

SAFETY DATA SHEET

Zinc pyrithione 99+% extra pure

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name: Product no.: Other means of identification: Zinc pyrithione 99+% extra pure 32049329

Index No.: 613-333-00-7 EC No.: 236-671-3 CAS No.: 13463-41-7

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

Relevant identified uses of the substance or mixture:Industrial purposes, Laboratory useUses advised against :None known.

1.0

1.3. Details of the supplier of the safety data sheet

Company and address:

Laboratoriumdiscounter Zandvoortstraat 75 1976BN Ijmuiden Netherlands Tel: +31 255 700 210 www.laboratoriumdiscounter.nl/en/ info@laboratoriumdiscounter.nl 24/02/2023

Revision:

E-mail:

SDS Version:

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Acute Tox. 3; H301, Toxic if swallowed. Eye Dam. 1; H318, Causes serious eye damage. Acute Tox. 2; H330, Fatal if inhaled. Repr. 1B; H360D, May damage the unborn child. STOT RE 1; H372, Causes damage to organs through prolonged or repeated exposure. Aquatic Acute 1; H400, Very toxic to aquatic life. Aquatic Chronic 1; H410, Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s):





	Signal word:	Danger
	Hazard statement(s):	Toxic if swallowed. (H301) Causes serious eye damage. (H318) Fatal if inhaled. (H330) May damage the unborn child. (H360D) Causes damage to organs through prolonged or repeated exposure. (H372) Very toxic to aquatic life with long lasting effects. (H410)
	Safety statement(s):	
	General:	If medical advice is needed, have product container or label at hand. (P101) Keep out of reach of children. (P102)
	Prevention:	Use only outdoors or in a well-ventilated area. (P271) [In case of inadequate ventilation] wear respiratory protection. (P284)
	Response:	IF INHALED: Remove person to fresh air and keep comfortable for breathing. (P304+P340) Immediately call a POISON CENTER/doctor. (P310)
	Storage:	Store locked up. (P405)
	Disposal:	Dispose of contents/container in accordance with local regulation. (P501)
	Hazardous substances:	pyrithione zinc; (T-4)- bis[1-(hydroxy- .kappa.O)pyridine-2(1H)- thionato- .kappa.S]zinc
	Additional labelling:	Restricted to professional users.
2.3.	Other hazards	
	Additional warnings:	This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Product/substance	Identifiers	% w/w	Classification	Note
bis[1-(hydroxy- .kappa.O)pyridine-2(1H)-	CAS No.: 13463-41-7 EC No.: 236-671-3 UK-REACH: Index No.: 613-333-00-7		Acute Tox. 3, H301 (ATE: 221.00 mg/kg) Eye Dam. 1, H318 Acute Tox. 2, H330 Repr. 1B, H360D	



	STOT RE 1, H372	
	Aquatic Acute 1, H400 (M=100))
	Aquatic Chronic 1, H410 (M=10)

3.2. Mixtures

Not applicable. This product is a substance.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

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SECTION 4: FIRST AID MEASURES

4.1.	Description of first aid measures	
	General information:	In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.
	Inhalation:	Upon breathing difficulties or irritation of the respiratory tract: Bring the injured person into fresh air. Make sure the injured person is continuously monitored. Prevent shock by keeping the injured person warm and calm. If breathing ceases, give mouth-to-mouth resuscitation. If unconscious, roll the injured person into recovery position. Call an ambulance.
	Skin contact:	Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners. If skin irritation occurs: Get medical advice/attention.
	Eye contact:	Upon irritation of the eye: Remove contact lenses. Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.
	Ingestion:	In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit returning



mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns:

Not applicable.

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

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

4.3. Indication of any immediate medical attention and special treatment needed IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics:

Bring this safety data sheet or the label from this product.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist. Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters. If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are: Sulphur oxides Nitrogen oxides (NO_x) Carbon oxides (CO / CO2)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice. Hazchem Code: 2X

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures Avoid direct contact with spilled substances.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

Minor spills are collected with a cloth. Collection and disposal of the material shall be done with minimum creation of dust. Sweep and collect. Shall be contained in suitable and tightly closed disposal containers.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of



solvents.

6.4. **Reference to other sections**

See section 13 "Disposal considerations" on handling of waste. See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid direct contact with the product. Smoking, drinking and consumption of food is not allowed in the work area. See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Recommended storage material: Storage temperature: Incompatible materials:

Keep only in original packaging.

Room temperature 15 to 25°C

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications guoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. **Control parameters**

No substances are listed in the national list of substances with an occupational exposure limit.

DNEL

pyrithione zinc; (T-4)- bis[1-(hydroxy-.kappa.O)pyridine-2(1H)- thionato-.kappa.S]zinc

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	10 µg/kgbw/day

PNEC

pyrithione zinc; (T-4)- bis[1-(hydroxy-.kappa.O)pyridine-2(1H)- thionato-.kappa.S]zinc

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		90 ng/L
Freshwater sediment		9.5 µg/kg
Marine water		90 ng/L
Marine water sediment		9.5 µg/kg
Sewage treatment plant		10 µg/L
Soil		1.02 mg/kg

8.2. **Exposure controls**

Control is unnecessary if the product is used as intended.

General recommendations:

Smoking, drinking and consumption of food is not allowed in the work area. **Exposure scenarios:** There are no exposure scenarios implemented for this product. **Exposure limits:** Occupational exposure limits have not been defined for the substances in this product.



Appropriate technical measures:	Do not recirculate outlet air that contain the substances.
Hygiene measures:	In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.
Measures to avoid environmental exposure:	Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally	••
UCHEI UIIV	

Use only UKCA marked protective equipment.

Respiratory E	Respiratory Equipment:				
Туре	Class	Colour	Standards		
SL	P3	White	EN149		

Skin protection:

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn.	-	-	R

Hand protection:

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0,2	> 480	EN374-2, EN374-3, EN388	

Eye protection:

Туре	Standards	
Safety glasses with side shields.	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:	Solid
Colour:	Beige, sand
Odour / Odour threshold:	None
pH:	Testing not relevant or not possible due to the nature of the product.
Density (g/cm³):	1.76 (20.1 °C)
Kinematic viscosity:	Does not apply to solids.
Particle characteristics:	Testing not relevant or not possible due to the nature of the product.



Phase changes

Melting point/Freezing point (°C): Softening point/range (waxes and pastes) (°C): Boiling point (°C): Vapour pressure:

Relative vapour density: Decomposition temperature (°C):

Data on fire and explosion hazards

Flash point (°C): Flammability (°C):

Auto-ignition temperature (°C):

Lower and upper explosion limit (% v/v):

Solubility

Solubility in water: n-octanol/water coefficient:

Solubility in fat (g/L):

9.2. Other information

Other physical and chemical parameters:

SECTION 10: STABILITY AND REACTIVITY

- **10.1. Reactivity** No data available.
- **10.2.** Chemical stability The product is stable under the conditions, noted in section 7 "Handling and storage".
- **10.3.** Possibility of hazardous reactions None known.
- **10.4.** Conditions to avoid None known.
- **10.5. Incompatible materials** Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.
- **10.6.** Hazardous decomposition products The product is not degraded when used as specified in section 1.

SECTION 11: TOXICOLOGICAL INFORMATION

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

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Does not apply to solids.

Does not apply to solids.

Testing not relevant or not possible due to the nature of the product.

Does not apply to solids.

Testing not relevant or not possible due to the nature of the product.

Does not apply to solids.

Testing not relevant or not possible due to the nature of the product.

Testing not relevant or not possible due to the nature of the product.

Does not apply to solids.

0,00493 g/l

Testing not relevant or not possible due to the nature of the product.

Testing not relevant or not possible due to the nature of the product.

No data available.



retained and amended in UK law

Acute toxicity

Toxic if swallowed. Fatal if inhaled.

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

May damage the unborn child.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Long term effects

Reproductive toxicity: This product contains teratogenic substances, which may produce anomalies and/or developmental defects to the human offspring. Adverse effects include: death, growth retardation, congenital disorders, delayed mental development, and functional disorders.

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

Endocrine disrupting properties

Not applicable.

Other information

None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

No data available.

- **12.2.** Persistence and degradability No data available.
- **12.3. Bioaccumulative potential** No data available.



12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Endocrine disrupting properties Not applicable.

12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 4 - Irritant (skin irritation and eye damage)

HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

HP 6 - Acute toxicity

HP 10 – Toxic for reproduction

HP 14 – Ecotoxic

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

Not applicable.

Specific labelling

Not applicable.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: TRANSPORT INFORMATION

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	UN2811	TOXIC SOLID, ORGANIC, N.O.S.	Class: 6.1 Labels: 6.1 Classification code: T2	Π	Yes	Limited quantities: 500 g Tunnel restriction code: (D/E) See below for additional information.
IMDG	UN2811	TOXIC SOLID,	Class: 6.1	II	Yes	Limited



	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
		ORGANIC, N.O.S.	Labels: 6.1 Classification code: T2			quantities: 500 g EmS: F-A S-A See below for additional information.
ΙΑΤΑ	UN2811	TOXIC SOLID, ORGANIC, N.O.S.	Class: 6.1 Labels: 6.1 Classification code: T2	Π	Yes	See below for additional information.

* Packing group

** Environmental hazards

Additional information

ADR / See Table A, Section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods. Hazchem Code: 2X

- **14.6.** Special precautions for user Not applicable.
- **14.7.** Maritime transport in bulk according to IMO instruments No data available.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Restrictions for application:

Restricted to professional users. People under the age of 18 shall not be exposed to this product. Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or



		design of the workplace needed to eliminate exposure, must be considered.
	Demands for specific education:	No specific requirements.
	SEVESO - Categories / dangerous substances:	H2 - ACUTE TOXIC, Qualifying quantity (lower- tier): 50 tonnes / (upper-tier): 200 tonnes E1 - ENVIRONMENTAL HAZARDS, Qualifying quantity (lower-tier): 100 tonnes / (upper- tier): 200 tonnes
	Additional information:	Tactile warning. If this product is sold in retail, it must be delivered with child-resistant fastening.
	Sources:	The Management of Health and Safety at Work Regulations 1999. The Health and Safety at Work etc. Act 1974 Regulations 2013. Control of Major Accident Hazards (COMAH) Regulations 2015. Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law. Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.
15.2.	Chemical safety assessment	

No

SECTION 16: OTHER INFORMATION

Full text of H-phrases as mentioned in section 3

H301, Toxic if swallowed. H318, Causes serious eye damage. H330, Fatal if inhaled. H360D, May damage the unborn child. H372, Causes damage to organs through prolonged or repeated exposure. H400, Very toxic to aquatic life. H410, Very toxic to aquatic life with long lasting effects. Abbreviations and acronyms ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate **BCF** = Bioconcentration Factor CAS = Chemical Abstracts Service CE = Conformité Européenne

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]



CSA = Chemical Safety Assessment CSR = Chemical Safety Report DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EINECS = European Inventory of Existing Commercial chemical Substances ES = Exposure Scenario EUH statement = CLP-specific Hazard statement EWC = European Waste Catalogue GHS = Globally Harmonized System of Classification and Labelling of Chemicals IARC = International Agency for Research on Cancer (IARC) IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) OECD = Organisation for Economic Co-operation and Development PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail RRN = REACH Registration Number SCL = A specific concentration limit SVHC = Substances of Very High Concern STOT-RE = Specific Target Organ Toxicity - Repeated Exposure STOT-SE = Specific Target Organ Toxicity - Single Exposure TWA = Time weighted average UN = United Nations UVBC = Unknown or variable composition, complex reaction products or of biological materials VOC = Volatile Organic Compound vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The safety data sheet is validated by

Laboratoriumdiscounter

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products. It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en