SAFETY DATA SHEET

Zinc Acetate, Anhydrous

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

1.1. Product identifier

Trade name

Zinc Acetate, Anhydrous

Other names / Synonyms

Zinc Acetate, Zinc Acetate Powder, Anhydrous

UK REACH registration number

01-4006579364-4-0003

Other means of identification

EC No.: 209-170-2
CAS No.: 557-34-6

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

▼Relevant identified uses of the substance or mixture

Detergent. Dietary supplement (in high-purity forms)
Restricted to professional users.

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

▼Company and address

Industrial Chemicals Limited
Jupiter House,
Warley Hill Business Park,
The Drive,
Warley,
Brentwood,
Essex,
CM13 3BE
United Kingdom
+44 (0)1375 389000
+44 (0)1375 389110
www.icgl.co.uk

E-mail

sds@icgl.co.uk

Revision

11/04/2024

SDS Version

2.0

Date of previous version

22/02/2023 (1.0)

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

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.1. Classification of the substance or mixture

Acute Tox. 4; H302, Harmful if swallowed.
Eye Dam. 1; H318, Causes serious eye damage.
Aquatic Chronic 2; H411, Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s)

Signal word

Danger

Hazard statement(s)

Harmful if swallowed. (H302)
Causes serious eye damage. (H318)
Toxic to aquatic life with long lasting effects. (H411)

Precautionary statement(s)

General

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Prevention

Wash hands and exposed skin thoroughly after handling. (P264)
Avoid release to the environment. (P273)
Wear protective gloves/protective clothing/eye protection/face protection. (P280)

Response

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

Storage

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▼Disposal

Dispose of contents/container in accordance with local regulation (P501)

Hazardous substances

zinc di(acetate)

Additional labelling

Not applicable.

2.3. Other hazards

▼Additional warnings

May form combustible dust concentrations in air.
Take action to prevent static discharges.
This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.
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
zinc di(acetate)	CAS No.: 557-34-6 EC No.: 209-170-2 UK-REACH: 01-4006579364-4-0003 Index No.:	95-100%	Acute Tox. 4, H302 Eye Dam. 1, H318 Aquatic Chronic 2, H411	

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 person into fresh air and stay with him/her.

Skin contact
Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

▼Eye contact
If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

▼Ingestion
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
Rinse mouth.

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.
High amounts of dust can cause coughing and general irritation of the respiratory airways.

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
Explosion: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
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:
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: 2Z

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.
Avoid direct contact with spilled substances.
Contaminated areas may be slippery.

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
Collect spills carefully. Moist the material with water in order to prevent the formation and propagation of dust.
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

May form combustible dust concentrations in air.
Take action to prevent static discharges.
Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.
It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.
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

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Powder trickling out onto the floor or onto other containers must be prevented.
Avoid the suspension of dust in the air.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Use non-sparking tools.

Recommended storage material

Keep only in original packaging.

Storage temperature

Tightly closed. Dry
Keep away from food, drink and animal feeding stuffs
Dry, cool and well ventilated

Incompatible materials

Strong oxidizing agents
Peroxides

7.3. Specific end use(s)

This product should only be used for applications quoted 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

zinc di(acetate)

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	669 µg/kgbw/day
Long term – Systemic effects - Workers	Dermal	1.338 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	1.16 mg/m³
Long term – Systemic effects - Workers	Inhalation	4.71 mg/m³
Long term – Systemic effects - General population	Oral	669 µg/kgbw/day

PNEC

zinc di(acetate)

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		2.1 µg/L
Freshwater sediment		7.8 µg/kg
Intermittent release (freshwater)		21 µg/L
Marine water		210 ng/L
Marine water sediment		780 ng/kg
Sewage treatment plant		8.81 µg/L
Soil		440 ng/kg

8.2. ▼Exposure controls

Apply general control to prevent unnecessary exposure

General recommendations

When transferring the materials, dust clouds should be kept at an absolute minimum. Handling should be slow and deliberate. The materials should be transferred from one container to another using a non-sparking, conductive metal scoop.
When mixing the material with other dry ingredients, frictional heat should be avoided. The best type of mixer for a dry mixing operation is one that contains no moving parts, but rather affects a tumbling action, such as a conical blender. Introduction of an inert atmosphere in the blender is highly recommended since dust clouds are generated. All equipment must be well grounded.
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

Airborne gas and dust concentrations must be kept at a minimum. Provide efficient mechanical ventilation. If not possible use suitable respiratory equipment.
It is recommended that all dust control equipment such as local exhaust ventilation contain an explosion suppression system.
Ensure that eyewash stations and safety showers are located within easy reach.

▼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. Pay special attention to 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

Use only UKCA marked protective equipment.

Respiratory Equipment

No specific requirements

Skin protection

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

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Neoprene (Neoprene)	-	> 120	EN374-2, EN374-3, EN388, EN407, EN511	

Eye protection

Type	Standards
Chemical splash goggles	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

▼Physical state

Powder

Colour

White

Odour / Odour threshold

Odourless

pH

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

Density (g/cm^3)
Testing not relevant or not possible due to the nature of the product.
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)
Testing not relevant or not possible due to the nature of the product.
Softening point/range (waxes and pastes) (°C)
Does not apply to solids.
Boiling point (°C)
Does not apply to solids.
Vapour pressure
Testing not relevant or not possible due to the nature of the product.
Relative vapour density
Does not apply to solids.
Decomposition temperature (°C)
Testing not relevant or not possible due to the nature of the product.
Data on fire and explosion hazards
Flash point (°C)
Does not apply to solids.
Flammability (°C)
Dust is a weakly explodable powder
Auto-ignition temperature (°C)
Testing not relevant or not possible due to the nature of the product.
Lower and upper explosion limit (% v/v)
1 - 7.6
Solubility
Solubility in water
Testing not relevant or not possible due to the nature of the product.
n-octanol/water coefficient (LogKow)
Testing not relevant or not possible due to the nature of the product.
Solubility in fat (g/L)
Testing not relevant or not possible due to the nature of the product.
9.2. Other information
Sensitivity to shock
There are no known reactivity hazards associated with this product
Thermal stability
Stable at normal ambient temperatures and when used as recommended
Formation of explosible dust/air mixtures
Yes
Molecular Weight (g/mol)
183.5
▼Oxidizing properties
Testing not relevant or not possible due to the nature of the product.
Other physical and chemical parameters
Avoid heat. Avoid contact with the following materials: Strong oxidising agents. Loss of constitutional water on heating

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

Avoid the suspension of dust in the air.

10.5. Incompatible materials

Strong oxidizing agents
Peroxides

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 retained and amended in UK law

Acute toxicity

Harmful if swallowed.

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

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

Long term effects

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

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

None known.

SECTION 12: Ecological information

12.1. ▼Toxicity

Toxic to aquatic life with long lasting effects.

12.2. ▼Persistence and degradability

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

12.3. ▼Bioaccumulative potential

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

12.4. Mobility in soil

No data available.

12.5. ▼Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. ▼Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

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 6 - Acute toxicity
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

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	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	Transport hazard class: 9 Label: 9 Classification code: M7 	III	Yes	Limited quantities: 5 kg Tunnel restriction code: (-) See below for additional information.
IMDG	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	Transport hazard class: 9 Label: 9 Classification code: M7 	III	Yes	Limited quantities: 5 kg EmS: F-A S-F See below for additional information.
IATA	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	Transport hazard class: 9 Label: 9 Classification code: M7 	III	Yes	See below for additional information.

* Packing group

** Environmental hazards

Additional information

These substances when carried in single or combination packaging's containing a net quantity per single or inner

packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR/IMDG/IATA provided the packaging's meet the general provisions of 4.1.1.1, 4.1.1.2, 4.1.1.4 - 4.1.1.8 (ADR, IMDG) / 5.0.2.4.1, 5.0.2.6.1.1, 5.0.2.8 (IATA).
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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: 2Z

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.

Demands for specific education
No specific requirements.

SEVESO - Categories / dangerous substances
E2 - ENVIRONMENTAL HAZARDS, Qualifying quantity (lower-tier): 200 tonnes / (upper-tier): 500 tonnes

Additional information
Not applicable.

Sources
The Management of Health and Safety at Work Regulations 1999.
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
H302, Harmful if swallowed.
H318, Causes serious eye damage.
H411, 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 (European conformity)
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

EuPCS = European Product Categorisation System
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

M Bartlett

▼Other

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