

Safety Data Sheet

In accordance with REACH Regulation EC No.1907/2006

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

1.1. Product identifier

Product name: Zinc Oxide (Non Nano)
CAS number: 1314-13-2
EINECS number: 215-222-5
Synonyms: -
INCI name: Zinc Oxide

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

Use of substance/mixture: Industrial/Cosmetic use.
Uses advised against: At this moment we have not identified any uses advised against.

1.3. Details of the supplier of the safety data sheet

Company name: Bath and Body Base Ltd
2A Laurel Way
Bishop Auckland
Co. Durham
DL14 7NF
Tel: 07493 064263
Email: technical@bathandbodybase.com

1.4. Emergency telephone number

Emergency tel: 07493 064263

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008: Short-term (acute) aquatic hazard - Category 1; H400
Long-term (chronic) aquatic hazard - Category 1; H410
For the full text of the H-Statements mentioned in this Section, see Section 16.
Most important adverse effects: Human Health: See Section 11 for toxicological information.
Physical and chemical hazards: See Section 9/10 for physicochemical information.
Potential environmental effects: See Section 12 for environmental information.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:
Hazard statements: H410: Very toxic to aquatic life with long lasting effects.
Signal words: Warning

Hazard pictograms:

GHS09

Precautionary statements:

Prevention: P273 Avoid release to the environment.
Response: P391 Collect spillage.
Disposal: P501 Dispose of contents/container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

Zinc Oxide

2.3. Other hazards

Other hazards: For results of PBT and vPvB assessment see Section 12.5.

Section 3: Composition/information on ingredients**3.1. Substances****Chemical identity:****Zinc Oxide**

Index No.: 030-013-00-7

CAS No.: 1314-13-2

EC No.: 215-222-5

EU REACH Reg. No.: 01-2119463881-32-xxxx

Amount (%): ≤ 100

Hazard class/category: Aquatic Acute 1, Aquatic Chronic 1

Hazard statements: H400, H410

Section 4: First aid measures**4.1. Description of first aid measures**

General advice: No special precautions required.

Skin contact: Wash off with plenty of water. If skin irritation persists, call a physician.

Eye contact: If symptoms persist, call a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Ingestion: Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

Inhalation: Remove to fresh air. If symptoms call a physician.

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

Symptoms: See Section 11 for more detailed information on health effects and symptoms.

Effects: See Section 11 for more detailed information on health effects and symptoms.

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

Immediate/special treatment: Treat symptomatically.

Section 5: Fire-fighting measures**5.1. Extinguishing media**

Suitable extinguishing media: The product itself does not burn. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: High volume water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards during fire-fighting: Incomplete combustion may form toxic pyrolysis products.

5.3. Advice for fire-fighters

Special protective equipment for fire-fighters: Wear appropriate body protection (full protective suit). In the event of fire, wear self-contained breathing apparatus.

Further advice: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Section 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions: Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid contact with the skin and the eyes. Do not breathe dust.

6.2. Environmental precautions

Environmental precautions: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Use mechanical handling equipment. Keep in suitable, closed containers for disposal.

Further information: Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

Reference to other sections: See Section 1 for emergency contact information.
See Section 8 for information on personal protective equipment.
See Section 13 for waste treatment information.

Section 7: Handling and storage**7.1. Precautions for safe handling**

Advice on safe handling: Use personal protective equipment. Avoid dust formation. Provide for appropriate exhaust ventilation and dust collection at machinery. Avoid contact with the skin and the eyes. Do not breathe dust.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Avoid contact with skin and eyes. Do not breathe dust.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Store in original container.

Advice on protection against fire and explosion: The product is not flammable. Normal measures for preventive fire protection.

Further information on storage conditions: Keep container tightly closed. Keep in a dry place. Keep in a well-ventilated place.

Advice on common Storage: Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Specific end use(s): No information available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Other occupational exposure limit values: Contains no substances with occupational exposure limit values.

Component: **Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)**

Zinc Oxide **DNEL**
Workers, long-term - systemic effects, skin contact, Zn insoluble: 83.3mg/kg bw/day

CAS No.: 1314-13-2 **DNEL**
Workers, long-term - systemic effects, skin contact, Zn soluble: 8.3mg/kg bw/day

DNEL
Workers, long-term - systemic effects, inhalation, Zn insoluble: 5mg/m3

DNEL
Workers, long-term - systemic effects, inhalation, Zn soluble: 2.5mg/m3

DNEL
Consumers, long-term - systemic effects, skin contact, Zn insoluble: 83.3mg/kg bw/day

DNEL
Consumers, long-term - systemic effects, skin contact, Zn soluble: 8.3mg/kg bw/day

DNEL
Consumers, long-term - systemic effects, inhalation, Zn insoluble: 2.5mg/m3

DNEL
Consumers, long-term - systemic effects, inhalation, Zn soluble: 1.3mg/m3

DNEL

Consumers, long-term - systemic effects, ingestion, Zn insoluble:
0.83mg/kg bw/day

DNEL

Consumers, long-term - systemic effects, ingestion, Zn soluble:
0.83mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh water, zinc, assessment factors: 20.6µg/l

Marine water, zinc, assessment factors: 6.1µg/l

Sewage Treatment Plant (STP), zinc: 52µg/l

Fresh water sediment, zinc: 117.8mg/kg dry weight (d.w.)

Marine sediment, zinc, partition equilibrium: 56.5mg/kg dry weight
(d.w.)

Soil, zinc: 35.6mg/kg dry weight (d.w.)

8.2. Exposure controls

Engineering measures:	Refer to protective measures listed in Sections 7 and 8.
PPE - respiratory protection:	Required if dust is released. Recommended filter type: particle filter: P2, particle filter: P3
PPE - hand protection:	Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Protective gloves should be replaced at first signs of wear. Material: Nitrile rubber Break through time: >=8h Glove thickness: >=0.11mm
PPE - eye protection:	Tightly fitting safety goggles.
PPE - skin protection:	Protective work clothing.
Environmental:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State:	Powder
Colour:	White to yellowish
Odour:	Odourless
Odour threshold:	No data available.
pH:	ca. 7 (50g/l) slurry
Freezing point:	No data available.
Boiling point/boiling range:	Not applicable.
Flashpoint:	Not applicable.
Evaporation rate:	Not applicable.

Flammability (solid, gas):	Not auto-flammable.
Upper explosion limit:	Not applicable.
Lower explosion limit:	Not applicable.
Vapour pressure:	Not applicable.
Relative vapour density:	Not applicable.
Density:	ca. 5.5 - 5.7g/cm ³ (20°C)
Water solubility:	<2mg/l (20°C) practically insoluble
Partition coefficient: n-octanol/water:	Not applicable.
Auto-ignition temperature:	Not applicable.
Thermal decomposition:	No data available.
Viscosity, kinematic:	Not applicable
Explosivity:	Product is not explosive.
Oxidizing properties:	None.

9.2. Other information

Molecular weight:	81.38g/mol
Bulk density:	ca. 600kg/m ³

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity:	Stable under recommended storage conditions.
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10.2. Chemical stability

Chemical stability:	No decomposition if stored and applied as directed.
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10.3. Possibility of hazardous reactions

Hazardous reactions:	Risk of explosion with: Magnesium.
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10.4. Conditions to avoid

Thermal decomposition:	No data available.
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10.5. Incompatible materials

Materials to avoid:	Materials to avoid: Hydrogen peroxide, Magnesium powder, acids and bases
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10.6. Hazardous decomposition product

Haz. decomp. products:	Zinc Oxide fumes.
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Section 11: Toxicological information**11.1. Information on toxicological effects****Component:**

Zinc Oxide

CAS No.: 1314-13-2

Acute toxicityOral

LD50 Oral: > 5,000mg/kg (Rat)

Inhalation

LC50: >5.7mg/l (Rat; 4h; dust/mist)

IrritationSkin

Result: No skin irritation

Eyes

Result: No eye irritation

Sensitisation

Result: Does not cause skin sensitisation (Guinea pig. Does not cause skin sensitisation (human).

CMR effectsCMR properties

Carcinogenicity: It is not considered carcinogenic.

Mutagenicity: In vitro tests did not show mutagenic effects, Ames test: negative.

Teratogenicity: It is not considered teratogenic.

Reproductive toxicity: It is not considered toxic for reproduction.

Specific Target Organ ToxicitySingle exposure

Remarks: no data available.

Repeated exposure

Remarks: no data available.

Other toxic propertiesAspiration hazard

Not applicable.

Section 12: Ecological information**12.1. Toxicity****Component:**

Zinc Oxide

CAS No.: 1314-13-2

Acute toxicityFish

LC50: 1.31mg/l (Oncorhynchus mykiss; 96h) Data based on test results or data from a comparable product.

Toxicity to daphnia and other aquatic invertebrates

EC50: 0.12mg/l (Daphnia magna; 48h) Data based on test results or data from a comparable product.

EC50: 0.413mg/l (Ceriodaphnia dubia (water flea); 48h; Test Substance: Zn ion (US-EPA).

Algae

EC50: 0.21mg/l (Pseudokirchneriella subcapitata (microalgae); 72h)

NOEC: 0.04mg/l (Pseudokirchneriella subcapitata (microalgae))

IC50: 0.136mg/l (Pseudokirchneriella subcapitata (green algae); 72h;

Test substance: Zn ion) (End point: Growth rate; OECD Test Guideline 201)

12.2. Persistence and degradability

Component: Biodegradability
Zinc Oxide
CAS No.: 1314-13-2 The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

Component: Bioaccumulation
Zinc Oxide
CAS No.: 1314-13-2 Not expected to be bioaccumulative.

12.4. Mobility in soil

Component: Mobility
Zinc Oxide
CAS No.: 1314-13-2 Water: The product is insoluble and sinks in water.

12.5. Results of PBT and vPvB assessment

Component: Results of PBT and vPvB assessment
Zinc Oxide
CAS No.: 1314-13-2 The PBT or vPvB criteria of Annex XIII to the REACH Regulation does not apply to inorganic substances.

12.6. Other adverse effects

Component: Additional ecological information
Zinc Oxide
CAS No.: 1314-13-2 Do not flush into surface water or sanitary sewer system. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Section 13: Disposal considerations**13.1. Waste treatment methods**

Product: Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.

Contaminated packaging: Empty contaminated packaging thoroughly. They can be recycled after thorough and proper cleaning. Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

European waste catalogue number: No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

Section 14: Transport information

UN number or ID number: 3077

UN proper shipping name: ADR: Environmentally Hazardous Substance, Solid, N.O.S. (Zinc Oxide)
RID: Environmentally Hazardous Substance, Solid, N.O.S. (Zinc Oxide)
IMDG: Environmentally Hazardous Substance, Solid, N.O.S. (Zinc Oxide)

Transport hazard class(es):	ADR Class: 9 (Labels; classification code; hazard identification no; tunnel restriction code): 9; M7; 90; (-) RID Class: 9 (Labels; classification code; hazard identification no): 9; M7; 90 IMDG Class: 9 (Labels; EmS): 9; F-A, S-F
Packaging group:	ADR: III RID: III IMDG: III
Environmental hazards:	Environmentally hazardous according to ADR: yes Environmentally hazardous according to RID: yes Marine pollutant according to IMDG-Code: yes
Special precautions for user:	Not applicable.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	IMDG: Not applicable.

Section 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Data for the product:	EU. Directive 2012/18/EU (SEVESO III) Annex I: Lower-tier requirements: 100 tonnes; Part 1: Categories of dangerous substances; E1: Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1 Upper-tier requirements: 200 tonnes; Part 1: Categories of dangerous substances; E1: Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1
Component: Zinc Oxide CAS No.: 1314-13-2	EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC): Point Nos.: 3; Listed EU. Cosmetics Directive 76/768/EEC - Annex IV, Part 1: Colouring agent allowed in all cosmetic product (see the regulation for applicable exceptions or provisions); Listed UK. Releases to air and water (UK ISR): Annual reporting level threshold: 100kg UK. Releases to air and water (UK ISR): Annual reporting level threshold: 100kg UK. Releases to air and water (UK ISR): Annual reporting level threshold: 100kg

Notification status, Zinc Oxide:

Regulatory List	Notification	Notification number
AICS	Yes	
DSL	Yes	
INV (CN)	Yes	
ENCS (JP)	Yes	(1)-561
JEX (JP)	Yes	(1)-561
ISHL (JP)	Yes	(1)-561
TSCA	Yes	
EINECS	Yes	215-222-5
KECI (KR)	Yes	KE-35565
PICCS (PH)	Yes	

IECSC	Yes	
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15.2. Chemical Safety Assessment

Chemical safety assessment: No data available.

Section 16: Other information

16.1. Other information

Full text of H-Statements referred to under Sections 2 and 3:

H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Other information:

* Indicates text in the SDS which has changed since the last revision.

Legal disclaimer:

This information is provided for documentation purposes only.

The complete range of conditions or methods of use are beyond our control therefore we do not assume any responsibility and expressly disclaim any liability for any use of this product.

Information contained herein is believed to be true and accurate however, all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.

Compliance with all appropriate local regulations remains the responsibility of the user.

This safety sheet cannot cover all possible situations which the user may experience during processing.

Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary.

All health and safety information contained in this document should be provided to your employees or customers.