

Safety Data Sheet

PROMET ZN (1 L BOTTLE)



Safety Data Sheet dated 8/2/2023, version 7

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: PROMET ZN (1 L BOTTLE)

Trade code: 151019

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use:

Professional use.

Fertilizer for agricultural use

Uses advised against:

The pertinent uses are listed above, other uses are not recommended

1.3. Details of the supplier of the safety data sheet

Company:

ALBA MILAGRO International spa

Via F. Corridoni 19 20015 Parabiago (MI) Italy

Ph. +39 0331495211

Competent person responsible for the safety data sheet:

reach@albamilagro.com

1.4. Emergency telephone number

Emergency telephone number of the company and/or of an authorised advisory centre (Monday to Friday from 8.30-12.30 and 13.30 to 17.30):

Ph. +39 0331495211

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

⚠ Danger, Skin Corr. 1B, Causes severe skin burns and eye damage.

⚠ Danger, Eye Dam. 1, Causes serious eye damage.

⚠ Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor.
 P391 Collect spillage.

Special Provisions:

None

Contains

zinc chloride

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
$\geq 15\%$ - $< 20\%$	zinc chloride	Index number: CAS: EC: REACH No.: 030-003-00-2 7646-85-7 231-592-0 01-2119472431-44	⚠ 3.1/4/Oral Acute Tox. 4 H302 ⚠ 3.2/1B Skin Corr. 1B H314 ⚠ 3.8/3 STOT SE 3 H335 ⚠ 4.1/C1 Aquatic Chronic 1 H410

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

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In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

- 5.1. Extinguishing media
 - Suitable extinguishing media:
 - Water.
 - Carbon dioxide (CO₂).
 - Extinguishing media which must not be used for safety reasons:
 - None in particular.
- 5.2. Special hazards arising from the substance or mixture
 - Do not inhale explosion and combustion gases.
 - Burning produces heavy smoke.
- 5.3. Advice for firefighters
 - Use suitable breathing apparatus .
 - Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
 - Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
 - Wear personal protection equipment.
 - Remove persons to safety.
 - See protective measures under point 7 and 8.
- 6.2. Environmental precautions
 - Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
 - Retain contaminated washing water and dispose it.
 - In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
 - Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up
 - Wash with plenty of water.
- 6.4. Reference to other sections
 - See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
 - Avoid contact with skin and eyes, inhalation of vapours and mists.
 - Don't use empty container before they have been cleaned.
 - Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
 - See also section 8 for recommended protective equipment.
 - Advice on general occupational hygiene:
 - Contaminated clothing should be changed before entering eating areas.
 - Do not eat or drink while working.
- 7.2. Conditions for safe storage, including any incompatibilities
 - Keep away from food, drink and feed.
 - Incompatible materials:
 - None in particular.
 - Instructions as regards storage premises:
 - Adequately ventilated premises.
- 7.3. Specific end use(s)

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None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

zinc chloride - CAS: 7646-85-7

ACGIH - TWA(8h): 1 mg/m³ - STEL: 2 mg/m³ - Notes: LRT and URT irr

DNEL Exposure Limit Values

zinc chloride - CAS: 7646-85-7

Worker Industry: 1 mg/m³ - Consumer: 1.3 mg/m³ - Exposure: Human Inhalation -
Frequency: Long Term, systemic effects

Worker Industry: 8.3 mg/kg - Consumer: 8.3 mg/kg - Exposure: Human Dermal - Frequency:
Long Term, systemic effects

Consumer: 0.83 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

zinc chloride - CAS: 7646-85-7

Target: STP - Value: 100 µg/L - Notes: (AF=1)

Target: Fresh Water - Value: 20.6 µg/L - Notes: (AF=1)

Target: Marine water - Value: 6.1 µg/L - Notes: (AF=1)

Target: Freshwater sediments - Value: 117.8 mg/kg - Notes: (AF=1)

Target: Marine water sediments - Value: 56.5 mg/kg - Notes: (AF=1)

Target: Soil (agricultural) - Value: 35.6 mg/kg dw - Notes: (AF=1)

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	Liquid	--	--
Colour:	N.A.	--	--
Odour:	Typical	--	--
Odour threshold:	Not Relevant	--	--
Melting point/freezing point:	n.d.	--	--

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Boiling point or initial boiling point and boiling range:	n.d.	--	--
Flammability:	N.A.	--	--
Lower and upper explosion limit:	n.d.	--	--
Flash point:	n.d. ° C	--	--
Auto-ignition temperature:	n.d.	--	--
Decomposition temperature:	n.d.	--	--
pH:		--	--
Kinematic viscosity:	N.A.	--	--
Solubility in water:	Completely miscible	--	--
Solubility in oil:	n.d.	--	--
Partition coefficient n-octanol/water (log value):	n.d.	--	--
Vapour pressure:	n.d.	--	--
Density and/or relative density:	1250 +/- 10 g/l	--	--
Relative vapour density:	n.d.	--	--
Particle characteristics:			
Particle size:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes
Explosive properties:	n.d.	--	--
Evaporation rate:	n.d.	--	--
Miscibility:	n.d.	--	--
Conductivity:	n.d.	--	--
Viscosity:	n.d.	--	--
Oxidizing properties:	n.d.	--	--

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Fat Solubility:	n.d.	--	--
Substance Groups relevant properties	n.d.	--	--

SECTION 10: Stability and reactivity

- 10.1. Reactivity
Stable under normal conditions
- 10.2. Chemical stability
Stable under normal conditions
- 10.3. Possibility of hazardous reactions
None
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
None in particular.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the product:

zinc chloride - CAS: 7646-85-7

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat = 2000 mg/m³

Test: LD50 - Route: Oral - Species: Mouse = 1260 mg/kg

Test: LD50 - Route: Oral - Species: Rat = 1100 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg

Test: Respiratory Tract Irritant Positive

b) skin corrosion/irritation:

Test: Skin Corrosive Positive

c) serious eye damage/irritation:

Test: Eye Corrosive Positive

d) respiratory or skin sensitisation:

Test: Skin Sensitization Negative

Test: Respiratory Sensitization Negative

e) germ cell mutagenicity:

Test: Mutagenesis Negative - Source: Ames Test

If not differently specified, the information required in Regulation (EU)2020/878 listed below must be considered as N.A.:

a) acute toxicity;

b) skin corrosion/irritation;

c) serious eye damage/irritation;

d) respiratory or skin sensitisation;

e) germ cell mutagenicity;

f) carcinogenicity;

g) reproductive toxicity;

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- h) STOT-single exposure;
 - i) STOT-repeated exposure;
 - j) aspiration hazard.
- 11.2. Information on other hazards
- Endocrine disrupting properties:
No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

- 12.1. Toxicity
- Adopt good working practices, so that the product is not released into the environment.
zinc chloride - CAS: 7646-85-7
- a) Aquatic acute toxicity:
- Endpoint: EC50 - Species: Daphnia = 670 $\mu\text{g/L}$ - Duration h: 48 - Notes: Ceriodaphnia dubia
 - Endpoint: EC50 - Species: Daphnia = 800 $\mu\text{g/L}$ - Duration h: 48 - Notes: Daphnia magna
 - Endpoint: LC50 - Species: Fish = 0.169 mg/L - Duration h: 96 - Notes: Oncorhynchus mykiss
 - Endpoint: LC50 - Species: Fish = 0.78 mg/L - Duration h: 96 - Notes: Pimephales promelas
 - Endpoint: IC50 - Species: Algae = 0.136 mg/L - Duration h: 72 - Notes: Selenastrum capricornutum
 - Endpoint: EC50 - Species: Daphnia = 0.1447-0.413 mg/L - Duration h: 48 - Notes: Ceriodaphnia dubia
- b) Aquatic chronic toxicity:
- Endpoint: NOEC - Species: Fish = 440 $\mu\text{g/L}$ - Notes: 72 days - Oncorhynchus mykiss
- c) Bacteria toxicity:
- Endpoint: NOEC - Species: Bacteria = 58 $\mu\text{g/L}$ - Duration h: 72 - Notes: Pseudokirchneriella subcapitata
- 12.2. Persistence and degradability
- None
N.A.
- 12.3. Bioaccumulative potential
- N.A.
- 12.4. Mobility in soil
- N.A.
- 12.5. Results of PBT and vPvB assessment
- vPvB Substances: None - PBT Substances: None
- 12.6. Endocrine disrupting properties
- No endocrine disruptor substances present in concentration $\geq 0.1\%$
- 12.7. Other adverse effects
- None

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
- Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

- 14.1. UN number or ID number
- | | |
|-----------------|------|
| ADR-UN number: | 3265 |
| IATA-Un number: | 3265 |
| IMDG-Un number: | 3265 |
- 14.2. UN proper shipping name
- | | |
|---------------------|--|
| ADR-Shipping Name: | Corrosive liquid organic, acidic, N.O.S. (Zinc chloride) |
| IATA-Shipping Name: | Corrosive liquid organic, acidic, N.O.S. (Zinc chloride) |

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IMDG-Shipping Name:	Corrosive liquid organic, acidic, N.O.S. (Zinc chloride)
14.3. Transport hazard class(es)	
ADR-Class:	8
ADR-Label:	8
IATA-Class:	8
IATA-Label:	8
IMDG-Class:	8
14.4. Packing group	
ADR-Packing Group:	III
IATA-Packing group:	III
IMDG-Packing group:	III
14.5. Environmental hazards	
Marine pollutant:	Marine pollutant
IMDG-EMS:	F-A, S-B
14.6. Special precautions for user	
ADR-Transport category (Tunnel restriction code):	3(E)
Rail (RID):	8
IMDG-Shipping Name:	Corrosive liquid organic, acidic, N.O.S. (Zinc chloride)
14.7. Maritime transport in bulk according to IMO instruments	
N.A.	

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
- Dir. 98/24/EC (Risks related to chemical agents at work)
 - Dir. 2000/39/EC (Occupational exposure limit values)
 - Regulation (EC) n. 1907/2006 (REACH)
 - Regulation (EC) n. 1272/2008 (CLP)
 - Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
 - Regulation (EU) n. 2020/878
 - Regulation (EU) n. 286/2011 (ATP 2 CLP)
 - Regulation (EU) n. 618/2012 (ATP 3 CLP)
 - Regulation (EU) n. 487/2013 (ATP 4 CLP)
 - Regulation (EU) n. 944/2013 (ATP 5 CLP)
 - Regulation (EU) n. 605/2014 (ATP 6 CLP)
 - Regulation (EU) n. 2015/1221 (ATP 7 CLP)
 - Regulation (EU) n. 2016/918 (ATP 8 CLP)
 - Regulation (EU) n. 2016/1179 (ATP 9 CLP)
 - Regulation (EU) n. 2017/776 (ATP 10 CLP)
 - Regulation (EU) n. 2018/669 (ATP 11 CLP)
 - Regulation (EU) n. 2018/1480 (ATP 13 CLP)
 - Regulation (EU) n. 2019/521 (ATP 12 CLP)
 - Regulation (EU) n. 2020/217 (ATP 14 CLP)
 - Regulation (EU) n. 2020/1182 (ATP 15 CLP)
 - Regulation (EU) n. 2021/643 (ATP 16 CLP)
 - Regulation (EU) n. 2021/849 (ATP 17 CLP)
 - Regulation (EU) n. 2022/692 (ATP 18 CLP)
- Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:
- None
- Where applicable, refer to the following regulatory provisions :
- Directive 2012/18/EU (Seveso III)
 - Regulation (EC) nr 648/2004 (detergents).

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Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: E2

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H410 Very toxic to aquatic life with long lasting effects.

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

This safety data sheet has been completely updated in compliance to Regulation 2020/878. Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Corr. 1B, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Aquatic Chronic 2, H411	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

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The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.