

Safety Data Sheet



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

1.1 Product identifier

- Product Name** • **Component Shotshell Projectiles**
- Synonyms** • Lead Shot; Lead Slug; Steel Shot
- SDS Number/Grade** • SSLDCOMP

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

- Relevant identified use(s)** • Shotshell 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**
- Acute Toxicity Oral 4 - H302
 - Carcinogenicity 2 - H351
 - Reproductive Toxicity 1A - H360
 - Specific Target Organ Toxicity Repeated Exposure 1 - H372
 - Specific Target Organ Toxicity Repeated Exposure 2 - H373
 - Hazardous to the aquatic environment Acute 1 - H400
 - Hazardous to the aquatic environment Chronic 1 - H410

2.2 Label Elements

CLP

DANGER



- Hazard statements** • H302 - Harmful if swallowed
 H351 - Suspected of causing cancer.
 H360 - May damage fertility or the unborn child.
 H372 - Causes damage to organs through prolonged or repeated exposure.
 H373 - May cause damage to organs through prolonged or repeated exposure.
 H400 - Very toxic to aquatic life
 H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements

- Prevention** • P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P260 - Do not breathe dust/fume.
 P264 - Wash thoroughly after handling.
 P273 - Avoid release to the environment.
 P281 - Use personal protective equipment as required.

- Response** • P301+P312 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell.
 P330 - Rinse mouth.
 P308+P313 - IF exposed or concerned: Get medical advice/attention.
 P314 - Get medical advice/attention if you feel unwell.
 P391 - Collect spillage.

- Storage/Disposal** • 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

- Acute Toxicity Oral 4
 Carcinogenicity 2
 Reproductive Toxicity 1A
 Specific Target Organ Toxicity Repeated Exposure 1
 Specific Target Organ Toxicity Repeated Exposure 2
 Combustible Dust
 Hazards Not Otherwise Classified - Health Hazards - Metal Fume Fever

2.2 Label elements

OSHA HCS 2012

DANGER



- Hazard statements** • Harmful if swallowed
 Suspected of causing cancer.
 May damage fertility or the unborn child.
 Causes damage to organs through prolonged or repeated exposure.
 May cause damage to organs through prolonged or repeated exposure.

May form combustible dust concentrations in air.

Precautionary statements

- Prevention** • Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/fume.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.
- Response** • IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell.
Rinse mouth.
IF exposed or concerned: Get medical advice/attention.
Get medical advice/attention if you feel unwell.

- Storage/Disposal** • 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	CAS:7439-89-6 EC Number:231-096-4	98% TO 99%	Ingestion/Oral-Rat LD50 • 750 mg/kg	EU CLP: Acute Tox. 4, H302; Aquatic Chronic 4, H413 OSHA HCS 2012: Acute Tox. 4 (Oral)	Steel Shot
Lead	CAS:7439-92-1 EC Number:231-100-4	94% TO 98%	NDA	EU CLP: Carc. 2, H351 (Inhalation); Repr. 1A, H360 (Oral, Inhalation); STOT RE 1, H372 (CNS, GI / Oral, Inhalation); Aquatic Acute 1, H400; Aquatic Chronic 1, H410 OSHA HCS 2012: Comb. Dust; Carc. 2 (Inhalation); Repr. 1A (Oral, Inhalation); STOT RE 1 (CNS, GI / Oral, Inhalation)	0% (Steel Shot)
Antimony	CAS:7440-36-0 EINECS:231-146-5	0% TO 6%	Ingestion/Oral-Rat LD50 • 100 mg/kg	EU CLP: Acute Tox. 3, H301; Repr. 2, H361d (Dermal, Inhalation); STOT RE 2, H373 (Lungs / Inhalation); Aquatic Chronic 2, H411 OSHA HCS 2012: Comb. Dust; Acute Tox. 3 (Oral); Repr. 2 (Dermal, Inhalation); STOT RE 2 (Lungs / Inhalation); HNO C Health - Causes Antimony spots	NDA
	CAS:7440-66-6				

Zinc	EC Number:231-175-3 EU Index:030-001-00-1	< 2%	NDA	EU CLP: Not Classified OSHA HCS 2012: Comb. Dust; HNOC Health - Metal fume fever	Steel Shot
Arsenic	CAS:7440-38-2 EC Number:231-148-6 EU Index:033-001-00-X	0% TO 1.5%	Ingestion/Oral-Rat LD50 • 763 mg/kg	EU CLP: Annex VI, Table 3.1: Acute Tox. 3 *, H331; Acute Tox. 3 *, H301; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 OSHA HCS 2012: Carc. 1A; Acute Tox 4 (oral); STOT RE 2 (Liver, Peripheral Nervous System, Bone Marrow)	NDA

See Section 16 for full text of H-statements.

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

- Avoid release to the environment.

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
Antimony	TWAs	0.5 mg/m ³ TWA	Not established	0.5 mg/m ³ TWA	0.5 mg/m ³ TWA
Arsenic (7440-38-2)	TWAs	0.01 mg/m ³ TWA	Not established	Not established	Not established
	Ceilings	Not established	Not established	0.002 mg/m ³ Ceiling (15 min)	Not established

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
Lead	TWAs	0.05 mg/m ³ TWA	Not established	0.050 mg/m ³ TWA	50 µg/m ³ TWA

Exposure Control Notations

ACGIH

- Lead (7439-92-1): **Carcinogens:** (A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans)
- Lead as Lead, inorganic compounds: **Carcinogens:** (A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans)
- Arsenic (7440-38-2): **Carcinogens:** (A1 - Confirmed Human Carcinogen)

Germany TRGS

- Lead (7439-92-1): **Developmental Toxins:** (Category 1 (bioavailable, metal)) | **Reproductive Toxins:** (Category 3 (bioavailable, metal))

Germany DFG

- 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))
- Lead (7439-92-1): **Carcinogens:** (Category 2 (considered to be carcinogenic for man))
- Lead as Lead, inorganic compounds: **Carcinogens:** (Category 2 (considered to be carcinogenic for man, as Pb except lead arsenate and lead chromate))
- Antimony (7440-36-0): **Carcinogens:** (Category 2 (considered to be carcinogenic for man))
- Arsenic (7440-38-2): **Carcinogens:** (Category 1 (causes cancer in man))

Exposure Limits Supplemental

ACGIH

- Lead (7439-92-1): **BEIs:** (30 µg/100 ml Medium: blood Time: not critical Parameter: Lead (Note: Women of child bearing potential, whose blood Pb exceeds 10 µg/dL, are at risk of delivering a child with a blood Pb over the current Centers for Disease Control guideline of 10 µg/dL. If the blood Pb of such children remains elevated, they may be at increased risk of cognitive deficits. The blood Pb of these children should be closely monitored and appropriate steps should be taken to minimize the child's exposure to environmental lead.)) | **TLV Basis - Critical Effects:** (CNS and PNS impairment; hematologic effects)
- Lead as Lead, inorganic compounds: **BEIs:** (30 µg/100 ml Medium: blood Time: not critical Parameter: Lead (Note: Women of child bearing potential, whose blood Pb exceeds 10 µg/dL, are at risk of delivering a child with a blood Pb over the current Centers for Disease Control guideline of 10 µg/dL. If the blood Pb of such children remains elevated, they may be at increased risk of cognitive deficits. The blood Pb of these children should be closely monitored and appropriate steps should be taken to minimize the child's exposure to environmental lead.)) | **TLV Basis - Critical Effects:** (CNS and PNS impairment; hematologic effects)
- Antimony (7440-36-0): **TLV Basis - Critical Effects:** (skin and upper respiratory tract irritation)
- Antimony as Antimony compounds: **TLV Basis - Critical Effects:** (skin and upper respiratory tract irritation)
- Arsenic (7440-38-2): **BEIs:** (35 µg As/L Medium: urine Time: end of workweek Parameter: Inorganic arsenic plus methylated metabolites (background)) | **TLV Basis - Critical Effects:** (lung cancer)

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.
- Hearing protection recommended when firing rounds.

Additional Protection Measures

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

BEI = Biological Exposure Indices

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

Material Description			
Physical Form	Solid	Appearance/Description	Various colored solid with no odor.
Color	Various	Odor	Odorless
Odor Threshold	Data lacking		
General Properties			
Boiling Point	Data lacking	Melting Point/Freezing Point	Data lacking
Decomposition Temperature	Data lacking	pH	Not relevant
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	Data lacking	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

- No data available

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
Zinc (< 2%)	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:</i>Carcinogenic by RTECS criteria; Gastrointestinal:Tumors; Tumorigenic:Facilitates action of known carcinogen</p>
Lead (94% TO 98%)	7439-92-1	<p>Acute Toxicity: Ingestion/Oral-Woman TDLo • 450 mg/kg 6 Year(s); <i>Peripheral Nerve and Sensation:</i>Flaccid paralysis without anesthesia (usually neuromuscular blockage); Behavioral:Hallucinations, distorted perceptions; Behavioral:Muscle weakness; Inhalation-Human TCLo • 10 µg/m³; <i>Gastrointestinal:Gastritis; Liver:Other changes;</i></p> <p>Multi-dose Toxicity: Inhalation-Human TCLo • 0.011 mg/m³ 26 Week(s)-Intermittent; <i>Brain and Coverings:Other degenerative changes;</i> Inhalation-Man TCLo • 0.03 mg/m³ 5 Year(s)-Intermittent; <i>Endocrine:Androgenic;</i> Inhalation-Man TCLo • 0.109 mg/m³ 5 Year(s)-Intermittent; <i>Reproductive Effects:Paternal Effects:Spermatogenesis;</i></p> <p>Mutagen: Cytogenetic analysis • Ingestion/Oral-Monkey • 42 mg/kg 30 Week(s); Cytogenetic analysis • Inhalation-Rat • 23 µg/m³ 16 Week(s);</p> <p>Reproductive: Ingestion/Oral-Rat TDLo • 790 mg/kg (multigenerations); <i>Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Effects on Embryo or Fetus:Fetal death;</i> Inhalation-Rat TCLo • 10 mg/m³ 24 Hour(s)(1-21D preg); <i>Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Specific Developmental Abnormalities:Blood and lymphatic system</i></p>
Antimony (0% TO 6%)	7440-36-0	<p>Acute Toxicity: Ingestion/Oral-Rat LD50 • 100 mg/kg; Inhalation-Human TCLo • 10 mg/m³ 8 Hour(s); <i>Behavioral:Muscle weakness; Gastrointestinal:Nausea or vomiting; Nutritional and Gross Metabolic:Changes in Chemistry or Temperature:Body temperature increase;</i> Inhalation-Human TCLo • 13.5 mg/m³ 4 Hour(s); <i>Sense Organs and Special Senses:Olfaction:Other changes; Blood:Hemorrhage</i></p>
Arsenic (0% TO 1.5%)	7440-38-2	<p>Acute Toxicity: Ingestion/Oral-Rat LD50 • 763 mg/kg; <i>Behavioral:Ataxia; Gastrointestinal:Hypermotility, diarrhea;</i></p> <p>Mutagen: Cytogenetic analysis • Ingestion/Oral-Human • 0.211 mg/L 15 Year(s); Cytogenetic analysis • Ingestion/Oral-Mouse • 280 mg/kg 8 Week(s);</p> <p>Reproductive: Ingestion/Oral-Mouse TDLo • 187 mg/kg (8-18D preg); <i>Reproductive Effects:Specific Developmental Abnormalities:Hepatobiliary system;</i> Ingestion/Oral-Rat TDLo • 580 µg/kg (30W pre/1-20D preg); <i>Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system;</i> Ingestion/Oral-Rat TDLo • 605 µg/kg (35W pre); <i>Reproductive Effects:Effects on Fertility:Pre-implantation mortality; Reproductive Effects:Effects on Fertility:Post-implantation mortality</i></p>
Iron (98% TO 99%)	7439-89-6	<p>Acute Toxicity: Ingestion/Oral-Rat LD50 • 750 mg/kg; <i>Blood:Changes in serum composition (e.g., TP, bilirubin cholesterol); Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:Transaminases;</i> Ingestion/Oral-Child TDLo • 77 mg/kg; <i>Behavioral:Irritability; Gastrointestinal:Nausea or vomiting; Blood:Normocytic anemia;</i></p> <p>Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 105 mg/kg 5 Week(s)-Continuous; <i>Liver:Tumors; Tumorigenic:Active as anti-cancer agent; Tumorigenic:Protects against induction of experimental tumors</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 • Acute Toxicity - Oral 4 - ATEmix orl = 750 mg/kg OSHA HCS 2012 • Acute Toxicity - Oral 4 - ATEmix orl = 750 mg/kg
Aspiration Hazard	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Carcinogenicity	EU/CLP • Carcinogenicity 2 OSHA HCS 2012 • Carcinogenicity 2
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 • Specific Target Organ Toxicity Repeated Exposure 1; Specific Target Organ Toxicity Repeated Exposure 2 OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 1; Specific Target Organ Toxicity Repeated Exposure 2
STOT-SE	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Toxicity for Reproduction	EU/CLP • Toxic to Reproduction 1A OSHA HCS 2012 • Toxic to Reproduction 1A

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)

- Repeated and prolonged exposure to dust may cause lung effects including pneumoconiosis.

Skin

Acute (Immediate)

- May cause allergic reaction (sensitization) in susceptible individuals.

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)

- Harmful if swallowed. 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: Chronic exposure to lead can cause kidney damage, anemia, reproductive effects, developmental effects and permanent nervous system damage in humans including changes in cognitive function. Repeated and prolonged exposure to Arsenic may have effects on the mucous membranes, skin, peripheral nervous system, liver and bone marrow, resulting in pigmentation disorders, hyperkeratosis, perforation of nasal septum, neuropathy, liver impairment, anaemia.

Carcinogenic Effects

- Repeated and prolonged exposure may cause cancer.

Carcinogenic Effects			
	CAS	IARC	NTP

Arsenic	7440-38-2	Group 1-Carcinogenic	Known Human Carcinogen
Lead	7439-92-1	Group 2A-Probable Carcinogen	Reasonably Anticipated to be Human Carcinogen

Reproductive Effects

- Repeated and prolonged exposure may cause reproductive effects.

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

LD = Lethal Dose

TC = Toxic Concentration

TD = Toxic Dose

Section 12 - Ecological Information**12.1 Toxicity**

	CAS	
Component Shotshell Projectiles	NDA	<p>Aquatic Toxicity-Fish: 96 Hour(s) LC50 <i>Cyprinus carpio (Common Carp)</i> 0.4 mg/L Comments: Lead (7439-92-1) 28 Day(s) NOEC <i>Cyprinus carpio (Common Carp)</i> 0.00003 mg/L Comments: Lead (7439-92-1) 96 Hour(s) LC50 <i>Cyprinodon variegatus (Sheepshead Minnow)</i> 6.2 mg/L Comments: Antimony (7440-36-0) 96 Hour(s) LC50 <i>Mudskipper (Periophthalmus waltoni)</i> 0.00648 mg/L Comments: Iron (7439-89-6) 7 Day(s) NOEC <i>Brown Trout (Salmo trutta)</i> 0.305 mg/L Comments: Iron (7439-89-6)</p> <p>Aquatic Toxicity-Crustacea: 7 Day(s) NOEC <i>Aquatic Sowbug, Isopod (Idotea balthica)</i> 0.5 mg/L Comments: Iron (7439-89-6) 7 Day(s) NOEC <i>Daphnia magna (Water Flea)</i> 3.9 mg/L Comments: Antimony (7440-36-0) 28 Day(s) NOEC <i>Hyalella azteca (Scud)</i> 0.006 mg/L Comments: Lead (7439-92-1)</p> <p>Aquatic Toxicity-Algae and Other Aquatic Plant(s): 72 Hour(s) EC50 <i>Chaetoceros sp. (Diatom)</i> 0.105 mg/L Comments: Lead (7439-92-1)</p>

- Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

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, Chronic, Pressure(Sudden Release of)

State Right To Know				
Component	CAS	MA	NJ	PA
Antimony	7440-36-0	Yes	Yes	Yes
Arsenic	7440-38-2	Yes	Yes	Yes
Iron	7439-89-6	No	No	No
Lead	7439-92-1	Yes	Yes	Yes
Zinc	7440-66-6	Yes	Yes	Yes

Inventory				
Component	CAS	EU EINECS	EU ELNICS	TSCA
Antimony	7440-36-0	Yes	No	Yes
Arsenic	7440-38-2	Yes	No	Yes
Iron	7439-89-6	Yes	No	Yes
Lead	7439-92-1	Yes	No	Yes
Zinc	7440-66-6	Yes	No	Yes

Europe**Other**

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

• Lead	7439-92-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	T; R23/25 N; R50-53
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

• Lead	7439-92-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

• Lead	7439-92-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	T N R:23/25-50/53 S:(1/2)-20/21-28-45-60-61
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

• Lead	7439-92-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

• Lead	7439-92-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	S:(1/2)-20/21-28-45-60-61
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Lead	7439-92-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Lead	7439-92-1	30 µg/m3 Action Level (See 29 CFR 1910.1025); 50 µg/m3 TWA (See 29 CFR 1910.1025)
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Lead	7439-92-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed

• Iron 7439-89-6 Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Lead	7439-92-1	10 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); 4.54 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) 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)
• Antimony	7440-36-0	1 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); 0.454 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)
• Arsenic	7440-38-2	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
• Iron	7439-89-6	Not Listed

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

• Lead	7439-92-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

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

• Lead	7439-92-1	Not Listed
• Antimony	7440-36-0	Not Listed

• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

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

• Lead	7439-92-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

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

• Lead	7439-92-1	0.1 % Supplier notification limit; 0.1 % de minimis concentration (when contained in stainless steel, brass, or bronze)
• Antimony	7440-36-0	1.0 % de minimis concentration
• Arsenic	7440-38-2	0.1 % de minimis concentration
• Zinc	7440-66-6	1.0 % de minimis concentration (dust or fume only)
• Iron	7439-89-6	Not Listed

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

• Lead	7439-92-1	100 lb RT (this lower threshold does not apply to lead when it is contained in stainless steel, brass or bronze alloy)
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix VII

• Lead	7439-92-1	Included in waste streams: F035, F037, F038, F039, K002, K003, K005, K046, K048, K049, K051, K052, K061, K062, K069, K086, K100, K176
• Antimony	7440-36-0	Included in waste streams: F039, K021, K161, K177
• Arsenic	7440-38-2	Included in waste streams: F032, F034, F035, F039, K031, K060, K084, K101, K102, K161, K171, K172, K176
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

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

• Lead	7439-92-1	(total)
• Antimony	7440-36-0	(total)
• Arsenic	7440-38-2	(total)
• Zinc	7440-66-6	(total)
• Iron	7439-89-6	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - D Series Wastes - Max Conc of Contaminants for the Toxic Characteristic

• Lead	7439-92-1	5.0 mg/L regulatory level
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	5.0 mg/L regulatory level
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261

• Lead	7439-92-1	hazardous constituent - no waste number
• Antimony	7440-36-0	hazardous constituent - no waste number
• Arsenic	7440-38-2	hazardous constituent - no waste number
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

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

• Lead	7439-92-1	(total)
• Antimony	7440-36-0	(total)
• Arsenic	7440-38-2	(total)
• Zinc	7440-66-6	(total)
• Iron	7439-89-6	Not Listed

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

• Lead	7439-92-1	0.69 mg/L (wastewater); 0.75 mg/L TCLP (nonwastewater)
• Antimony	7440-36-0	1.9 mg/L (wastewater); 1.15 mg/L TCLP (nonwastewater)
• Arsenic	7440-38-2	1.4 mg/L (wastewater); 5.0 mg/L TCLP (nonwastewater)
• Zinc	7440-66-6	2.61 mg/L (wastewater); 4.3 mg/L TCLP (nonwastewater)
• Iron	7439-89-6	Not Listed

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

• Lead	7439-92-1	(total)
• Antimony	7440-36-0	(total)
• Arsenic	7440-38-2	(total)
• Zinc	7440-66-6	(total)
• Iron	7439-89-6	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Waste Minimization Priority Chemicals

• Lead	7439-92-1	
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

United States - California

Environment

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

• Lead	7439-92-1	carcinogen, initial date 10/1/92
--------	-----------	----------------------------------

• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• Lead	7439-92-1	developmental toxicity, initial date 2/27/87
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Lead	7439-92-1	0.5 µg/day MADL
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Lead	7439-92-1	15 µg/day NSRL (oral)
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	0.06 µg/day NSRL (inhalation); 10 µg/day NSRL (except inhalation)
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Lead	7439-92-1	female reproductive toxicity, initial date 2/27/87
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Lead	7439-92-1	male reproductive toxicity, initial date 2/27/87
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	Not Listed
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

United States - Pennsylvania

Labor

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

• Lead	7439-92-1	
• Antimony	7440-36-0	
• Arsenic	7440-38-2	(inorganic)
• Zinc	7440-66-6	
• Iron	7439-89-6	Not Listed

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• Lead	7439-92-1	Not Listed
• Antimony	7440-36-0	Not Listed
• Arsenic	7440-38-2	
• Zinc	7440-66-6	Not Listed
• Iron	7439-89-6	Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

15.3 Other Information

- **WARNING:** This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Section 16 - Other Information**Relevant Phrases (code & full text)**

- H301 - Toxic if swallowed
H331 - Toxic if inhaled
H361d - Suspected of damaging the unborn child.
H411 - Toxic to aquatic life with long lasting effects
H413 - May cause long lasting harmful effects to aquatic life

Revision Date

- 25/November/2015

Preparation Date

- 01/October/2001

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