

## Safety Data Sheet CALAMINE, USP

### Section 1: Identification

#### 1.1 Product identifier

Product Name	CALAMINE, USP
Synonyms	CALAMINE POWDER; CALAMINA; CALAMINE; CalamineBp; Calaminelp; CalamineUsp; CALAMINE, PHARMA; CalamineExtraPure; CALAMINE USP/EP/BP; Calamine pure, 98%
Product Code	CALAMINEUSP
CAS Number	8011-96-9
<b>Relevant identified uses of the substance or mixture and uses advised against</b>	
Recommended use	Used as absorbent, opacifier and skin protectant in cosmetics, sun creams, spot drying lotions, foundation.
Use Restrictions:	None specified.
<b>Detail of the supplier of the safety data sheet</b>	
Manufacturer	
Supplier/ Distributor	Chemical Store Inc. 1059 Main Avenue, Clifton, NJ 07011 Tel: 1(973)405-6248 Website: ChemicalStore.com Email: info@ChemicaStore.com
Emergency Telephone Number	+1 (973) 420 – 4972 (United States)

### Section 2: Hazards Identification


#### 2.1 Classification of the substance or mixture

Not transport regulated in the U. S. A.

#### 2.2 GHS Classification

Aquatic Chronic 1, H410

#### 2.3 GHS Labeling

Zinc Oxide. Signal word: Warning.	
Hazard statements	H410: Very toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	P273: Avoid release to the environment.
Storage/Disposal	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501
Other hazards OSHA HCS 2012	

## Section 3: Composition/ Information on ingredients

### 3.1 Substances

Component Name	CAS Number	EC / EINECS	% Composition
Zinc Oxide (ZnO)	1314-13-2	215-222-5	97-100
Ferric Oxide (Fe <sub>2</sub> O <sub>3</sub> )	1309-37-1	215-168-2	0.5 - 2

Note: all other constituents are found at trace levels, for further information please consult the individual product grade TDS.

## Section 4: First Aid Measures

### 4.1 Description of first aid measures

<b>Skin Contact</b>	Immediately wash with soap and water. Seek medical attention if irritation occurs.
<b>Eye Contact</b>	Immediately flush eyes with plenty of water. Get medical attention if irritation occurs.
<b>Ingestion</b>	Drink plenty of water. Do not induce vomiting. Seek medical attention or contact Poison Control.
<b>Inhalation</b>	Remove victim to fresh air. Seek medical attention if feeling unwell or experiencing respiratory distress

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

**Acute:** Dry cough, headache, throat irritation

**Delayed:** No delayed symptoms or effects expected

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

Bad cough, headache, and/or nausea. Move effected individual to fresh air.

**Section 5: Fire Fighting Measures**

**5.1 Extinguishing Media**

<b>Suitable Extinguishing Media</b>	Use an extinguishing media suitable for the surrounding fire
<b>Unsuitable Extinguishing media</b>	None Known

**5.2 Special hazards arising from the substance or mixture**

<b>Hazards from the substance</b>	Water contaminated with this material must be contained and prevented from being discharged to environment
<b>Hazardous thermal decomposition products</b>	Decomposition products may include Zinc Oxide fumes at high temperatures

**5.3 Advice for fire-fighters**

<b>Special protective actions for fire-fighters</b>	No special measures required
<b>Special protective equipment for fire-fighters</b>	Suitable breathing apparatus

**Section 6: Accidental Release Measures**

**6.1 Personal Precautions**

Avoid breathing dust. Refer to Section 7 and Section 8 for advice on handling/storage and PPE

**6.2 Environmental Precautions**

Prevent contamination of soil, drains, and surface water. Inform relevant authorities of spill where required.

**6.3Spill Cleanup Recommendation**

Avoid dry sweeping or other methods which raise dust. Vacuum or wet-sweep and place into a suitable closable, labeled container for disposal. Dispose of waste via licensed waste disposal contractor.

## Section 7: Handling and Storage

### 7.1 Precautions for Safe Handling

This product should be used in accordance with good industrial safety practices and industrial hygiene standards and all local, state, federal, and international regulations. Avoid creating airborne dust. Ensure adequate exhaust ventilation. Workers who handle material should wear gloves and thoroughly wash hands/forearms after exposure. See Section 8.2 if exposure exceeds limits.

### 7.2 Conditions for Safe Storage/Instabilities

This product should be stored in accordance with all local, state, federal and international regulations. Store in a cool, dry, well-ventilated space sealed tightly in the original containers. Protect containers from damage and repair if damage occurs. Use all product within 1 year.

## Section 8: Exposure Control/ Personal Protection

### 8.1 Control Parameters

#### Occupational Exposure Limits

Product/Ingredient Name	Exposure limit values (8 hour TWA)
Zinc Oxide (U.S.A. OSHA PEL)	5 mg/m <sup>3</sup> (fumes) 15mg/m <sup>3</sup> (dust; total) 5 mg/m <sup>3</sup> (dust; respirable)
Zinc Oxide (U.S.A. NIOSH IDLH)	500 mg/m <sup>3</sup>

### 8.2 Exposure Controls

<b>Respiratory Protection</b>	Avoid creating dust. If exposure levels exceed limits, respiratory protection approved for the work being performed must be worn.
<b>Hand Protection</b>	Always wear glove approved for the work being performed when handling Zinc Oxide.
<b>Skin Protection</b>	Wear normal chemical work clothing.
<b>Eye Protection</b>	Always wear approved protective eyewear if there is a potential for dust being created while handling the material.

<b>General Protective Hygiene Measures</b>	Use local exhaust ventilation to pro-actively reduce dust levels.
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### 8.3 Other

<b>Route(s) of entry</b>	Inhalation and mechanical irritation of eyes and skin
<b>Carcinogen Status</b>	Not a NTP/IARC carcinogen
<b>Signs and symptoms of exposure</b>	Dry throat, cough, and dry itchy skin
<b>Notes</b>	Excess bulk exposure may cause acute respiratory irritation or dry skin

## Section 9: Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

Appearance: White, cream, or yellowish color

Description: Fine powder or pelletized powder

Typical Particle Size: 0.1  $\mu\text{m}$  – 5  $\mu\text{m}$

Flammability Limits: Calamine is not flammable

Explosive Limits: Calamine is not explosive

Odor: Odorless

Vapor Pressure: @1500C = 12 mm HG

Odor Threshold: Odorless

Vapor Density: n/a

pH: Neutral

Relative Density: Varies

Melting point: 1975 °C

Solubility in water: Negligible Boiling Point: n/a

Flash Point: Not flammable

Evaporation Rate n/a

Specific Gravity:5.68

Molecular Weight: 81.38

Suggested Solvents: Acids and bases

Fire qualities: Will not burn

Explosive Qualities: Not explosive

Volatile: 0.3% nominal

<b>Material Description</b>			
Physical Form		Appearance/Description	
Color		Odor	
Taste		Particulate Type	
Particulate Size		Aerosol Type	
Odor Threshold		Physical and Chemical Properties	
<b>General Properties</b>			
Boiling Point		Melting Point	
Decomposition Temperature		Heat of Decomposition	
pH		Specific Gravity/Relative Density	
Density		Bulk Density	
Water Solubility		Solvent Solubility	
Viscosity		Explosive Properties	
Oxidizing Properties:			
<b>Volatility</b>			
Vapor Pressure		Vapor Density	
Evaporation Rate		VOC (Wt.)	
VOC (Vol.)		Volatiles (Wt.)	
Volatiles (Vol.)			
<b>Flammability</b>			
Flash Point		Upper Explosive Limit	
Lower Explosive Limit		Autoignition	
Self-Accelerating Decomposition Temperature (SADT)		Heat of Combustion ( $\Delta H_c$ )	
Burning Time		Flame Duration	
Flame Height		Flame Extension	
Ignition Distance		Flammability (solid, gas)	
<b>Environmental</b>			
Half-Life		Octanol/Water Partition coefficient	
Coefficient of water/oil distribution		Bioaccumulation Factor	

Bioconcentration Factor		Biochemical Oxygen Demand BOD/BOD5	
Chemical Oxygen Demand		Persistence	
Degradation			

## Section 10: Stability and Reactivity

Reactivity	Stable under normal, dry conditions
Chemical stability	This product is stable
Possibility of hazardous reactions	None
Conditions to avoid or incompatible materials	Heated magnesium. Chlorinated rubbers above 215C
Hazardous decomposition products	Potential for ZnO fumes at elevated temperatures

## Section 11: Toxicological Information

### 11.1 Information on toxicological effects

Routes of Entry	Oral, Inhalation
Acute Toxicity	LD <sub>50</sub> (rat, Inhalation): 7,950 mg/kg (Encyclopedia of Toxicology: Reference Book 2005)
Chronic Toxicity	NOAEL: 50 mg/day (based on human clinical studies)
Mutagenicity	No data available
Carcinogenicity	No data available. Not listed as an IARC Carcinogen. Not listed in the NTP report on carcinogens.

### 11.2 Acute Exposure Symptoms

Eye Contact	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
Inhalation	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the respiratory tract
Skin Contact	No known significant effects or critical hazards
Ingestion	No known significant effects or critical hazards

Sources for section 11: PubChem (NIH), ECHA (EU REACH dossiers), NIOSH Pocket Guide, EPA IRIS, OECD SIDS, ATSDR Toxicological Profiles

## Section 12: Ecological Information

### 12.1 Toxicity

Product Name	Result	Species	Dose	Exposure	Reference
Zinc Oxide	LC50 Inhalation Dusts and mists	Rat	>5.7mg/L	4 Hours	Klimisch and Freisberg (1982)
Zinc Oxide	LD50 Oral	Rat	15000 mg/kg	N/A	Löser (1972)
Zinc Oxide	LD50 Oral	Rat	>5000 mg/kg	N/A	Löser (1977)

### 12.2 Persistence and degradability

Not rapidly degradable

### 12.3 Bioaccumulative potential

No evidence to indicate significant bioaccumulative potential

### 12.4 Mobility in soil

No evidence to indicate significant mobility in soil

### 12.5 Results of PBT and vPvB assessment

ZnO is not PBT or vPvB.

### 12.6 Other adverse effects

None

## Section 13: Disposal Considerations

### 13.1 Waste treatment methods

#### Product

Generation of product waste should be minimized wherever possible. Disposal of product, solutions, and any byproducts should comply with the requirements of environmental protection and waste disposal legislation and any regional or local authority requirements. Dispose of surplus and non-

recyclable products via licensed waste disposal contractor. Waste should not be released into sewer system unless regulations permit such release

**Containers/Packaging**

Generation of packaging waste should be minimized wherever possible. Waste packaging should be recycled when possible. Incineration and/or landfill dumping should only be considered when recycling isn't feasible. Make sure to follow all local, state, federal, and international regulations when disposing of packaging materials.

**Section 14: Transport Information**

<b>NAFTA Tariff Class</b>	2817.00.0000, Schedule B.
<b>Country of Origin</b>	U.S.A.
<b>Responsible party</b>	U.S. Zinc, Houston Texas USA
<b>Classification code</b>	M7 (Formerly: Item Number 12C)
<b>Hazard identification/reconnaissance #</b>	90
<b>NMFC Class</b>	55
<b>USDOT Information</b>	This material is not regulated

**Section 15: Regulatory Information**

**15.1 U.S.A. Regulations**

<b>USDOT</b>	Not Transport regulated, 49CFR172
<b>SARA 302</b>	Yes, name listed (Zinc). RQ= None, TPQ= None
<b>SARA311/312</b>	Yes, acute hazard, 29CFR1200
<b>SARA313</b>	Yes, Zn & Pb compounds
<b>CA Prop.65</b>	Yes, Pb & Cd
<b>CAA 112, 61 HAP</b>	No, not regulated, no HAP's
<b>FIFRA 152 et seq.</b>	No (product is not subject to FIFRA)
<b>CERCLA 102/103</b>	Name List, RQ=None
<b>NSF 60/61</b>	Submitted NSF, UL
<b>FCC</b>	Listed
<b>CONEG</b>	Compliant
<b>ODS/ODC 82</b>	No
<b>TSCA</b>	Yes, on Inventory, Compliant with TSCA, Notification not required

<b>RCRA 261</b>	If governing spec is >1000 ppm Pb or >20 ppm Cd, product must be TCLP tested for Pb and Cd to determine if waste product is subject to RCRA
<b>USFDA</b>	Listed as GRAS at 21CFR182.8991

**15.2 TSCA Equivalent 'inventory' regulations**

<b>AICS</b>	Yes
<b>SWISS</b>	Yes
<b>PICCS</b>	Yes
<b>DSL</b>	Yes
<b>NDSL</b>	No
<b>ASIA-PAC</b>	Yes
<b>EINECS</b>	Yes, on inventory
<b>ELINCS</b>	No, notification/reporting not required

**15.3 EU REACH Information**

<b>Product Origin</b>	01-2119463881-32-0075 (Tonnage >1000 t/year)
<b>P.R.C. Pre-Registration #</b>	05-2114620034-66-0000
<b>Brazil Pre-Registration #</b>	05-2114626885-37-0000

**Section 16: Other Information**

**16.1 HMIS Hazard Rating (Paint and Coating Industry)**

<b>Health</b>	1 (Slight)
<b>Flammability</b>	0
<b>Reactivity</b>	0
<b>Personal Protection</b>	E (in bulk dust conditions only. Gloves, mask, and goggles are recommended.

**16.2 GHS Labeling**

Zinc Oxide. Signal word: Warning.

**H410:** Very toxic to aquatic life with long lasting effects.

**P273:** Avoid release to the environment.

**P391:** Collect spillage.

**P501:** Dispose of contents/container as hazardous or special waste in accordance with applicable law.



**16.3 Notes**

This Safety Data Sheet (SDS) provides information on the safety requirements for working with this material. This SDS is not a guarantee of the product's properties. The information presented here is believed to be accurate by the preparer utilizing reasonably available published data. We are not responsible for any inadvertent error or omission.

Use of this product will include many factors beyond our control and we cannot accept liability for any accident, injury or damage cause by its use.

**Revision date:** 2026-06-21

**Initial preparation date:** 2026-01-13

**SDS version:** 1.1

**Supersedes:** 1.0

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**Change History**

Version	Date	Description of Change
[1.0]	[2026-01-13]	Initial SDS creation
[1.1]	[2026-06-21]	[Review and editorial updates]

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**Abbreviations and Acronyms**

Term	Meaning
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
OSHA	Occupational Safety and Health Administration
ACGIH	American Conference of Governmental Industrial Hygienists
NIOSH	National Institute for Occupational Safety and Health
TWA	Time-Weighted Average
STEL	Short-Term Exposure Limit
LC50	Lethal Concentration 50%
LD50	Lethal Dose 50%
PBT	Persistent, Bioaccumulative, Toxic
vPvB	very Persistent and very Bioaccumulative

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## Key Literature and Data Sources

This Safety Data Sheet was prepared using information from the following sources:

- [ECHA / REACH database]
  - [NIOSH Pocket Guide]
  - [PubChem / NIH]
  - [OECD test data]
  - [Supplier technical data sheets]
  - [Scientific literature]
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## Hazard Classification Method

The classification of this substance was determined by:

- Experimental data
  - Read-across
  - Literature review
  - GHS calculation method
  - Supplier classification
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## Training Advice

Workers handling this product should be trained in:

- Chemical hazard communication
  - Use of personal protective equipment
  - Safe handling and storage
  - Emergency response and spill procedures
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## Disclaimer

The information provided in this Safety Data Sheet is believed to be accurate and represents the best information currently available. However, no warranty, express or implied, is made regarding its accuracy, completeness, or suitability for any particular purpose. The user is responsible for determining the applicability of this information to their specific use and for compliance with all applicable laws and regulations.

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