Remington Arms

Material Safety Data Sheet

This Material Safety Data Sheet has been prepared in compliance with Federal OSHA Hazard Communication Standard 29 CFR 1910.1200, ANSI Z400.1-1993 and the ISO Safety Data Sheet Standard. This product may be considered to be a hazardous chemical under 29 CFR 1910.1200. This information is required to be disclosed for safety in the workplace. This MSDS is applicable only to the product identified herein and only when used properly.

NOTE: Refer to Section XVII for List of Acronyms.

I. PRODUCT IDENTIFICATION

Product: Tungsten-Bronze-Iron Pellets (Wingmaster HD™)

HMIS Rating
- Health: 1
- Flammability: 0
- Reactivity: 0

IN EVENT OF EMERGENCY
(Spill, Leak, Fire, Exposure, Accident)
CALL CHEMTREC DAY OR NIGHT
(800) 424-9300
In Arlington, VA 741-5000
Outside Continental U.S.A. (703) 741-5000

II. HAZARDOUS COMPONENT INFORMATION

Tungsten Bronze Iron Pellets consist of a sintered composite of tungsten, bronze and iron. The bronze is an alloy of copper and tin (90% Copper/10% Tin by weight). The percent by weight of the hazardous are listed in the table below.

<table>
<thead>
<tr>
<th>Hazardous Ingredients</th>
<th>Percent by Weight</th>
<th>CAS Number</th>
<th>Exposure Limits (PEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>41-44%</td>
<td>7440-50-8</td>
<td>TWA (dust) 1.0 mg/m³</td>
</tr>
<tr>
<td>Iron</td>
<td>0-2%</td>
<td>7440-39-3</td>
<td>TWA 0.5 mg/m³</td>
</tr>
<tr>
<td>Tungsten</td>
<td>50-55%</td>
<td>7440-3-7/7440-33-7</td>
<td>TWA 5 mg/m³ (TLV)</td>
</tr>
<tr>
<td>Tin</td>
<td>4-6%</td>
<td>7440-31-5</td>
<td>TWA 2 mg/m³</td>
</tr>
</tbody>
</table>

III. HAZARDS IDENTIFICATION

Potential Human Health Effects:
- Skin Contact: May cause irritation in susceptible individuals.
- Eye Contact: Dust and fumes can irritate the eyes causing redness and discharge.
- Inhalation: None
- Ingestion/Absorption: None

Carcinogenicity Information: This product is not classified a carcinogen by IARC, OSHA, NTP or EPA.
IV. FIRST AID MEASURES

Skin Contact: Wash affected area thoroughly with soap and water. Remove contaminated clothing. Wash clothing thoroughly prior to reuse. Discard any contaminated leather items (i.e. shoes, etc.).

Eye Contact: If wearing contacts, immediately remove contact lenses. Hold eyelids apart and flush eyes thoroughly with water for at least 15 minutes. Obtain medical attention immediately.

Inhalation: N/A

Ingestion/Absorption: N/A

V. FIRE HAZARDS

Flammable Properties: Large accumulations of dust could result in a flammable dust/air mixture.

Extinguishing Media: N/A

VI. ACCIDENTAL RELEASE MEASURES

Safeguards: None Required

Spill Cleanup: If disposal is necessary, refer to XIII. DISPOSAL CONSIDERATIONS.

Accidental Release: See above.

VII. HANDLING AND STORAGE

Personnel Handling: High density of material provides surprisingly large weights for small unit volumes. Take care in handling shipping containers. Use appropriate equipment to move material to ensure personnel safety. Avoid generating dust.

Storage: Store in original containers. This product is recommend to not be stored with acids, strong oxidizers or caustics.

VIII. PERSONAL PROTECTION/EXPOSURE CONTROLS

Engineering Controls: Local exhaust ventilation is recommended if significant dusting occurs. Otherwise, use general exhaust ventilation.

Personal Protective Equipment: Safety glasses and shoes recommended when handling shipping containers. Use of a NIOSH/MSHA-approved respirator is recommended when concentrations to fumes and/or dust exceed the PEL or TLV.

Exposure Guidelines: None

Exposure Limits: Exposure limits listed with each hazardous chemical.
IX. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Solid</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Color</td>
<td>Gray/Bronze</td>
</tr>
<tr>
<td>Melting Point</td>
<td>850°C for the composite Bronze</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>2900°C</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>11-12 gram/cc</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N/A</td>
</tr>
</tbody>
</table>

X. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal use conditions. Will not react with water.

Other Hazards:
- Incompatibility: Fluorine attaches tungsten.
- Polymerization: N/A
- Conditions to Avoid: None

XI. TOXICOLOGICAL INFORMATION

Oral LD 50: No available data. Iron powder >5g/kg (rat)
Dermal LD 50: No available data.
Inhalation LC 50: No available data.
Irritation: Not a skin or eye irritant unless specific allergy exists. Mild irritant in powder form.

XII. ECOLOGICAL INFORMATION

Aquatic Toxicity:
Meets minimum requirements for nontoxic shot per United States Fish & Wildlife Service standards/

Environmental Impact:
There is no known environmental impact.

XIII. DISPOSAL CONSIDERATIONS

Recycle back to supplier

XIV. TRANSPORTATION INFORMATION

SHIPPING INFORMATION

- Proper Shipping Name: Tungsten-Bronze-Iron Pellets
- Hazard Class: N/A
- UN/NA No: N/A
- Packing Group: N/A
- Shipping Label: None required.
- Special Information: N/A
XV. REGULATORY INFORMATION

Section 313 Supplier Notification: this product contains the following chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372): None

In addition to the ingredients listed in Section 2, this product contains the following chemicals considered by the State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as causing cancer or reproductive toxicity and for which warnings are now required: None

The Comprehensive Environmental Response, Compensation, and Liability Act of 1990, Sec102 (40 CFR 302) requires that any “release” into the “environment” of these hazardous substances contained in a product in excess of the “reportable quantity” in any 24-hour period must be immediately reported to the National Response Center (800-424-8802). Reporting is not required under certain circumstances such as a federally permitted release or the release of certain metal solid particles with a diameter larger than 100 micrometers: Not Required

If this product is discarded as a waste, it would be identified with the following hazardous waste classification under the Resource Conservation and Recovery Act (40 CFR 261). The act specifies requirements for the management and disposal of hazardous wastes: None

Components on Canadian “Ingredient Disclosure List”: Not Available

TSCA (Toxic Substances Control Act): Components of this product listed on the TSCA Inventory are: None

XVI. OTHER INFORMATION

NFPA Rating: Not established.

HAZARD CLASSIFICATION

Chronic Health: None
Acute Health: None.
Fire Hazard: 0 (per HMIS Rating)
Pressure Hazard: None.
Reactivity Hazard: 0 (per HMIS Rating)

NPCA-HMIS Ratings:

Health: 1
Flammability: 0
Reactivity: 0

References:


American National Standards Institute, Z400.1-1993

International Standards Organization Safety Data Sheet Standard.
XVII. LIST OF ACRONYMS

ACGIH    American Conference of Governmental Industrial Hygienists
AIHA WEEL American Industrial Hygiene Association-Workplace Environmental Exposure Level
ANSI    American National Standard Institute
BEI    Biological Exposure Indexes
CAS    Chemical Abstract Service
CFR    Code of Federal Regulations
CL    Ceiling Limit (must not be exceeded)
DSL    Domestic Substances List
EPA    Environmental Protection Agency
HMIS    Hazardous Materials Identification System
IARC    International Agency for Research on Cancer
IATA    International Air Transport Association
ICAO    International Civil Aviation Organization
ISO    International Standards Organization
LC    Lethal Concentration
LD    Lethal Dose
MITI   Ministry of International Trade and Industry (Japan)
MSHA   Mine Safety and Health Appliance
NFPA   National Fire Protection Association
NIOSH  National Institute for Occupational Safety and Health
NTA    National Transportation Agency (Canada)
NTP    National Toxicology Program
OSHA   Occupational Safety and Health Administration
ORM    Other Regulated Materials
PEL    Permissible Exposure Limit (OSHA)
SCBA   Self-contained Breathing Apparatus
STEL   Short-Term Exposure Limit
TLV    Threshold Limit Values (ACGIH)
TSCA   Toxic Substances Control Act
TWA    Time Weighted Average
UN/NA  United Nations/North American (Identification number)
SARA   Superfund Amendments and Reauthorization Act
RCRA   Resource Conservation and Recovery Act

For additional information, please contact:

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P.O. Box 700
870 Remington Road
Madison, NC 27025-0700

(800) 243-9700

The information contained in this Material Safety Data Sheet is provided to all individuals who are or will be exposed to this product through use, handling, storage or transport. Remington believes, yet makes no warranty, that all information contained in this document is current as of the date of publication.