



SAFETY DATA SHEET

This SDS complies with REACH 1907/2006 and 2001/58/EC, GHS REVISION 5, OSHA 29CFR 1910.1200

Section 1: Chemical Product and Company Identification

MANUFACTURER'S NAME

HydroGro
7815 S Hardy Dr Ste 101
Tempe, AZ 85284 USA

Safety Data Sheet Competent Person: Customer Service

EMERGENCY TELEPHONE

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DATE PREPARED: December 5, 201

REVISION DATE: April 20, 2021

PRODUCT NAME: **HydroFuze Zinc**

FORMULA: Preparation/Mixture

PRODUCT USE: For seed treatments, foliar applications and granular fertilizer applications.



GHS Hazard Class

| | | | | |
|---------------------------|--|--|--|--|
| Signal word: | Hazardous to the Aquatic Environment—Short Term (Acute) Hazard -- Category 1 | | | |
| Hazard Statement: | Hazardous to the Aquatic Environment—Long Term (Chronic Hazard) --Category 1 | | | |
| | Warning | | | |
| | H315: Causes skin reaction | | | |
| | H320: Causes eye irritation | | | |
| | H400: Very toxic to aquatic life | | | |
| | H410: Very toxic to aquatic life with long lasting effects | | | |
| Precautionary Statements: | P273: Avoid release to the environment | | | |
| | P281: Use personal protective equipment as required | | | |
| Prevention | P391: Collect spillage | | | |
| | P403 + P233: Store in well-ventilated place keep container tightly closed | | | |
| Response | P501: Dispose of contents/container in accordance with the waste disposal requirements of your country, state, or local authorities. | | | |
| Storage | | | | |
| Disposal | | | | |
| | Hazardous not otherwise classified (HNOC) or not covered by GHS - None | | | |

HAZARD CLASSIFICATION:

Not classified as hazardous based on IATA, IMDG, and DOT.

FIRE AND EXPLOSION:

Not considered flammable or combustible. Product emits toxic fumes when burned.

POTENTIAL HEALTH EFFECTS:

<1 % of mixture consists of ingredients of unknown acute toxicity

APPEARANCE:

White suspension

NFPA Rating:

| Component | Health (Blue) | Flammability (Red) | Reactivity (Yellow) | Special (White) |
|----------------|------------------|-----------------------|------------------------|--------------------|
| HydroFuze Zinc | 1 | 0 | 0 | ----- |

Section 3: Composition, Information on Ingredients

| PRODUCT COMPOSITION | APPROX % | CAS NO. | EC NUMBER | CANADA DSL |
|---------------------|----------|-----------|-----------|------------|
| Zinc Oxide | < 50 | 1314-13-2 | 215-222-5 | Y |
| Water | < 40 | 7732-18-5 | 231-791-2 | Y |



Some items on this SDS may be designated as trade secrets (TS). Bonafide requests for disclosure of trade secret information to medical personnel must be made in accordance with the provisions contained in 29 CFR 1910.1200 I 1-13.

Section 4: First Aid Measures

Description of First Aid Measures

| | |
|--------------|--|
| Inhalation | Remove to fresh air. If not breathing, provide CPR (cardio pulmonary resuscitation). Get immediate medical attention. |
| Skin Contact | Immediately wash skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing. Get medical attention if irritation develops or persists. |
| Eye Contact | Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention. |
| Ingestion | Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately |

Most important symptoms and effects, both acute and delayed

| | |
|--------------------------------------|---|
| Symptoms/Injuries after Inhalation | May cause respiratory tract irritation. |
| Symptoms/Injuries after Skin Contact | May cause mild skin irritation. Symptoms may include redness, drying, defatting, and cracking of the skin. |
| Symptoms/Injuries after Eye Contact | Causes mild eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. |
| Symptoms/Injuries after Ingestion | Mildly harmful if swallowed. |

Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately.

Section 5: Fire-fighting Measures

| | |
|---|--|
| Suitable extinguishing media | Use foam, dry chemical, carbon dioxide, or any media suitable to extinguish the surrounding fire |
| Special hazards arising from the substance or mixture | Containers could explode when heated above 225°F (107°). |
| Protective actions fire-fighters | Wear standard protective equipment and self contained breathing apparatus for firefighting if necessary. |

Further information

Hazardous decomposition products formed under fire conditions. - Zinc/zinc oxides.

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Wear proper personal protective equipment. Avoid breathing fumes.

Environmental precautions

Prevent further spillage if safe to do so. Prevent spills or contaminated rinse water from entering sewers or watercourses.

Methods and materials for containment and cleaning up

In case of small spills, absorb with sand or other non-combustible absorbent material and put spilled material in a plastic container. Dispose of according to the requirements of your country, state, or local authorities.

In case of large spills, dike far ahead of liquid spills. Absorb with inert material and put into a plastic container. Dispose of according to the requirements of your country, state, or local authorities.

Reference to other Sections For personal protection reference section 8. For disposal reference section 13.



Section 7: Handling and Storage

Precautions for safe handling

- Use only with adequate ventilation.
- Keep out of reach of children.
- Wear proper protective equipment when handling this material.
- Avoid contact with skin, eyes, or clothing.
- Wash hands and face after handling this material.
- A plastic container should be used for disposal.
- For precautions see section 2.

Conditions for safe storage, including any incompatibilities

- Store upright in a cool, dry place.
- Keep container closed when not in use.
- Keep away from heat, in excess of 225°F (107°).
- Do not store with acid, metallic oxide, amines, and combustible materials.
- Utilize chemical segregation.
- Follow all applicable local regulations for handling and storage.

Specific uses

- This product is intended to be used for seed treatments, foliar applications and granular fertilizer applications.

Section 8: Exposure Controls/Personal Protection

Control Parameters

| PRODUCT COMPOSITION | ACGIH TLV | OSHA PEL | NIOSH REL |
|---------------------|--|--|---|
| Zinc Oxide | TWA 2.0 mg/m ³ STEL 10.0 mg/m ³ | TWA 5 mg/m ³ (fume) TWA 15 mg/m ³ (total dust) TWA 5 mg/m ³ (resp dust) | Dust: TWA 5 mg/m ³ C 15 mg/m ³ Fume: TWA 5 mg/m ³ ST 10 mg/m ³ |

Exposure controls

VENTILATION:

Always provide good general, mechanical room ventilation where this chemical/material is used.

SPECIAL VENTILATION CONTROLS:

None

RESPIRATORY PROTECTION:

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

PROTECTIVE GLOVES:

Neoprene, butyl, or nitrile rubber gloves are recommended.

EYE PROTECTION:

Recommend eye protection using safety glasses or goggles.

SKIN PROTECTION:

Suitable protective clothing to prevent skin contact

WORK/HYGIENE PRACTICES:

Avoid breathing fumes. Avoid contact with eyes. Wash hands after handling.

OTHER EQUIPMENT:

Make safety shower, eyewash stations, and hand washing equipment available in the work area.

Section 9: Physical and Chemical Properties

| | PRODUCT CRITERIA |
|--|-------------------|
| APPEARANCE - COLOR: | White |
| PHYSICAL STATE: | Suspension |
| ODOR: | Pungent Odor |
| ODOR THRESHOLD | No data available |
| PH | No data available |
| MELTING POINT/FREEZING POINT: | No data available |
| INITIAL BOILING POINT AND BOILING RANGE: | > 100°C |
| FLASH POINT: | No data available |
| EVAPORATION RATE: | No data available |
| FLAMMABILITY (Solid, gas) | Not flammable |



| | |
|--|-------------------|
| UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS | Not Measured |
| VAPOR PRESSURE | No data available |
| VAPOR DENSITY (AIR = 1) | No data available |
| RELATIVE DENSITY (@25°C): | 1.7 |
| SOLUBILITY(IES) | Soluble in water |
| OXIDIZING PROPERTIES | No data available |
| PARTITION COEFFICIENT: n-octanol/water | No data available |
| AUTO IGNITION TEMPERATURE | No data available |
| DECOMPOSITION TEMPERATURE | No data available |
| VISCOSITY | No data available |

Section 10: Stability and Reactivity

| | |
|---------------------------------------|--|
| Reactivity: | Not reactive |
| Chemical Stability: | Stable under recommended conditions. |
| Possibility of Hazardous Reactions: | Will not occur under normal temperatures and pressures. |
| Conditions to Avoid: | High temperatures, high pressure, and incompatible materials. |
| Incompatibility (Materials to avoid): | This product is compatible with the majority of agricultural remedies. However, it is advisable to do a miscibility test prior to mixing with other chemicals. Do not mix concentrate directly with other herbicides or pesticides concentrates – always dilute first. Do not mix product with oxidizing materials or with any phosphate containing fertilizers. |
| Hazardous Decomposition Products: | Decomposition products include carbon dioxide, carbon monoxide, and water which may form when heated to decomposition. |

Section 11: Toxicological Information

| GHS Required Criteria | Toxicity Criteria | Toxicity Information | Comments | Chemical Constituent |
|-------------------------------------|--|----------------------|----------------|----------------------|
| Acute Toxicity | LD50 (Oral/Mouse) | >5000 mg/kg | No Mortality | Zinc Oxide |
| | LD50 (Oral/Rat) | >5000 mg/kg | | Zinc Oxide |
| | LC50(Inhalation/Mouse): | > 5.7 mg/L, 4 hr. | | Zinc Oxide |
| Skin Corrosion/Irritation | 20 % w/v zinc oxide was found to be non-irritating to guinea-pig skin. | | | Zinc Oxide |
| Serious Eye Damage / Eye Irritation | 50 µL bulk volume, 90 min exposure, 18 hr observation on human cornea tissue | | Not irritating | Zinc Oxide |
| Respiratory or Skin Sensitization | Data not available | | | |
| Germ Cell Mutagenicity | Data not available | | | |
| Carcinogenicity | NTP | Not listed | | |
| | IARC | Not listed | | |
| | OSHA | Not listed | | |
| Reproductive Toxicity | Data not available | | | |
| STOT -- Single Exposure | Data not available | | | |
| STOT – Repeated Exposure | Data not available | | | |
| Aspiration Hazard | Data not available | | | |

STOT = Specific Target Organ Toxicity

Section 12: Ecological Information

| | | Chemical Constituent |
|--------------------------------|---|----------------------|
| Toxicity: | LC50 Danio rerio (Zebrafish) = 3.31 mg/L, 96hr. LC50 Daphnia magna (water flea) = 1.55 mg/L, 48hr. | Zinc Oxide |
| Persistence and degradability: | No information is available. | Zinc Oxide |
| Bioaccumulative potential | No information is available. | |
| Mobility in soil: | No information is available. | |
| PBT and vPvB assessment: | PBT/vPvB assessment not available as chemical assessment not required/not conducted | |
| Other adverse effects: | No information is available. | |



Section 13: Disposal Considerations

Waste from residues/unused products: Follow the waste disposal requirements of your country, state, or local authorities.

Contaminated packaging: Contaminated packaging material should be disposed of as stated above for residues and unused product.

Rinsate: Do not dispose of rinse water containing product in a sanitary sewer system or stormwater drainage system.

Section 14: Transport Information

| | |
|---|---------------|
| <u>DOT TRANSPORT:</u> | Not Regulated |
| <u>ADR = International Carriage of Dangerous Goods by Road</u> | Not Regulated |
| <u>SEA TRANSPORT:</u> | IMDG |
| <u>AIR TRANSPORT:</u> | IATA/ICAO |

Section 15: Regulatory Information

TOXIC SUBSTANCE CONTROL ACT (TSCA) STATUS:

This product is in compliance with rules, regulations, and orders of TSCA. All components are either listed on the TSCA inventory or are considered exempt.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III SECTION 313 SUPPLIER NOTIFICATION:

This regulation requires submission of annual reports of toxic chemical(s) that appear in section 313 of the Emergency Planning and Community Right To Know Act of 1986 and 40 CFR 372. This information must be included in all SDS's that are copied and distributed for the material.

The Section 313 toxic chemicals contained in this product are: None

CALIFORNIA PROPOSITION 65:

This regulation requires a warning for California Proposition 65 chemical(s) under the statute.

The California proposition 65 chemical(s) contained in this product are: None

STATE RIGHT-TO-KNOW TOXIC SUBSTANCE OR HAZARDOUS SUBSTANCE LIST:

| | |
|---|------------|
| Massachusetts's hazardous substance(s): | Zinc Oxide |
| Pennsylvania | Zinc Oxide |
| New Jersey | Zinc Oxide |

CANADA:

WHMIS-2015: This SDS is in compliance with WHMIS 2015 (HPR / new HPA).

EUROPEAN UNION:

This product has been reviewed for compliance with the following European Community Directives: REACH 1907/2006; Regulation (EC) No 1272/2008 on classification, labeling, and packaging (CLP) of substances and mixtures.

Section 16: Other Information

| | |
|----------------------|--|
| Initial issue date: | December 5, 2016 |
| Final revision date: | April 20, 2021 |
| Revision Number: | 1 |
| Revision explanation | Updated Address |
| Information Sources: | RTECS, ECHA, REACH, OSHA 29CFR 1910.1200 |

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