

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name Zinc Metal Powder
CAS number 7440-66-6
Synonyms Zinc Dust

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

Identified uses Laboratory chemicals.

1.3 Details of the supplier of the safety data sheet

Company Lab Alley, LLC
 12501 Pauls Valley Road
 Austin, Texas 78737
 U.S.A.

Telephone 512-668-9918
Fax 512-886-4008

1.4 Emergency telephone

Emergency Phone # US & Canada: 1-800-535-5053 INFOTRAC
 International 1-352-323-3500 INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Substances/mixtures which, in contact with water,
emit flammable gases Category 1

Pyrophoric solids Category 1

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

In contact with water releases flammable gases which may ignite spontaneously.
Catches fire spontaneously if exposed to air.

Precautionary statements

Prevention: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not allow contact with air. Wear protective gloves/protective clothing/eye protection/face protection. Keep away from any possible contact with water, because of violent reaction and possible flash fire. Handle under inert gas. Protect from moisture.

IF ON SKIN: Brush off loose particles from skin. Immerse in cool water/wrap with wet bandages.

Fire: In case of fire, use CO₂, dry chemical, or foam for extinction.

Storage: Store under an inert atmosphere. Store in a dry place. Store in a closed container.

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

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Very toxic to aquatic life with long lasting effects.
May form combustible dust concentrations in air.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Zinc Powder	Zinc Dust	7440-66-6	95-100%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled

Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms occur.

- In case of skin contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
- In case of eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
- If swallowed** Do not induce vomiting. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Dry sand, clay, approved class D extinguishers.

Unsuitable extinguishing media DO NOT USE WATER, Carbon dioxide (CO₂), dry chemical, foam.

5.2 Specific hazards arising from the substance or mixture

Flammable. Fine dust dispersed in air may ignite. Pyrophoric: spontaneously flammable in air. Water reactive. Contact with water liberates extremely flammable gases. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.
Hazardous Combustion Products: Hydrogen.

5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

5.4 Further information

Flash Point No information available.

Autoignition Temperature 460 °C / 860 °F

Explosion limits

Upper No data available.

Lower No data available.

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
1	4	3	W

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Remove all sources of ignition. Avoid dust formation. Take precautionary measures against static discharges. Do not get in eyes, on skin, or on clothing.

6.2 Environmental precautions

Should not be released into the environment.

6.3 Methods and materials for containment and cleaning up

Remove all sources of ignition. Do not expose spill to water. Sweep up or vacuum up spillage and collect in suitable container for disposal. Use spark-proof tools and explosion-proof equipment. Avoid dust formation.

6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements. See Section 12 for additional Ecological Information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Use only under a chemical fume hood. Wear personal protective equipment. Avoid dust formation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Handle under an inert atmosphere. Do not allow contact with air. Do not allow contact with water. Keep away from open flames, hot surfaces, and sources of ignition. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep containers tightly closed in a dry, cool, and well-ventilated place. Store under an inert atmosphere. Keep away from heat and sources of ignition. Keep away from water.

Incompatibilities

Strong oxidizing agents, Strong acids, Strong bases, Amines.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

8.2 Exposure controls

Appropriate engineering controls

Use only under a chemical fume hood. Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Control of environmental exposure

No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Solid
Appearance	Light blue

Odor	Odorless
Odor Threshold	No information available
pH	No information available
Melting Point/Range	419 °C / 786.2 °F
Boiling Point/Range	908 °C / 1666.4 °F
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	No data available
Upper	
Lower	
Vapor Pressure	1 mmHg @ 487 °C
Vapor Density	No information available
Density	No information available
Solubility	Insoluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	460 °C / 860 °F
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	Zn
Molecular Weight	65.37 g/mol
VOC Content(%)	No information available
Oxidizing properties	No information available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Known reactive hazard.

10.2 Chemical stability

Water reactive. Moisture sensitive. Air sensitive. Pyrophoric: spontaneously flammable in air.

10.3 Possibility of hazardous reactions

Contact with water liberates extremely flammable gases.

10.4 Conditions to avoid

Dust formation, incompatible products, exposure to air, exposure to moist air or water. Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible materials

Strong oxidizing agents, Strong acids, Strong bases, Amines.

10.6 Hazardous decomposition products

Hydrogen.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

No acute toxicity information is available for this product.

Skin corrosion/irritation

No information available.

Serious eye damage/eye irritation

No information available.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Zinc powder	7440-66-6	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

None known.

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

No information available.

Chronic effects

No information available.

11.2 Additional Information

Tumorigenic effects have been reported in experimental animals. See actual entry in RTECS for complete information.

SECTION 12: Ecological information

12.1 Toxicity

This product contains the following substance(s) which are hazardous for the environment.

Product	Species	Test Results
Zinc powder	Freshwater Algae	EC50 = 0.09-0.125 mg/L, 72h EC50 = 0.11-0.271 mg/L, 96h
	Freshwater Fish	LC50 = 0.41 mg/L, 96h LC50 = 0.59 mg/L, 96h LC50 = 0.24 mg/L, 96h LC50 = 3.5 mg/L, 96h LC50 = 7.8 mg/L, 96h LC50 = 0.45 mg/L, 96h LC50 = 30 mg/L, 96h LC50 = 2.66 mg/L, 96h LC50 = 0.211-0.269 mg/L, 96h LC50 = 2.16-3.05 mg/L, 96h
	Water Flea	EC50 = 0.139-0.908 mg/L, 48h

12.2 Persistence and degradability

No information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN-no

UN1436

Proper Shipping Name

ZINC POWDER

Hazard Class	4.3
Subsidiary Hazard Class	4.2
Packing Group	II

IMDG

UN-no	UN1436
Proper Shipping Name	ZINC POWDER
Hazard Class	4.3
Subsidiary Hazard Class	4.2
Packing Group	II

IATA

UN-no	UN1436
Proper Shipping Name	ZINC POWDER
Hazard Class	4.3
Subsidiary Hazard Class	4.2
Packing Group	II

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)
Listed, Zinc powder (CAS #7440-66-6), RQ: 1000 lb.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous
Acute Health Hazard, Fire Hazard, Reactive Hazard.

SARA 313 (TRI reporting)
Regulated, Zinc powder (CAS #7440-66-6).

Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA - Toxic Pollutants)

Listed, Zinc powder (CAS #7440-66-6).

Clean Water Act (CWA - Priority Pollutants)

Listed, Zinc powder (CAS #7440-66-6).

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations

US. Massachusetts RTK - Substance List

Listed, Zinc powder (CAS #7440-66-6).

US. New Jersey Worker and Community Right-to-Know Act

Listed, Zinc powder (CAS #7440-66-6).

US. Pennsylvania Worker and Community Right-to-Know Law

Listed, Zinc powder (CAS #7440-66-6).

California Proposition 65

Not listed.

SECTION 16: Other information

Issue date: 09/30/2024

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.