY DATA SHEETS

The preparation date	*In progress*
Description of abbreviations and acronyms used in the safety data sheet.	

ABREVIATURAS	
• *CAS*	*Chemical Abstracts Service (unique identifying number without chemical meaning)*
• *Aquatic Acute*	*Dangerous to the aquatic environment - acute danger*
• *Aquatic Chronic*	*Hazardous to the aquatic environment - chronic hazard*
• *FBC*	*bioconcentration factor*
• *INSHT*	*Occupational Exposure Limits for Chemical Agents, INSHT*
• *log KOW*	*n-octanol/water*
• *MARPOL*	*the international convention to prevent pollution by ships*
• *mPmB*	*very persistent and very bioaccumulative*
• *SGA*	*"Globally Harmonized System of Classification and Labeling of chemical substances" prepared by the United Nations*
• *VLA*	*environmental limit value*
• *VLA-EC*	*environmental limit value-short-term exposure*

References to the basic documents and data sources used to prepare the safety data sheet, these may be included in this section, if necessary, considers necessary.	*In progress*

Disclaimer Clause

The information in this safety data sheet is to the best of our knowledge at the time of printing. The information must be supporting points for the safe handling of products mentioned in this safety sheet for storage, processing, transportation and disposal. The instructions cannot be transferred to other products. As long as the product is mixed or manufactured with other materials, the indications of this safety sheet cannot be transferred to the new agent.

REVISO:	*APROBÓ:*
Laboratory Coordinator	Quality manager