

SAFETY DATA SHEET

Creation Date 09-May-2012

Revision Date 14-Feb-2020

Revision Number 2

1. Identification **Product Name** Zinc shot 10759 Cat No. : CAS-No 7440-66-6 **Synonyms** No information available **Recommended Use** Laboratory chemicals. Food, drug, pesticide or biocidal product use. Uses advised against Details of the supplier of the safety data sheet Company Alfa Aesar Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street Ward Hill, MA 01835-8099 Tel: 800-343-0660 Fax: 800-322-4757

Emergency Telephone Number

Email: tech@alfa.com www.alfa.com

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.

2. Hazard(s) identification

Classification Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Based on available data, the classification criteria are not met

Label Elements
None required

Hazards not otherwise classified (HNOC)

Very toxic to aquatic life

3. Composition/Information on Ingredients

| Component | CAS-No | Weight % |
|------------|-----------|----------|
| Zinc metal | 7440-66-6 | <= 100 |

| 4. First-aid measures | | | |
|-------------------------------|---|--|--|
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. | | |
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur. | | |
| Inhalation | Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur. | | |
| Ingestion | Do NOT induce vomiting. Get medical attention. | | |
| Most important symptoms and | None reasonably foreseeable. | | |
| effects Notes to Physician | Treat symptomatically | | |

5. Fire-fighting measures

| Unsuitable Extinguishing Media | Water |
|----------------------------------|--|
| Flash Point Method - | No information available 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 |

Specific Hazards Arising from the Chemical

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

Nitrogen oxides (NOx). Sulfur oxides. Ammonia.

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.

| <u>NFPA</u> Health 1 | Flammability 1 | Instability 0 | Physical hazards N/A |
|----------------------------|--|--|--------------------------------|
| | 6. Accidental re | lease measures | |
| Personal Precautions | Use personal protective ec formation. | quipment as required. Ensure ade | equate ventilation. Avoid dust |
| Environmental Precautions | | to the environment. Do not flush ir n 12 for additional Ecological Info | |

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Up

7. Handling and storage

| Handling | Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation. |
|--|---|
| Storage | Keep containers tightly closed in a dry, cool and well-ventilated place. |
| 8. E | xposure controls / personal protection |
| Exposure Guidelines | This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies. |
| Engineering Measures Personal Protective Equipment | None under normal use conditions. |
| 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 and body protection | Wear appropriate protective gloves and clothing to prevent skin exposure. |
| Respiratory Protection | No protective equipment is needed under normal use conditions. |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. |

9. Physical and chemical properties

| Physical State | Solid; Various Form |
|--|--------------------------|
| Appearance | Grey |
| Odor | No information available |
| Odor Threshold | No information available |
| рН | No information available |
| Melting Point/Range | 419 °C / 786.2 °F |
| Boiling Point/Range | 907 °C / 1664.6 °F |
| Flash Point | No information available |
| Evaporation Rate | Not applicable |
| Flammability (solid,gas) | No information available |
| Flammability or explosive limits | |
| Upper | No data available |
| Lower | No data available |
| Vapor Pressure | 1.3 mbar @ 478 °C |
| Vapor Density | Not applicable |
| Specific Gravity | 7.140 |
| Solubility | Insoluble in water |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | 460 °C / 860 °F |
| Decomposition Temperature | No information available |
| Viscosity | Not applicable |
| Molecular Formula | Zn |
| Molecular Weight | 65.36 |
| | |

10. Stability and reactivity

| Reactive Hazard | None known, based on information available |
|---------------------|---|
| Stability | Stable under normal conditions. |
| Conditions to Avoid | Incompatible products. Excess heat. Avoid dust formation. |

| Incompatible Materials | Strong oxidizing agents, Strong acids, Strong bases, Amines, Combustible material, Peroxides, Metals |
|---------------------------------|--|
| Hazardous Decomposition Product | s Nitrogen oxides (NOx), Sulfur oxides, Ammonia |
| Hazardous Polymerization | Hazardous polymerization does not occur. |
| Hazardous Reactions | None under normal processing. |
| | 11. Toxicological information |

Acute Toxicity

No acute toxicity information is available for this product

Product Information Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-----------------------------|--------------------------|-------------|-----------------|
| Zinc metal | LD50 = 630 mg/kg (Rat) | Not listed | Not listed |
| Toxicologically Synergistic | No information available | | |

Products

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

No information available

| Irritation | No information available |
|------------|--------------------------|
| | |

Sensitization

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|----------------|---------------------------|----------------|-------------------|------------|------------|
| Zinc metal | 7440-66-6 | Not listed | Not listed | Not listed | Not listed | Not listed |
| Mutagenic Effects | | No information ava | ailable | | | |
| Reproductive Effects | 5 | No information available. | | | | |
| Developmental Effec | ts | No information available. | | | | |
| Teratogenicity | | No information available. | | | | |
| STOT - single exposit STOT - repeated expo | | None known None known | | | | |
| Aspiration hazard | | No information ava | ailable | | | |
| Symptoms / effects, delayed | both acute and | No information ava | ailable | | | |
| Endocrine Disruptor | Information | No information ava | ailable | | | |
| Other Adverse Effect | s | See actual entry in | RTECS for comp | lete information. | | |

12. Ecological information

Ecotoxicity

Contains a substance which is:. Very toxic to aquatic organisms. The product contains following substances which are hazardous for the environment.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|------------|------------------------------------|---------------------------------|------------|----------------------------|
| Zinc metal | EC50: 0.09 - 0.125 mg/L, | LC50: = 0.41 mg/L, 96h | Not listed | EC50: 0.139 - 0.908 mg/L, |
| | 72h static (Pseudokirchneriella | static (Oncorhynchus mvkiss) | | 48h Static (Daphnia magna) |
| | subcapitata) | LC50: = 0.59 mg/L, 96h | | |
| | EC50: 0.11 - 0.271 mg/L, | semi-static (Oncorhynchus | | |

| | | |
|----------------------|-------------------------------|------|
| 96h static | mykiss) | 1 |
| (Pseudokirchneriella | LC50: 2.16 - 3.05 mg/L, 96h | 1 |
| subcapitata) | flow-through (Pimephales | |
| | promelas) | |
| | LC50: 0.211 - 0.269 mg/L, | |
| | 96h semi-static (Pimephales | |
| | promelas) | |
| | LC50: = 2.66 mg/L, 96h | |
| | static (Pimephales | |
| | promelas) | |
| | LC50: = 30 mg/L, 96h | |
| | (Cyprinus carpio) | |
| | LC50: = 0.45 mg/L, 96h | |
| | semi-static (Cyprinus carpio) | |
| | LC50: = 7.8 mg/L, 96h static | |
| | (Cyprinus carpio) | |
| | LC50: = 3.5 mg/L, 96h static | |
| | (Lepomis macrochirus) | |
| | LC50: = 0.24 mg/L, 96h | |
| | flow-through (Oncorhynchus | 1 |
| | mykiss) | 1 |
| | - / | 1 |

Persistence and Degradability

Insoluble in water

Bioaccumulation/Accumulation

Waste Disposal Methods

No information available.

Mobility

Is not likely mobile in the environment due its low water solubility.

13. Disposal considerations

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.

| | 14. Transport information | | |
|--------------------|----------------------------|--|--|
| DOT | Not regulated | | |
| DOT TDG IATA | Not regulated | | |
| IATA | Not regulated | | |
| IMDG/IMO | Not regulated | | |
| | 15. Regulatory information | | |

United States of America Inventory

| Component | CAS-No | TSCA | TSCA Inventory notification - Active/Inactive | TSCA - EPA Regulatory Flags |
|------------|-----------|------|--|--------------------------------|
| Zinc metal | 7440-66-6 | Х | ACTIVE | - |

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed '-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

| Component | CAS-No | TSCA 12(b) - Notices of Export |
|------------|-----------|--------------------------------|
| Zinc metal | 7440-66-6 | Section 5 |

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

| Component | CAS-No | DSL | NDSL | EINECS | PICCS | ENCS | AICS | IECSC | KECL |
|------------|-----------|-----|------|-----------|-------|------|------|-------|----------|
| Zinc metal | 7440-66-6 | Х | - | 231-175-3 | Х | Х | Х | Х | KE-35518 |

U.S. Federal Regulations

SARA 313

| Component | CAS-No | Weight % | SARA 313 - Threshold Values % |
|------------|-----------|----------|----------------------------------|
| Zinc metal | 7440-66-6 | <= 100 | 1.0 |

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|------------|-------------------------------|--------------------------------|------------------------|---------------------------|
| Zinc metal | - | - | Х | Х |

| Clean Air Act | Not applicable |
|---------------|----------------|
| | |

OSHA - Occupational Safety and Not applicable Health Administration

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)

| Component | Hazardous Substances RQs | CERCLA EHS RQs | | |
|--------------------------------|---|----------------|--|--|
| Zinc metal | 1000 lb | - | | |
| California Proposition 65 This | This product does not contain any Proposition 65 chemicals. | | | |

U.S. State Right-to-Know

| Regulations | | | | | |
|-------------|---------------|------------|--------------|----------|--------------|
| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
| Zinc metal | Х | Х | Х | - | Х |

| U.S. Department of Transportation Reportable Quantity (RQ): DOT Marine Pollutant DOT Severe Marine Pollutant | N N N |
|--|--|
| U.S. Department of Homeland Security | This product does not contain any DHS chemicals. |
| | |

Other International Regulations

Mexico - Grade No information available

| | 16. Other information |
|--|--|
| Prepared By | Health, Safety and Environmental Department Email: tech@alfa.com www.alfa.com |
| Creation Date Revision Date Print Date Revision Summary | 09-May-2012 14-Feb-2020 14-Feb-2020 SDS authoring systems update, replaces ChemGes SDS No. 7440-66-6/3. |

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