

SAFETY DATA SHEET

spectrum®



Revision date 08-September-2020

Revision Number 2

1. Identification

Product identifier

Product Name ZINC METAL, 325 MESH, DUST, REAGENT

Other means of identification

Product Code(s) Z1005

UN/ID no UN1436

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use No information available

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Address

Spectrum Chemical Mfg. Corp.
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. Hazard(s) identification

Classification

Substances or mixtures which, in contact with water, emit flammable gases	Category 1
Combustible dust	Yes

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Danger

Hazard statements

In contact with water releases flammable gases which may ignite spontaneously
May form combustible dust concentrations in air



Appearance Powder

Physical state Solid

Odor No information available

Precautionary Statements - Prevention

Do not allow contact with water
Handle under inert gas. Protect from moisture
Wear protective gloves/eye protection/face protection
Keep away from all ignition sources including heat, sparks, and flame
Keep container closed and grounded
Prevent dust accumulations to minimize explosion hazard

Precautionary Statements - Response

Brush off loose particles from skin and immerse in cool water/wrap in wet bandages
In case of fire: Use CO₂, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store in a dry place. Store in a closed container

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

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

3. Composition/information on ingredients

Substance

Chemical name	CAS No	Weight-%	Trade secret
Zinc Metal	7440-66-6	100	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

Inhalation Remove to fresh air.
Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact Wash skin with soap and water.
Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	Avoid generation of dust. Fine dust dispersed in air may ignite.
Explosion data	
Sensitivity to mechanical impact	none.
Sensitivity to static discharge	yes.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation. Avoid generation of dust. Avoid contact with eyes. Use personal protective equipment as required. Do not breathe dust. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Take precautionary measures against static discharges.
Other information	Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so. Prevent dust cloud.
Methods for cleaning up	Take up with inert, damp, non-combustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal. Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with eyes. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.
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8. Exposure controls/personal protection

Control parameters

Exposure Limits The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not breathe dust.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid
Appearance Powder
Color Gray; blue
Odor No information available
Odor threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	no data available	None known
Melting point / freezing point	419 °C / 786.2 °F	None known
Boiling point / boiling range	907 °C / 1664.6 °F	None known
Flash point	no data available	None known
Evaporation rate	no data available	None known
Flammability (solid, gas)	no data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	no data available	None known
Relative density	7.14	None known
Water solubility	Insoluble in cold water Insoluble in hot water	None known
Solubility(ies)	Insoluble in Acetone Insoluble in diethyl ether Insoluble in methanol Insoluble in n-octanol	None known
Partition coefficient	No data available	None known
Autoignition temperature	460 °C / 860 °F	None known
Decomposition temperature		None known
Kinematic viscosity	no data available	None known

Dynamic viscosity	No data available	None known
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Other information

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Liquid Density	No information available
Bulk density	No information available

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Excessive heat. Heating in air. dust formation.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available.
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Acute toxicity

Numerical measures of toxicity

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Zinc Metal 7440-66-6	EC50: 0.09 - 0.125mg/L (72h, Pseudokirchneriella subcapitata) EC50: 0.11 - 0.271mg/L (96h, Pseudokirchneriella subcapitata)	LC50: 0.211 - 0.269mg/L (96h, Pimephales promelas) LC50: 2.16 - 3.05mg/L (96h, Pimephales promelas) LC50: =0.24mg/L (96h, Oncorhynchus mykiss) LC50: =0.41mg/L (96h, Oncorhynchus mykiss) LC50: =0.45mg/L (96h, Cyprinus carpio) LC50: =0.59mg/L (96h, Oncorhynchus mykiss) LC50: =2.66mg/L (96h, Pimephales promelas) LC50: =3.5mg/L (96h, Lepomis macrochirus) LC50: =30mg/L (96h, Cyprinus carpio) LC50: =7.8mg/L (96h, Cyprinus carpio)	-	EC50: 0.139 - 0.908mg/L (48h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation Inherently biodegradable.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

DOT

UN/ID no UN1436

Proper Shipping Name: Zinc powder

Hazard class 4.3

Subsidiary Class 4.2

Packing group: II

Special Provisions A19, IB7, IP2, T3, TP33, W31, W40

Marine Pollutant Severe Marine Pollutant

Description: UN1436, Zinc powder, 4.3 (4.2), II

**Emergency Response Guide
Number** 138

TDG

UN-No: UN1436
Proper Shipping Name: Zinc dust
Hazard class 4.3
Subsidiary Class 4.2
Packing Group: II
Description: UN1436, Zinc dust, 4.3 (4.2), II

MEX

UN-No UN1436
Proper Shipping Name Zinc powder
Hazard class 4.3
Subsidiary Class 4.2
Packing Group II
Description UN1436, Zinc powder, 4.3 (4.2), II

ICAO (air)

UN-No: UN1436
Proper Shipping Name: Zinc dust
Hazard class 4.3
Subsidiary hazard class 4.2
Packing Group: II
Special Provisions A3
Description: UN1436, Zinc dust, 4.3 (4.2), II

IATA

UN number UN1436
Proper Shipping Name: Zinc dust
Transport hazard class(es) 4.3
Subsidiary hazard class 4.2
Packing group II
Description: UN1436, Zinc dust, 4.3 (4.2), II

IMDG

UN number UN1436
Proper shipping name Zinc powder
Transport hazard class(es) 4.3
Subsidiary hazard class 4.2
Packing group II
EmS-No F-G, S-O
Marine pollutant NP1
Description UN1436, Zinc powder, 4.3 (4.2), II

RID

UN number UN1436
Proper Shipping Name: Zinc powder
Transport hazard class(es) 4.3
Packing group II
Classification code WS
Description: UN1436, Zinc powder, 4.3 (4.2), II
Labels 4.3 + 4.2

ADR

UN number 1436
Proper Shipping Name: Zinc powder
Transport hazard class(es) 4.3
Subsidiary hazard class 4.2
Packing group II
Classification code WS
Tunnel restriction code (D/E)
Description: 1436, Zinc powder, 4.3 (4.2), II, (D/E)
Labels 4.3 + 4.2

ADN

UN/ID No	UN1436
Proper shipping name	Zinc powder
Transport hazard class(es)	4.3
Packing Group	II
Classification code	WS
Description	UN1436, Zinc powder, 4.3 (+ 4.2), II
Hazard label(s)	4.3 + 4.2
Limited quantity (LQ)	0
ventilation	VE01
Equipment Requirements	PP, EX, A

15. Regulatory information**International Inventories**

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	This product complies with ENCS:
IECSC	This product complies with China:
KECL	Complies
PICCS	Complies
AICS	All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Zinc Metal - 7440-66-6	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Zinc Metal 7440-66-6	454 kg final RQ 1000 lb final RQ	-

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA

Health hazards 2

Flammability 1

Instability 0

Physical and chemical properties W

HMIS

Health hazards 2

Flammability 1

Physical hazards 0

Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value		

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision date 08-September-2020

Revision Note No information available.

Disclaimer

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet