Pfaltz & Bauer
RARE AND FINE CHEMICALS
www.pfaltzandbauer.com

# SAFETY DATA SHEET

## SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

| | |
|---|---|
| Product Name: | Zinc sulfide phosphorescent doped with W & Mo |
| Product Code: | Z01101 |
| Supplier: | Pfaltz & Bauer, Inc.<br>172 E. Aurora Street<br>Waterbury, CT 06708 USA |
| Phone: | 203-574-0075 |
| FAX: | 203-574-3181 |
| Emergency Phone: | INFOTRAC, US: 1-800-535-5053<br>INFOTRAC, INTERNATIONAL: +1-352-323-3500 |

## SECTION 2: HAZARDS IDENTIFICATION

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|---|---|
| Statement of Hazard: | Irritant, Respiratory irritant |
| Acute Health Hazard: | Irritant to eyes, skin, mucous membranes and respiratory system.<br>May be harmful by ingestion, skin absorption and inhalation. |
| Chronic Health Hazard: | Not Available |
| HMIS Rating: | H: 0 F: 0 P: 0 |
| NFPA Rating: | H: 1 F: 0 R: 0 |

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

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

Acute toxicity, dermal (Category 4), H312
Acute toxicity, inhalation (Category 4), H332
Acute toxicity, oral (Category 4), H302
Serious eye damage/eye irritation (Category 2A), H319
Skin corrosion/irritation (Category 2), H315
Specific target organ toxicity, single exposure; Respiratory tract irritation (Category 3), H335

Pictogram:

| | |
|---|---|
| Signal Word: | Warning |
| Hazard Statement(s): | H302 Harmful if swallowed.<br>H312 Harmful in contact with skin.<br>H315 Causes skin irritation.<br>H319 Causes serious eye irritation.<br>H332 Harmful if inhaled.<br>H335 May cause respiratory irritation. |
| Precautionary Statement(s): | P261 Avoid breathing dust/fume/gas/mist/vapors/spray.<br>P280 Wear protective gloves/protective clothing/eye protection/face protection.<br>P301+P312 IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.<br>P302+P352 IF ON SKIN: wash with plenty of soap and water.<br>P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P332+P313 IF SKIN irritation occurs: Get medical advice/attention. |

## SECTION 3: COMPOSITION/INFORMATION on INGREDIENTS

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|---|---|
| Chemical Name: | Zinc sulfide phosphorescent doped with W & Mo |
| CAS Number: | 68611-70-1 |
| MDL Number: | MFCD00011301 |
| EINECS Number: | 215-251-3 |
| Beilstein Registry Number: | Not Available |
| Molecular Formula: | ZnS/W/Mo |
| Molecular Weight: | 97.46 |
| Content: | As specified in product name. |

## SECTION 4: FIRST AID MEASURES

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|---|---|
| Eye Contact: | Flush eyes with large amounts of water for fifteen minutes. Separate eyelids with fingers. If irritation persists, seek medical attention. |
| Skin Contact: | Wash skin with soap and water. If irritation persists, seek medical attention. |
| Ingestion: | Do not induce vomiting. Seek medical attention. |
| Inhalation: | Move to a fresh air environment. Contact a physician if breathing becomes difficult. |

## SECTION 5: FIRE FIGHTING MEASURES

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|---|---|
| Flash Point (ºC): | Not Available |
| Explosion Limits: | Not Available |
| Auto Ignition Temperature (ºC): | Not Available |
| Extinguishing Media: | Carbon dioxide, dry chemical powder, alcohol-resistant foam, or water spray |
| Protective Equipment: | Wear self-contained respirator and fully protective impervious suit. |
| Specific Hazards: | May emit hazardous fumes under fire conditions. |

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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|---|---|
| Personal Protection: | Wear a self-contained breathing apparatus, rubber boots and gloves, and disposable coveralls. Dispose of coveralls after use. Remove from ignition sources if safe to do so. Follow emergency response plan and contact proper authorities if needed.<br>Keep unprotected persons away. |
| Environmental Protection: | Keep spills out of sewers and bodies of water. Dike and contain the spill with inert material. Absorb on sand, vermiculite or diatomite. Transfer material to a container for disposal or recovery. Ventilate area and wash spill site after material pickup is complete. |

## SECTION 7: HANDLING and STORAGE

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|---|---|
| Handling and Storage: | Avoid breathing dust, vapor, mist or gas. Avoid contact with skin and eyes. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Open and handle container with care. Keep ignition sources away.<br>Store in a tightly closed container in a dry, well-ventilated place. |
| Sensitivities: | Not Available |
| Storage Temperature (ºC): | 15 to 30 |

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use product in a well ventilated area or under a fume hood. Use proper lab equipment while handling this product. Keep away from incompatible materials for possible risk of hazardous reaction.

Eye Protection: Wear appropriate protective eyeglass or chemical safety goggles. Make sure that there is an eyewash station in your vicinity.

Skin Protection: Wear impervious gloves and protective clothing.

Respiratory Protection: Use a NIOSH approved respirator when exposure limits are exceeded or if irritation or other symptoms are experienced.

Exposure Limits:

| Country | Source | Type | Value |
|---|---|---|---|
| USA | ACGIH | TWA | Not Available |
| USA | OSHA | STEL | Not Available |
| USA | OSHA | PEL | Not Available |

## SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

Appearance: Beige powder

Odor: Not Available

Odor Threshold: Not Available

Flash Point (ºC): Not Available

Auto Ignition Temperature (ºC): Not Available

UEL % by Volume: Not Available

LEL % by Volume: Not Available

Melting Point (ºC): Not Available

Boiling Point (ºC): Not Available

Evaporation Rate: Not Available

pH Value: Not Available

Density (g/cm³): 4.1

| | |
|---|---|
| Refractive Index ($n^{20}_D$): | Not Available |
| Viscosity: | Not Available |
| Solubility in Water: | Not Available |
| Solubility in Other: | Not Available |
| Vapor Pressure (mmHg): | Not Available |
| Vapor Density (Air=1): | Not Available |

## SECTION 10: STABILITY and REACTIVITY

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|---|---|
| Stability: | Stable under normal temperatures and pressures. |
| Incompatibility: | Strong oxidizing agents. |
| Reactivity: | Product may react with incompatible materials to release other hazardous substances. |
| Conditions to Avoid: | Heat, flame, sparks, other ignition sources. |
| Hazardous Decomposition Products: | Molybdenum oxides, Sulfur oxides, Tungsten oxides, Zinc oxides |

## SECTION 11: TOXICOLOGICAL INFORMATION

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|---|---|
| RTECS Reference: | ZH5400000 |
| Target Organs: | Not Available |
| Toxicity Data: | Oral Rat $LD_{50}$ mg/kg: 2000.00 |
| Carcinogenicity: | National Toxicology Program (NTP) listed: Not Available<br><br>International Agency for Research on Cancer (IARC) listed: Not Available |
| Potential Symptoms: | Not Available |

## SECTION 12: ECOLOGICAL INFORMATION

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|---|---|
| Toxicity: | Not Available |

## SECTION 13: DISPOSAL CONSIDERATIONS

Contact a licensed professional waste disposal service. Dispose in a manner consistent with federal, state and local environmental regulations.

## SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name: Not D.O.T.-Regulated

IMDG Shipping Name: Not Regulated

Marine Pollutant: No

IATA Shipping Name: Not Regulated

## SECTION 15: REGULATORY INFORMATION

United States

Toxic Substance Control Act (TSCA) listed: Yes

Superfund Amendments and Reauthorization Act (SARA 302) listed: No

Superfund Amendments and Reauthorization Act (SARA 311/312) listed: No

Superfund Amendments and Reauthorization Act (SARA 313) listed: No

European Union

European Inventory of Existing Chemical Substances (EINECS): 215-251-3

Canada

Canadian Domestic Substances List (DSL) listed: Yes

Canadian Non-Domestic Substances List (NDSL) listed: No

## SECTION 16: OTHER INFORMATION

Date Prepared: 10/1/2018

The information above is presented in good faith. It is believed to be accurate and represents the best information currently available to us. However, we make no warranty with respect to such information and we assume no liability resulting from its use. The user should consider this information as a supplement to other information that may be available and make independent judgement to ensure proper use to protect the health and safety of employees and the environment. Pfaltz and Bauer shall not be held liable for any damage resulting from handling or from contact with the above product.