Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name · Component Empty Shellcases (Unprimed) (Shotshell)
Synonyms · Shotshell Empty Unprimed Shells
SDS Number/Grade · SSMTCASE

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s) · Handloading/Reloading

1.3 Details of the supplier of the safety data sheet

Manufacturer · Remington Arms
2592 AR HWY 15 N
Lonoke, AR 72086
United States
www.remington.com
Telephone (General) · 501-676-3161

1.4 Emergency telephone number

Manufacturer · (800) 424-9300 - CHEMTREC
Manufacturer · 501-676-3161 - Company Emergency Telephone Number

Section 2: Hazards Identification

EU/EEC

2.1 Classification of the substance or mixture

CLP · Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation - H335

2.2 Label Elements

CLP

WARNING

Hazard statements · H335 - May cause respiratory irritation
Precautionary statements

Prevention • P261 - Avoid breathing dust/fume.
        • P271 - Use only outdoors or in a well-ventilated area.

Response • P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
        • P312 - Call a POISON CENTER or doctor/physician if you feel unwell.

Storage/Disposal • P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
            • P405 - Store locked up.
            • P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other Hazards

CLP • May form combustible dust concentrations in air.
     • Heating above the melting point releases metallic oxides which may cause metal fume fever by inhalation. The symptoms are shivering, fever, malaise and muscular pain. According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

United States (US)
According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
                Combustible Dust
                Hazards Not Otherwise Classified - Health Hazards - Metal Fume Fever

2.2 Label elements

OSHA HCS 2012

WARNING

Hazard statements • May cause respiratory irritation
                   • May form combustible dust concentrations in air.

Precautionary statements

Prevention • Avoid breathing dust/fume.
            • Use only outdoors or in a well-ventilated area.

Response • IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
          • Call a POISON CENTER or doctor/physician if you feel unwell.

Storage/Disposal • Store in a well-ventilated place. Keep container tightly closed.
                  • Store locked up.
                  • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

OSHA HCS 2012 • Heating above the melting point releases metallic oxides which may cause metal fume fever by inhalation. The symptoms are shivering, fever, malaise and muscular pain. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients

Preparation Date: 10/August/2007
Revision Date: 25/November/2015
Format: EU CLP/REACH Language: English (US)
3.1 Substances

- Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

3.2 Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identifiers</th>
<th>%</th>
<th>LD50/LC50</th>
<th>Classifications According to Regulation/Directive</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron oxide</td>
<td>CAS: 1309-37-1, EC Number: 215-168-2</td>
<td>0% TO 53%</td>
<td>NDA</td>
<td>EU CLP: Not Classified, OSHA HCS 2012: Not Classified</td>
<td>NDA</td>
</tr>
<tr>
<td>Copper</td>
<td>CAS: 7440-50-8, EC Number: 231-159-6</td>
<td>0.4% TO 40%</td>
<td>NDA</td>
<td>EU CLP: STOT SE 3: Resp. Irrit., H335, OSHA HCS 2012: Comb. Dust, STOT SE 3: Resp. Irrit.</td>
<td>NDA</td>
</tr>
<tr>
<td>Zinc</td>
<td>CAS: 7440-66-6, EC Number: 231-175-3</td>
<td>0.17% TO 18%</td>
<td>NDA</td>
<td>EU CLP: Not Classified, OSHA HCS 2012: Comb. Dust; HNOC Health: Metal fume fever</td>
<td>NDA</td>
</tr>
<tr>
<td>Polyethylene</td>
<td>NDA</td>
<td>N/A</td>
<td>NDA</td>
<td>EU CLP: Not Classified, OSHA HCS 2012: Not Classified</td>
<td>NDA</td>
</tr>
</tbody>
</table>

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation
- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If signs/symptoms develop, move person to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin
- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. Wash skin with soap and water. If signs/symptoms develop, get medical attention.

Eye
- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. Remove contact lenses if worn. Flush eyes with water for at least 15 minutes. If signs/symptoms develop, get medical attention.

Ingestion
- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. Give plenty of water to drink. Induce vomiting (only in conscious persons) Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician
- No specific actions or treatments recommended related to exposure to this material.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media
- Water, carbon dioxide, dry chemical, earth.

Unsuitable Extinguishing Media
- No data available.
5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards
- Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Hazardous Combustion Products
- No data available

5.3 Advice for firefighters
- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection. Evacuate area. Flood fire with water to fight fire and cool shells. If no water is available, use carbon dioxide, dry chemical or earth. Fight fire with normal precautions from a reasonable distance.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions
- Do not walk through spilled material. Do not strike or crush the rounds.

Emergency Procedures
- Eliminate all ignition sources. Use normal clean up procedures. Contain spill and monitor for excessive dust accumulation. Avoid unnecessary personnel and equipment traffic in the spill area.

6.2 Environmental precautions
- No special environmental precautions necessary.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures
- Avoid generating dust. Use clean nonsparking tools to collect material. Carefully shovel or sweep up spilled material and place in suitable container. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

6.4 Reference to other sections
- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling
- Do not use in areas without adequate ventilation. Handle with care. Do not strike or crush the rounds (cartridges). Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Use personal protective equipment as required. Avoid breathing dust or fume. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

7.2 Conditions for safe storage, including any incompatibilities

Storage
- Keep only in the original container. Store in a cool, dry, well-ventilated place. Keep away from sources of ignition – No Smoking. Do not subject to mechanical shock. Keep out of reach of children. This product must not be stored with acids, strong oxidizers or caustics.

7.3 Specific end use(s)
- Refer to Section 1.2 - Relevant identified uses.
### Section 8 - Exposure Controls/Personal Protection

#### 8.1 Control parameters

<table>
<thead>
<tr>
<th></th>
<th>Exposure Limits/Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Result</td>
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<tr>
<td>Iron oxide (1309-37-1)</td>
<td>TWAs</td>
</tr>
<tr>
<td>Zinc (7440-66-6)</td>
<td>Ceilings</td>
</tr>
<tr>
<td>Copper (7440-50-8)</td>
<td>MAKs</td>
</tr>
<tr>
<td>Copper (7440-50-8)</td>
<td>TWAs</td>
</tr>
<tr>
<td>Copper (7440-50-8)</td>
<td>Ceilings</td>
</tr>
<tr>
<td>Copper (7440-50-8)</td>
<td>MAKs</td>
</tr>
</tbody>
</table>

**Exposure Control Notations**

**ACGIH**
- Iron oxide (1309-37-1): **Carcinogens**: (A4 - Not Classifiable as a Human Carcinogen)

**Germany DFG**
- Copper (7440-50-8): **Pregnancy**: (no risk to embryo/fetus if exposure limits adhered to)
- Zinc (7440-66-6): **Pregnancy**: (no risk to embryo/fetus if exposure limits adhered to (respirable fraction); no risk to embryo/fetus if exposure limits adhered to (inhalable fraction))
- Iron oxide (1309-37-1): **Carcinogens**: (Category 3B (could be carcinogenic for man, with the exception of non-bioavailable ferrous oxides))

**Exposure Limits Supplemental**

**ACGIH**
- Copper (7440-50-8): **TLV Basis - Critical Effects**: (metal fume fever (fume))
- Copper as Copper compounds: **TLV Basis - Critical Effects**: (gastrointestinal (dust and mist); irritation (dust and mist))

#### 8.2 Exposure controls

**Engineering Measures/Controls**
- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Personal Protective Equipment**

**Respiratory**
- Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

**Eye/Face**
- Wear safety glasses.
Skin/Body
- Wear protective clothing

Environmental Exposure Controls
- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Additional Protection Measures
- Hearing protection recommended when firing rounds.

Key to abbreviations
- ACGIH = American Conference of Governmental Industrial Hygiene
- MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration
- NIOSH = National Institute of Occupational Safety and Health
- OSHA = Occupational Safety and Health Administration
- TLV = Threshold Limit Value determined by the American Conference of Governmental Industrial Hygienists (ACGIH)
- TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

<table>
<thead>
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<th>Physical Description</th>
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<th>Appearance/Description</th>
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<td>Color</td>
<td>Various</td>
<td>Odor</td>
<td>No odor.</td>
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<td>Odor Threshold</td>
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<table>
<thead>
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<th>General Properties</th>
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<th>100 to 400 C(212 to 752 F)</th>
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<tr>
<td>Boiling Point</td>
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<td>pH</td>
<td>Data lacking</td>
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<td>Decomposition Temperature</td>
<td>Data lacking</td>
<td>Water Solubility</td>
<td>Negligible &lt; 0.1 %</td>
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<tr>
<td>Specific Gravity/Relative Density</td>
<td>Data lacking</td>
<td>Explosive Properties</td>
<td>Data lacking</td>
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<td>Viscosity</td>
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<td></td>
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<tr>
<td>Oxidizing Properties:</td>
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<table>
<thead>
<tr>
<th>Volatility</th>
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<th>Vapor Density</th>
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</thead>
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<tr>
<td>Evaporation Rate</td>
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<td></td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Flammability</th>
<th>Data lacking</th>
<th>UEL</th>
<th>Data lacking</th>
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</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>121 C(249.8 F)</td>
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<td></td>
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<tr>
<td>LEL</td>
<td>Data lacking</td>
<td>Autoignition</td>
<td>Data lacking</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Data lacking</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental</th>
<th>Data lacking</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Octanol/Water Partition coefficient</td>
<td>Data lacking</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9.2 Other Information
- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity
- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability
- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions
- Hazardous polymerization will not occur.
10.4 Conditions to avoid

- Flames, sparks, percussion, shock, static, high temperatures (266°F or 130°C, or above)

10.5 Incompatible materials

- Acids, strong oxidizers, caustics

10.6 Hazardous decomposition products

- No data available.

---

### Section 11 - Toxicological Information

#### 11.1 Information on toxicological effects

<table>
<thead>
<tr>
<th>Components</th>
<th>Acute Toxicity</th>
<th>Reproductive</th>
<th>Multi-dose Toxicity</th>
<th>Tumorigen / Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (0.4% TO 40%)</td>
<td>Ingestion/Oral-Mouse TDL0 • 108 mg/kg; Behavioral: Tremor; Gastrointestinal: Hypermotility, diarrhea; Gastrointestinal: Nausea or vomiting; Ingestion/Oral-Mouse TDL0 • 158 mg/kg; Kidney, Ureter, and Bladder: Changes in tubules (including acute renal failure, acute tubular necrosis); Ingestion/Oral-Mouse TDL0 • 232 mg/kg; Kidney, Ureter, and Bladder: Changes primarily in glomeruli; Blood: Changes in spleen; Blood: Changes in serum composition (e.g., TP, bilirubin cholesterol); Multi-dose Toxicity: Ingestion/Oral-Rabbit TDL0 • 3 g/kg 60 Day(s)-Continuous; Cardiac: Other changes; Liver: Hepatitis (hepatocellular necrosis), zonal; Related to Chronic Data: Death in the Other Multiple Dose data type field; Reproductive: Ingestion/Oral-Rat TDL0 • 1520 µg/kg (22W pre); Reproductive Effects: Specific Developmental Abnormalities: Musculoskeletal system; Ingestion/Oral-Rat TDL0 • 152 mg/kg (22W pre); Reproductive Effects: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects: Specific Developmental Abnormalities: Central nervous system; Ingestion/Oral-Rat TDL0 • 1210 µg/kg (35W pre); Reproductive Effects: Effects on Fertility: Pre-implantation mortality; Reproductive Effects: Effects on Fertility: Post-implantation mortality; Tumorigen / Carcinogen: Ingestion/Oral-Mouse TDL0 • 10.08 mg/kg 12 Week(s)-Continuous; Tumorigenic: Carcinogenic by RTECS criteria: Lungs, Thorax, or Respiration: Other changes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc (0.17% TO 18%)</td>
<td>Ingestion/Oral-Mouse TDL0 • 12.6 mg/kg 46 Week(s)-Continuous; Tumorigenic: Carcinogenic by RTECS criteria: Gastrointestinal: Tumors; Tumorigenic: Facilitates action of known carcinogen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron oxide (0% TO 53%)</td>
<td>Ingestion/Oral-Mouse TDL0 • 12.6 mg/kg 46 Week(s)-Continuous; Tumorigenic: Carcinogenic by RTECS criteria: Gastrointestinal: Tumors; Tumorigenic: Facilitates action of known carcinogen</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

### GHS Properties

<table>
<thead>
<tr>
<th>GHS Properties</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory sensitization</td>
<td>EU/CLP: Data lacking; OSHA HCS 2012: Data lacking</td>
</tr>
<tr>
<td>Serious eye damage/Irritation</td>
<td>EU/CLP: Data lacking; OSHA HCS 2012: Data lacking</td>
</tr>
<tr>
<td>Acute toxicity</td>
<td>EU/CLP: Data lacking; OSHA HCS 2012: Data lacking</td>
</tr>
<tr>
<td>Aspiration Hazard</td>
<td>EU/CLP: Data lacking; OSHA HCS 2012: Data lacking</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>EU/CLP: Data lacking; OSHA HCS 2012: Data lacking</td>
</tr>
</tbody>
</table>
### Potential Health Effects

**Inhalation**
- **Acute (Immediate)**
  - Inhalation of dust or fumes may cause irritation to nose, throat, upper respiratory tract and lungs. Irritation may lead to bronchitis, headache, lowering of blood pressure and weakness.
- **Chronic (Delayed)**
  - No data available

**Skin**
- **Acute (Immediate)**
  - No data available
- **Chronic (Delayed)**
  - No data available

**Eye**
- **Acute (Immediate)**
  - Dust and fumes can irritate the eyes causing redness and discharge.
- **Chronic (Delayed)**
  - No data available

**Ingestion**
- **Acute (Immediate)**
  - Ingestion may cause severe headache, nausea, vomiting, abdominal pain, fatigue, diarrhea, trembling, ringing in ear and salivation.
- **Chronic (Delayed)**
  - No data available

**Other**
- **Chronic (Delayed)**
  - When the ammunition is fired, a small amount of particles may be generated. The particles may contain trace amounts of these harmful substances. Inhalation of high concentrations of metallic copper dusts or fumes may cause nasal irritation and/or nausea, vomiting and stomach pain.

**11.2 Other information**

- Heating above the melting point releases metallic oxides which may cause metal fume fever by inhalation. The symptoms are shivering, fever, malaise and muscular pain.

### Key to abbreviations

TC = Toxic Concentration
TD = Toxic Dose

### Section 12 - Ecological Information

**12.1 Toxicity**

- Material data lacking.
12.2 Persistence and degradability
   • Material data lacking.

12.3 Bioaccumulative potential
   • Material data lacking.

12.4 Mobility in Soil
   • Material data lacking.

12.5 Results of PBT and vPvB assessment
   • PBT and vPvB assessment has not been conducted for this material.

12.6 Other adverse effects
   • No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods
Product waste
   • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste
   • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>14.1 UN number</th>
<th>14.2 UN proper shipping name</th>
<th>14.3 Transport hazard class(es)</th>
<th>14.4 Packing group</th>
<th>14.5 Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
</tr>
<tr>
<td>TDG</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
</tr>
<tr>
<td>IMO/IMDG</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
</tr>
<tr>
<td>IATA/ICAO</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
</tr>
</tbody>
</table>

14.6 Special precautions for user
   • None known.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
   • Not relevant.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications
   • Acute, Pressure(Sudden Release of)
<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>EU EINECS</th>
<th>EU ELNICS</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>7440-50-8</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>1309-37-1</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Zinc</td>
<td>7440-66-6</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Europe**

**Other**

**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification**
- Copper: 7440-50-8 Not Listed
- Iron oxide: 1309-37-1 Not Listed
- Zinc: 7440-66-6 Not Listed

**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits**
- Copper: 7440-50-8 Not Listed
- Iron oxide: 1309-37-1 Not Listed
- Zinc: 7440-66-6 Not Listed

**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling**
- Copper: 7440-50-8 Not Listed
- Iron oxide: 1309-37-1 Not Listed
- Zinc: 7440-66-6 Not Listed

**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations**
- Copper: 7440-50-8 Not Listed
- Iron oxide: 1309-37-1 Not Listed
- Zinc: 7440-66-6 Not Listed

**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases**
- Copper: 7440-50-8 Not Listed
- Iron oxide: 1309-37-1 Not Listed
- Zinc: 7440-66-6 Not Listed

**United States**

**Labor**

**U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**
- Copper: 7440-50-8 Not Listed
- Iron oxide: 1309-37-1 Not Listed
- Zinc: 7440-66-6 Not Listed

**U.S. - OSHA - Specifically Regulated Chemicals**
- Copper: 7440-50-8 Not Listed
- Iron oxide: 1309-37-1 Not Listed
- Zinc: 7440-66-6 Not Listed

**Environment**

**U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants**
- Copper: 7440-50-8 Not Listed
- Iron oxide: 1309-37-1 Not Listed
- Zinc: 7440-66-6 Not Listed

**U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities**
- **Copper**
  - 7440-50-8
  - 5000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 2270 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)

- **Iron oxide**
  - 1309-37-1
  - Not Listed
  - 454 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 1000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)

- **Zinc**
  - 7440-66-6
  - Not Listed

### U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>RQ</th>
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<tr>
<td>Copper</td>
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<td>Not Listed</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>1309-37-1</td>
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</tr>
<tr>
<td>Zinc</td>
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</tbody>
</table>

### U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>7440-50-8</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>1309-37-1</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Zinc</td>
<td>7440-66-6</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

### U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>7440-50-8</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>1309-37-1</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Zinc</td>
<td>7440-66-6</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

### U.S. - CERCLA/SARA - Section 313 - Emission Reporting

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>7440-50-8</td>
<td>1.0 % de minimis concentration</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>1309-37-1</td>
<td>1.0 % de minimis concentration (dust or fume only)</td>
</tr>
<tr>
<td>Zinc</td>
<td>7440-66-6</td>
<td></td>
</tr>
</tbody>
</table>

### U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>7440-50-8</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>1309-37-1</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Zinc</td>
<td>7440-66-6</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

### U.S. - RCRA (Resource Conservation & Recovery Act) - Constituents for Detection Monitoring

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>7440-50-8</td>
<td>(total)</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>1309-37-1</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Zinc</td>
<td>7440-66-6</td>
<td>(total)</td>
</tr>
</tbody>
</table>
### United States - California

#### Environment

**U.S. - California - Proposition 65 - Carcinogens List**
- Copper: 7440-50-8 (total)
- Iron oxide: 1309-37-1 Not Listed
- Zinc: 7440-66-6

**U.S. - California - Proposition 65 - Developmental Toxicity**
- Copper: 7440-50-8 Not Listed
- Iron oxide: 1309-37-1 Not Listed
- Zinc: 7440-66-6 Not Listed

**U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)**
- Copper: 7440-50-8 Not Listed
- Iron oxide: 1309-37-1 Not Listed
- Zinc: 7440-66-6 Not Listed

**U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)**
- Copper: 7440-50-8 Not Listed
- Iron oxide: 1309-37-1 Not Listed
- Zinc: 7440-66-6 Not Listed

**U.S. - California - Proposition 65 - Reproductive Toxicity - Female**
- Copper: 7440-50-8 Not Listed
- Iron oxide: 1309-37-1 Not Listed
- Zinc: 7440-66-6 Not Listed

**U.S. - California - Proposition 65 - Reproductive Toxicity - Male**
- Copper: 7440-50-8 Not Listed
- Iron oxide: 1309-37-1 Not Listed
- Zinc: 7440-66-6 Not Listed

### United States - Pennsylvania

#### Labor

**U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**
- Copper: 7440-50-8 (dust and fume)
- Iron oxide: 1309-37-1 Not Listed
- Zinc: 7440-66-6
U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

- Copper 7440-50-8 Not Listed
- Iron oxide 1309-37-1 Not Listed
- Zinc 7440-66-6 Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Relevant Phrases (code & full text)

- H317 - May cause an allergic skin reaction
- H372 - Causes damage to organs through prolonged or repeated exposure.
- H412 - Harmful to aquatic life with long lasting effects

Revision Date
25/November/2015

Preparation Date
10/August/2007

Disclaimer/Statement of Liability

- The information contained in this 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.

Key to abbreviations
NDA = No Data Available