

Safety Data Sheet



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

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]

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

3.1 Substances

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

3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Iron oxide	CAS:1309-37-1 EC Number:215-168-2	0% TO 53%	NDA	EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA
Copper	CAS:7440-50-8 EC Number:231-159-6	0.4% TO 40%	NDA	EU CLP: STOT SE 3: Resp. Irrit., H335 OSHA HCS 2012: Comb. Dust; STOT SE 3: Resp. Irrit.	NDA
Zinc	CAS:7440-66-6 EC Number:231-175-3	0.17% TO 18%	NDA	EU CLP: Not Classified OSHA HCS 2012: Comb. Dust; HNO3 Health: Metal fume fever	NDA
Polyethylene	NDA	N/A	NDA	EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA

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

Exposure Limits/Guidelines					
	Result	ACGIH	Germany DFG	NIOSH	OSHA
Iron oxide (1309-37-1)	TWAs	5 mg/m ³ TWA (respirable fraction)	Not established	5 mg/m ³ TWA (dust and fume, as Fe)	10 mg/m ³ TWA (fume); 15 mg/m ³ TWA (total dust, listed under Rouge); 5 mg/m ³ TWA (respirable fraction, listed under Rouge)
Zinc (7440-66-6)	Ceilings	Not established	0.4 mg/m ³ Peak (respirable fraction); 4 mg/m ³ Peak (inhalable fraction)	Not established	Not established
	MAKs	Not established	0.1 mg/m ³ TWA MAK (respirable fraction); 2 mg/m ³ TWA MAK (inhalable fraction)	Not established	Not established
Copper (7440-50-8)	TWAs	0.2 mg/m ³ TWA (fume)	Not established	1 mg/m ³ TWA (dust and mist); 0.1 mg/m ³ TWA (fume)	0.1 mg/m ³ TWA (fume); 1 mg/m ³ TWA (dust and mist)
	Ceilings	Not established	0.02 mg/m ³ Peak (respirable fraction)	Not established	Not established
	MAKs	Not established	0.01 mg/m ³ TWA MAK (including inorganic copper compounds, respirable fraction)	Not established	Not established

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))
- Iron oxide (1309-37-1): **TLV Basis - Critical Effects:** (pneumoconiosis)

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

OSHA = Occupational Safety and Health Administration

MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration

TLV = Threshold Limit Value determined by the American Conference of Governmental Industrial Hygienists (ACGIH)

NIOSH = National Institute of Occupational Safety and Health

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**

Material Description			
Physical Form	Solid	Appearance/Description	Various colored solid with no odor.
Color	Various	Odor	No odor.
Odor Threshold	Data lacking		
General Properties			
Boiling Point	Data lacking	Melting Point/Freezing Point	100 to 400 C(212 to 752 F)
Decomposition Temperature	Data lacking	pH	Data lacking
Specific Gravity/Relative Density	Data lacking	Water Solubility	Negligible < 0.1 %
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
Flammability			
Flash Point	121 C(249.8 F)	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Data lacking		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

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

Components		
Copper (0.4% TO 40%)	7440- 50-8	<p>Acute Toxicity: Ingestion/Oral-Mouse TDLo • 108 mg/kg; <i>Behavioral:Tremor</i>; <i>Gastrointestinal:Hypermotility, diarrhea</i>; <i>Gastrointestinal:Nausea or vomiting</i>; Ingestion/Oral-Mouse TDLo • 158 mg/kg; <i>Kidney, Ureter, and Bladder:Changes in tubules (including acute renal failure, acute tubular necrosis)</i>; Ingestion/Oral-Mouse TDLo • 232 mg/kg; <i>Kidney, Ureter, and Bladder:Changes primarily in glomeruli</i>; <i>Blood:Changes in spleen</i>; <i>Blood:Changes in serum composition (e.g., TP, bilirubin cholesterol)</i>;</p> <p>Multi-dose Toxicity: Ingestion/Oral-Rabbit TDLo • 3 g/kg 60 Day(s)-Continuous; <i>Cardiac:Other changes</i>; <i>Liver:Hepatitis (hepatocellular necrosis), zonal</i>; <i>Related to Chronic Data:Death in the Other Multiple Dose data type field</i>;</p> <p>Reproductive: Ingestion/Oral-Rat TDLo • 1520 µg/kg (22W pre); <i>Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system</i>; Ingestion/Oral-Rat TDLo • 152 mg/kg (22W pre); <i>Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus)</i>; <i>Reproductive Effects:Specific Developmental Abnormalities:Central nervous system</i>; Ingestion/Oral-Rat TDLo • 1210 µg/kg (35W pre); <i>Reproductive Effects:Effects on Fertility:Pre-implantation mortality</i>; <i>Reproductive Effects:Effects on Fertility:Post-implantation mortality</i>;</p> <p>Tumorigen / Carcinogen: Ingestion/Oral-Mouse TDLo • 10.08 mg/kg 12 Week(s)-Continuous; <i>Tumorigenic:Carcinogenic by RTECS criteria</i>; <i>Lungs, Thorax, or Respiration:Other changes</i></p>
Zinc (0.17% TO 18%)	7440- 66-6	<p>Irritation: Skin-Human • 300 µg 3 Day(s)-Intermittent • Mild irritation;</p> <p>Tumorigen / Carcinogen: Ingestion/Oral-Mouse TDLo • 12.6 mg/kg 46 Week(s)-Continuous; <i>Tumorigenic:Carcinogenic by RTECS criteria</i>; <i>Gastrointestinal:Tumors</i>; <i>Tumorigenic:Facilitates action of known carcinogen</i></p>
Iron oxide (0% TO 53%)	1309- 37-1	<p>Acute Toxicity: Inhalation-Rat TCLo • 50 mg/m³ 60 Hour(s); <i>Behavioral:Excitement</i>; <i>Behavioral:Fluid intake</i>; <i>Gastrointestinal:Hypermotility, diarrhea</i>; Inhalation-Rat TCLo • 0.8 mg/kg; <i>Lungs, Thorax, or Respiration:Emphysema</i>; <i>Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:Multiple enzyme effects</i>; <i>Biochemical:Metabolism (intermediary):Effect on inflammation or mediation of inflammation</i>;</p> <p>Multi-dose Toxicity: Inhalation-Rat TCLo • 500 µg/m³ 24 Hour(s) 61 Day(s)-Continuous; <i>Brain and Coverings:Other degenerative changes</i>; <i>Blood:Changes in serum composition (e.g., TP, bilirubin cholesterol)</i>; <i>Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:True cholinesterase</i></p>

GHS Properties	Classification
Respiratory sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Serious eye damage/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Acute toxicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Aspiration Hazard	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Carcinogenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking

Germ Cell Mutagenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Skin corrosion/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Skin sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
STOT-RE	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
STOT-SE	EU/CLP • Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
Toxicity for Reproduction	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking

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

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not Regulated	NDA	NDA	NDA

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)

State Right To Know				
Component	CAS	MA	NJ	PA
Copper	7440-50-8	Yes	Yes	Yes
Iron oxide	1309-37-1	Yes	Yes	Yes
Zinc	7440-66-6	Yes	Yes	Yes

Inventory				
Component	CAS	EU EINECS	EU ELNICS	TSCA
Copper	7440-50-8	Yes	No	Yes
Iron oxide	1309-37-1	Yes	No	Yes
Zinc	7440-66-6	Yes	No	Yes

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		
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Zinc	7440-66-6	Not Listed
U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Zinc	7440-66-6	Not Listed
U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Zinc	7440-66-6	Not Listed
U.S. - CERCLA/SARA - Section 313 - Emission Reporting		
• Copper	7440-50-8	1.0 % de minimis concentration
• Iron oxide	1309-37-1	Not Listed
• Zinc	7440-66-6	1.0 % de minimis concentration (dust or fume only)
U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing		
• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Zinc	7440-66-6	Not Listed
U.S. - RCRA (Resource Conservation & Recovery Act) - Constituents for Detection Monitoring		
• Copper	7440-50-8	(total)
• Iron oxide	1309-37-1	Not Listed
• Zinc	7440-66-6	(total)

U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents

• Copper	7440-50-8	(total)
• Iron oxide	1309-37-1	Not Listed
• Zinc	7440-66-6	(total)

U.S. - RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Universal Treatment Standards

• Copper	7440-50-8	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Zinc	7440-66-6	2.61 mg/L (wastewater); 4.3 mg/L TCLP (nonwastewater)

U.S. - RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground Water Monitoring

• Copper	7440-50-8	(total)
• Iron oxide	1309-37-1	Not Listed
• Zinc	7440-66-6	(total)

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

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

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