Safety Data Sheet



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

1.1 Product identifier

Product Name · Component Primers (Electronically-Initiated)

• Component Primers (Electrically-Fired)

SDS Number/Grade • ELECPRIM

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

• 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 • Explosives 1.4 - H204

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

Reproductive Toxicity 1A - H360Df

2.2 Label Elements

CLP

DANGER







Hazard statements • H204 - Fire or projection hazard

H335 - May cause respiratory irritation

H360Df - May damage the unborn child. Suspected of damaging fertility.

Precautionary statements

Prevention • P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P210 - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.

P240 - Ground and/or bond container and receiving equipment.

P250 - Do not subject to grinding/shock/friction.

P261 - Avoid breathing dust or fume.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P281 - Use personal protective equipment as required.

Response • P370+P380 - In case of fire: Evacuate area.

P373 - DO NOT fight fire when fire reaches explosives.

P374 - Fight fire with normal precautions from a reasonable distance.

P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P312 - Call a POISON ČENTER or doctor/physician if you feel unwell. P308+P313 - IF exposed or concerned: Get medical advice/attention.

Storage/Disposal • P401 - Store in accordance with local, regional, national, and/or international

regulations.

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

 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

Explosives 1.4

Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation

Reproductive Toxicity 1A

Hazards Not Otherwise Classified - Health Hazards - Metal fume fever

2.2 Label elements

OSHA HCS 2012

DANGER





Hazard statements • Fire or projection hazard

May cause respiratory irritation

May damage fertility or the unborn child.

Precautionary statements

Prevention • Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.

Ground and/or bond container and receiving equipment.

Do not subject to grinding/shock/friction.

Avoid breathing dust or fume.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Response • In case of fire: Evacuate area.

DO NOT fight fire when fire reaches explosives.

Fight fire with normal precautions from a reasonable distance.

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.

IF exposed or concerned: Get medical advice/attention.

Storage/Disposal • Store in accordance with local, regional, national, and/or international regulations.

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.

3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Copper	CAS:7440-50-8 EC Number:231- 159-6	56% TO 67%	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 EU Index:030- 001-00-1	24% TO 29%	NDA	EU CLP: Not Classified OSHA HCS 2012: Comb. Dust; Hazard Not Otherwise Classified - Health Hazard - Metal fume fever	NDA
Barium	CAS:7440-39-3 EINECS:231- 149-1	2% TO 10%	NDA	EU CLP: Not Classified OSHA HCS 2012: Comb. Dust	NDA
2,4,6-Trinitro-1,3- benzenediol lead salt	CAS:15245-44- 0 EC Number:239- 290-0	2% TO 9%	NDA	EU CLP: Annex VI, Table 3.1: Expl. 1.1., H201; Repr. 1A, H360Df; Acute Tox. 4*, H302; STOT RE 2*, H373***; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 OSHA HCS 2012: Expl. 1.1; Repr. 1A; STOT RE 1 (Liver, Kidney, Blood, Nervous System)	NDA
Aluminum	CAS:7429-90-5 EC Number:231- 072-3	< 1%	NDA	EU CLP: Annex VI, Table 3.1: Flam. Sol. 1, H228; Water-react. 2, H261 OSHA HCS 2012: Flam. Sol. 1; Water-react. 2; Comb. Dust; STOT RE 1 (Lungs, Inhl)	NDA

Preparation Date: 25/October/2010

Antimony CAS:7440-36-0 EINECS:231-146-5 Ingestion/Oral-Rat LD50 • 100 mg/kg CSHA HCS 2012: Exposure Limits 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

May ignite if heated above 130°C.

Will ignite when exposed to flame and high temperatures.

Be cautious of low-energy fragments.

Packages bearing the 1.4S label or packages containing material classified as 1.4S are designed orpackaged in such a manner that when involved in a fire, may burn vigorously with localized detonations and projection of fragments.

Effects are usually confined to immediate vicinity of packages.

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. If fire threatens cargo area containing packages bearing
the 1.4S label or packages containing material classified as 1.4S, consider isolating
at least 15 meters (50 feet) in all directions. In fire situations move people out of line of
site of the scene and away from windows. Use normal clean up procedures.

6.2 Environmental precautions

No special environmental precautions necessary.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

Use clean nonsparking tools to collect material.
 Carefully shovel or sweep up spilled material and place in suitable container.

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

Handle with care. Do not strike or crush the rounds. Avoid breathing dust or fume. Use
personal protective equipment as required. 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/m3 TWA	Not established	0.5 mg/m3 TWA	0.5 mg/m3 TWA		
TWAs		1 mg/m3 TWA (respirable fraction)	Not established	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)		
Aluminum (7429-90-5)	MAKs	Not established	4 mg/m3 TWA MAK (dust, inhalable fraction); 1.5 mg/m3 TWA MAK (dust, respirable fraction)	Not established	Not established		
Barium (7440-39-3)	TWAs	0.5 mg/m3 TWA	Not established	Not established	Not established		
Zinc	Ceilings	Not established	0.4 mg/m3 Peak (respirable fraction); 4 mg/m3 Peak (inhalable fraction)	Not established	Not established		

(7440-66-6)	MAKs	Not established	0.1 mg/m3 TWA MAK (respirable fraction); 2 mg/m3 TWA MAK (inhalable fraction)	Not established	Not established
	TWAs	0.2 mg/m3 TWA (fume)	Not established	1 mg/m3 TWA (dust and mist); 0.1 mg/m3 TWA (fume)	0.1 mg/m3 TWA (fume); 1 mg/m3 TWA (dust and mist)
Copper (7440-50-8)	Ceilings	Not established	0.02 mg/m3 Peak (respirable fraction)	Not established	Not established
(MAKs	Not established	0.01 mg/m3 TWA MAK (including inorganic copper compounds, respirable fraction)	Not established	Not established

Exposure Control Notations

ACGIH

- •Barium (7440-39-3): Carcinogens: (A4 Not Classifiable as a Human Carcinogen)
- •Aluminum (7429-90-5): Carcinogens: (A4 Not Classifiable as a Human Carcinogen)
- •Aluminum as Aluminum insoluble compounds: 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))
- •Antimony (7440-36-0): Carcinogens: (Category 2 (considered to be carcinogenic for man))
- •Aluminum (7429-90-5): Pregnancy: (classification not yet possible (respirable, inhalable, dust))

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))
- •Barium (7440-39-3): TLV Basis Critical Effects: (eye, gastrointestinal and skin irritation; muscular stimulation)
- •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)
- •Aluminum (7429-90-5): TLV Basis Critical Effects: (pneumoconiosis; lower respiratory tract irritation; neurotoxicity)
- •Aluminum as Aluminum insoluble compounds: TLV Basis Critical Effects: (pneumoconiosis; lower respiratory tract irritation; neurotoxicity)

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

Material Description			
Physical Form	Solid	Appearance/Description	Brass, Copper, and/or Silver/Gray solid with no odor.
Color	Brass, Copper, and/or Silver/Gray.	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	93.3 °C(199.94 °F)	рН	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	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 (56% TO 67%)	7440- 50-8	Acute Toxicity: Ingestion/Oral-Mouse TDLo • 108 mg/kg; Behavioral:Tremor; Gastrointestinal:Hypermotility, diarrhea; Gastrointestinal:Nausea or vomiting; Ingestion/Oral-Mouse TDLo • 158 mg/kg; Kidney, Ureter, and Bladder:Changes in tubules (including acute renal failure, acute tubular necrosis); Ingestion/Oral-Mouse TDLo • 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 TDLo • 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 TDLo • 1520 µg/kg (22W pre); Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system; Ingestion/Oral-Rat TDLo • 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 TDLo • 1210 µg/kg (35W pre); Reproductive Effects:Effects on Fertility:Pre-implantation mortality; Tumorigen / Carcinogen: Ingestion/Oral-Mouse TDLo • 10.08 mg/kg 12 Week(s)-Continuous; Tumorigenic:Carcinogenic by RTECS criteria; Lungs, Thorax, or Respiration:Other changes
Zinc (24% TO 29%)	7440- 66-6	Irritation: Skin-Human • 300 µg 3 Day(s)-Intermittent • Mild irritation; Tumorigen / Carcinogen: Ingestion/Oral-Mouse TDLo • 12.6 mg/kg 46 Week(s)-Continuous; Tumorigenic:Carcinogenic by RTECS criteria; Gastrointestinal:Tumors; Tumorigenic:Facilitates action of known carcinogen
Barium (2% TO 10%)	7440- 39-3	Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 26622 mg/kg 69 Week(s)-Continuous; Vascular:BP elevation not characterized in autonomic section; Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:Cytochrome oxidases (including oxidative phosphorylation); Biochemical:Metabolism (intermediary):Xanthine, purine, or nucleotides including urate
Aluminum (< 1%)	7429- 90-5	Multi-dose Toxicity: Inhalation-Man TCLo • 4 mg/m³ 1 Year(s)-Intermittent; Lungs, Thorax, or Respiration:Cough; Lungs, Thorax, or Respiration:Dyspnea; Nutritional and Gross Metabolic:Gross Metabolite Changes:Weight loss or decreased weight gain; Inhalation-Rat TCLo • 206 mg/m³ 5 Hour(s) 30 Day(s)-Intermittent; Lungs, Thorax, or Respiration:Fibrosis (interstitial); Endocrine:Hypoglycemia; Blood:Changes in serum composition (e.g., TP, bilirubin cholesterol)

Classification
EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
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
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
STOT-RE	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)

Jili Offic (Delayeu)

No data available

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)

Ingestion is not anticipated to be a likely route of exposure to this product.

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.

Reproductive Effects

Repeated and prolonged exposure may cause reproductive effects.

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	UN00044	Primers, Cap Type	1.4S	II	NDA
TDG	UN00044	PRIMERS, CAP TYPE	1.4S	II	NDA
IMO/IMDG	UN00044	PRIMERS, CAP TYPE	1.4S	NDA	NDA
IATA/ICAO	UN00044	Primers, cap type	1.4S	NDA	NDA

14.6 Special precautions for • None specified.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Data lacking.

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		
2,4,6-Trinitro-1,3- benzenediol lead salt	15245-44-0	Yes	Yes	No		
Aluminum	7429-90-5	Yes	Yes	Yes		
Antimony	7440-36-0	Yes	Yes	Yes		
Barium	7440-39-3	Yes	Yes	Yes		
Copper	7440-50-8	Yes	Yes	Yes		
Zinc	7440-66-6	Yes	Yes	Yes		

	Inventory					
Component	CAS	EU EINECS	EU ELNICS	TSCA		
2,4,6-Trinitro-1,3- benzenediol lead salt	15245-44-0	Yes	No	Yes		

Preparation Date: 25/October/2010

Aluminum	7429-90-5	Yes	No	Yes
Antimony	7440-36-0	Yes	No	Yes
Barium	7440-39-3	Yes	No	Yes
Copper	7440-50-8	Yes	No	Yes
Zinc	7440-66-6	Yes	No	Yes

Europe

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification		Xn; R20/22 E; R3 R33 N; R50-
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	53 Repr.Cat.1; R61 Repr.Cat.3
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Antimony	7440-36-0	Not Listed
• Aluminum	7429-90-5	F; R11-15
• Zinc	7440-66-6	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Antimony	7440-36-0	Not Listed
• Aluminum	7429-90-5	Not Listed
• Zinc	7440-66-6	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	E T N R:61-3-20/22-33-50/53-62 S:53-45-60-61
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Antimony	7440-36-0	Not Listed
• Aluminum	7429-90-5	F R:11-15 S:(2)-7/8-43
• Zinc	7440-66-6	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	E, 1
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Antimony	7440-36-0	Not Listed
• Aluminum	7429-90-5	Т
• Zinc	7440-66-6	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	S:53-45-60-61
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Antimony	7440-36-0	Not Listed
• Aluminum	7429-90-5	S:(2)-7/8-43
• Zinc	7440-66-6	Not Listed

United States

Labor U.S OSHA - Process Safety Management - Highly Hazardous Chemicals		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Antimony	7440-36-0	Not Listed
• Aluminum	7440-30-0	Not Listed
• Zinc	7429-90-5 7440-66-6	Not Listed
• ZIIIC	7440-00-0	NOI LISIEU
U.S OSHA - Specifically Regulated Chemicals		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
Antimony	7440-36-0	Not Listed
• Aluminum	7429-90-5	Not Listed
• Zinc	7440-66-6	Not Listed
Environment —		
U.S CAA (Clean Air Act) - 1990 Hazardous Air Pollutants		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Antimony	7440-36-0	Not Listed
• Aluminum	7429-90-5	Not Listed
• Zinc	7440-66-6	Not Listed
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Barium	7440-39-3	Not Listed
		5000 lb final RQ (no reporting
		of releases of this hazardous
		substance is required if the
		diameter of the pieces of the
Common	7440 50 0	solid metal released is >100
• Copper	7440-50-8	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)
		5000 lb final RQ (no reporting
		of releases of this hazardous
		substance is required if the
		diameter of the pieces of the
• 0		solid metal released is >100
• Antimony	7440-36-0	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)
• Aluminum	7429-90-5	Not Listed
, with the state of the state o	7 720 00-0	454 kg final RQ (no reporting
		of releases of this hazardous
		substance is required if the
		·
		diameter of the pieces of the

• Zinc	7440-66-6	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)
U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
Antimony	7440-36-0	Not Listed
• Aluminum	7429-90-5	Not Listed
• Zinc	7440-66-6	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Antimony	7440-36-0	Not Listed
• Aluminum	7429-90-5	Not Listed
• Zinc	7440-66-6	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Antimony	7440-36-0	Not Listed
• Aluminum	7429-90-5	Not Listed
• Zinc	7440-66-6	Not Listed
U.S CERCLA/SARA - Section 313 - Emission Reporting		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Barium	7440-39-3	1.0 % de minimis concentration
• Copper	7440-50-8	1.0 % de minimis concentration
Antimony	7440-36-0	1.0 % de minimis concentration
• Aluminum	7429-90-5	1.0 % de minimis concentration (dust or fume only)
• Zinc	7440-66-6	1.0 % de minimis concentration (dust or fume only)
U.S CERCLA/SARA - Section 313 - PBT Chemical Listing		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
Antimony	7440-36-0	Not Listed
Aluminum	7429-90-5	Not Listed
• Zinc	7440-66-6	Not Listed
U.S RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Append	lix VII	

• Barium	7440-39-3	Included in waste stream: F039
• Copper	7440-50-8	Not Listed
• Antimony	7440-36-0	Included in waste streams: F039, K021, K161, K177
Aluminum	7429-90-5	Not Listed
• Zinc	7440-66-6	Not Listed
I.S RCRA (Resource Conservation & Recovery Act) - Constituents	for Detection Monitoring	
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Barium	7440-39-3	(total)
• Copper	7440-50-8	(total)
• Antimony	7440-36-0	(total)
• Aluminum	7429-90-5	Not Listed
• Zinc	7440-66-6	(total)
S RCRA (Resource Conservation & Recovery Act) - D Series Was	stes - Max Conc of Contaminant	s for the Tox Characteristi
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Barium	7440-39-3	100.0 mg/L regulatory level
• Copper	7440-50-8	Not Listed
• Antimony	7440-36-0	Not Listed
• Aluminum	7429-90-5	Not Listed
• Zinc	7440-66-6	Not Listed
.S RCRA (Resource Conservation & Recovery Act) - Hazardous Co	onstituents - Appendix VIII to 40	CFR 261
2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Barium		hazardous constituent - no
- Danum	7440-39-3	waste number
	7440-39-3 7440-50-8	
• Copper		waste number
Copper Antimony	7440-50-8	waste number Not Listed hazardous constituent - no
Copper Antimony Aluminum	7440-50-8 7440-36-0	waste number Not Listed hazardous constituent - no waste number
Copper Antimony Aluminum Zinc	7440-50-8 7440-36-0 7429-90-5 7440-66-6	waste number Not Listed hazardous constituent - no waste number Not Listed
 Copper Antimony Aluminum Zinc .S RCRA (Resource Conservation & Recovery Act) - List for Haza 	7440-50-8 7440-36-0 7429-90-5 7440-66-6	waste number Not Listed hazardous constituent - no waste number Not Listed
 Copper Antimony Aluminum Zinc .S RCRA (Resource Conservation & Recovery Act) - List for Hazal 2,4,6-Trinitro-1,3-benzenediol lead salt 	7440-50-8 7440-36-0 7429-90-5 7440-66-6 rdous Constituents	waste number Not Listed hazardous constituent - no waste number Not Listed Not Listed
 Copper Antimony Aluminum Zinc .S RCRA (Resource Conservation & Recovery Act) - List for Haza 2,4,6-Trinitro-1,3-benzenediol lead salt Barium 	7440-50-8 7440-36-0 7429-90-5 7440-66-6 rdous Constituents 15245-44-0	waste number Not Listed hazardous constituent - no waste number Not Listed Not Listed Not Listed
 Copper Antimony Aluminum Zinc I.S RCRA (Resource Conservation & Recovery Act) - List for Hazar 2,4,6-Trinitro-1,3-benzenediol lead salt Barium Copper 	7440-50-8 7440-36-0 7429-90-5 7440-66-6 rdous Constituents 15245-44-0 7440-39-3	waste number Not Listed hazardous constituent - no waste number Not Listed Not Listed Not Listed (total)
 Copper Antimony Aluminum Zinc S RCRA (Resource Conservation & Recovery Act) - List for Hazal 2,4,6-Trinitro-1,3-benzenediol lead salt Barium Copper Antimony 	7440-50-8 7440-36-0 7429-90-5 7440-66-6 rdous Constituents 15245-44-0 7440-39-3 7440-50-8	waste number Not Listed hazardous constituent - no waste number Not Listed Not Listed Not Listed (total) (total)
 Copper Antimony Aluminum Zinc S RCRA (Resource Conservation & Recovery Act) - List for Hazal 2,4,6-Trinitro-1,3-benzenediol lead salt Barium Copper Antimony Aluminum 	7440-50-8 7440-36-0 7429-90-5 7440-66-6 rdous Constituents 15245-44-0 7440-39-3 7440-50-8 7440-36-0	waste number Not Listed hazardous constituent - no waste number Not Listed Not Listed Not Listed (total) (total) (total)
 Copper Antimony Aluminum Zinc I.S RCRA (Resource Conservation & Recovery Act) - List for Haza 2,4,6-Trinitro-1,3-benzenediol lead salt Barium Copper Antimony Aluminum Zinc I.S RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR 	7440-50-8 7440-36-0 7429-90-5 7440-66-6 rdous Constituents 15245-44-0 7440-39-3 7440-50-8 7440-36-0 7429-90-5 7440-66-6 Rule - Universal Treatment Star	waste number Not Listed hazardous constituent - no waste number Not Listed Not Listed Not Listed (total) (total) (total) Not Listed (total)
 Copper Antimony Aluminum Zinc I.S RCRA (Resource Conservation & Recovery Act) - List for Haza 2,4,6-Trinitro-1,3-benzenediol lead salt Barium Copper Antimony Aluminum Zinc I.S RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR 	7440-50-8 7440-36-0 7429-90-5 7440-66-6 rdous Constituents 15245-44-0 7440-39-3 7440-50-8 7440-36-0 7429-90-5 7440-66-6	waste number Not Listed hazardous constituent - no waste number Not Listed Not Listed Not Listed (total) (total) (total) Not Listed (total) Not Listed (total) Not Listed
 Copper Antimony Aluminum Zinc I.S RCRA (Resource Conservation & Recovery Act) - List for Haza 2,4,6-Trinitro-1,3-benzenediol lead salt Barium Copper Antimony Aluminum Zinc I.S RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR 2,4,6-Trinitro-1,3-benzenediol lead salt 	7440-50-8 7440-36-0 7429-90-5 7440-66-6 rdous Constituents 15245-44-0 7440-39-3 7440-36-0 7429-90-5 7440-66-6 Rule - Universal Treatment Star 15245-44-0 7440-39-3	waste number Not Listed hazardous constituent - no waste number Not Listed Not Listed Not Listed (total) (total) (total) Not Listed (total) And Listed An
 Copper Antimony Aluminum Zinc I.S RCRA (Resource Conservation & Recovery Act) - List for Hazal 2,4,6-Trinitro-1,3-benzenediol lead salt Barium Copper Antimony Aluminum Zinc I.S RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR 2,4,6-Trinitro-1,3-benzenediol lead salt Barium 	7440-50-8 7440-36-0 7429-90-5 7440-66-6 rdous Constituents 15245-44-0 7440-39-3 7440-50-8 7440-36-0 7429-90-5 7440-66-6 Rule - Universal Treatment Star	waste number Not Listed hazardous constituent - no waste number Not Listed Not Listed Not Listed (total) (total) (total) Not Listed (total) and Listed Not Listed (total) Not Listed (total) not Listed Not Listed Not Listed 1.2 mg/L (wastewater); 21 mg/L TCLP (nonwastewater) Not Listed
 Copper Antimony Aluminum Zinc I.S RCRA (Resource Conservation & Recovery Act) - List for Hazal 2,4,6-Trinitro-1,3-benzenediol lead salt Barium Copper Antimony Aluminum Zinc I.S RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR 2,4,6-Trinitro-1,3-benzenediol lead salt Barium Copper 	7440-50-8 7440-36-0 7429-90-5 7440-66-6 rdous Constituents 15245-44-0 7440-39-3 7440-36-0 7429-90-5 7440-66-6 Rule - Universal Treatment Star 15245-44-0 7440-39-3	waste number Not Listed hazardous constituent - no waste number Not Listed Not Listed Not Listed (total) (total) (total) Not Listed (total) And Listed An
 Copper Antimony Aluminum Zinc I.S RCRA (Resource Conservation & Recovery Act) - List for Haza 2,4,6-Trinitro-1,3-benzenediol lead salt Barium Copper Antimony Aluminum Zinc I.S RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR 2,4,6-Trinitro-1,3-benzenediol lead salt Barium Copper Antimony 	7440-50-8 7440-36-0 7429-90-5 7440-66-6 rdous Constituents 15245-44-0 7440-39-3 7440-50-8 7440-66-6 Rule - Universal Treatment Star 15245-44-0 7440-39-3 7440-50-8	waste number Not Listed hazardous constituent - no waste number Not Listed Not Listed Not Listed (total) (total) (total) Not Listed (total) **Not Listed **Total total total) **Total total to
 Copper Antimony Aluminum Zinc I.S RCRA (Resource Conservation & Recovery Act) - List for Hazal 2,4,6-Trinitro-1,3-benzenediol lead salt Barium Copper Antimony Aluminum Zinc I.S RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR 2,4,6-Trinitro-1,3-benzenediol lead salt Barium Copper Antimony Aluminum 	7440-50-8 7440-36-0 7429-90-5 7440-66-6 rdous Constituents 15245-44-0 7440-39-3 7440-50-8 7440-66-6 Rule - Universal Treatment Star 15245-44-0 7440-39-3 7440-50-8 7440-50-8 7440-50-8	waste number Not Listed hazardous constituent - no waste number Not Listed Not Listed Not Listed (total) (total) (total) Not Listed (total) ndards Not Listed 1.2 mg/L (wastewater); 21 mg/L TCLP (nonwastewater) Not Listed 1.9 mg/L (wastewater); 1.1 mg/L TCLP (nonwastewater)
 Copper Antimony Aluminum Zinc J.S RCRA (Resource Conservation & Recovery Act) - List for Haza 2,4,6-Trinitro-1,3-benzenediol lead salt Barium Copper Antimony Aluminum Zinc J.S RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR 2,4,6-Trinitro-1,3-benzenediol lead salt Barium Copper Antimony Aluminum Zinc 	7440-50-8 7440-36-0 7429-90-5 7440-66-6 rdous Constituents 15245-44-0 7440-39-3 7440-36-0 7429-90-5 7440-66-6 Rule - Universal Treatment Star 15245-44-0 7440-39-3 7440-50-8 7440-50-8 7440-50-8 7440-66-6	waste number Not Listed hazardous constituent - no waste number Not Listed Not Listed Not Listed (total) (total) (total) Not Listed (total) **Market** *
Copper Antimony Aluminum Zinc J.S RCRA (Resource Conservation & Recovery Act) - List for Hazar 2,4,6-Trinitro-1,3-benzenediol lead salt Barium Copper Antimony Aluminum Zinc J.S RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR 2,4,6-Trinitro-1,3-benzenediol lead salt Barium Copper Antimony Aluminum Copper Antimony Aluminum Copper Antimony Aluminum Zinc J.S RCRA (Resource Conservation & Recovery Act) - TSD Facilities 2,4,6-Trinitro-1,3-benzenediol lead salt	7440-50-8 7440-36-0 7429-90-5 7440-66-6 rdous Constituents 15245-44-0 7440-39-3 7440-36-0 7429-90-5 7440-66-6 Rule - Universal Treatment Star 15245-44-0 7440-39-3 7440-50-8 7440-50-8 7440-50-8 7440-66-6	waste number Not Listed hazardous constituent - no waste number Not Listed Not Listed Not Listed (total) (total) (total) Not Listed (total) **Market** *

Preparation Date: 25/October/2010 Revision Date:

• Copper	7440-50-8	(total)
• Antimony	7440-36-0	(total)
• Aluminum	7429-90-5	Not Listed
• Zinc	7440-66-6	(total)

United States - California

Environment U.S California - Proposition 65 - Carcinogens List		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Antimony	7440-36-0	Not Listed
• Aluminum	7429-90-5	Not Listed
• Zinc	7440-66-6	Not Listed
U.S California - Proposition 65 - Developmental Toxicity		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
Antimony	7440-36-0	Not Listed
Aluminum	7429-90-5	Not Listed
• Zinc	7440-66-6	Not Listed
U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL)		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
Antimony	7440-36-0	Not Listed
• Aluminum	7429-90-5	Not Listed
• Zinc	7440-66-6	Not Listed
U.S California - Proposition 65 - No Significant Risk Levels (NSRL)		
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Antimony	7440-36-0	Not Listed
• Aluminum	7429-90-5	Not Listed
• Zinc	7440-66-6	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Female		
2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Antimony	7440-36-0	Not Listed
• Aluminum	7429-90-5	Not Listed
• Zinc	7440-66-6	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Male	4=6:	
• 2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
• Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Antimony	7440-36-0	Not Listed
• Aluminum	7429-90-5	Not Listed
• Zinc	7440-66-6	Not Listed
<u> </u>		

United States - Pennsylvania

2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
Barium	7440-39-3	
Copper	7440-50-8	(dust and fume)
Antimony	7440-36-0	
• Aluminum	7429-90-5	
• Zinc	7440-66-6	
.S Pennsylvania - RTK (Right to Know) - Special Hazardous Substances		
2,4,6-Trinitro-1,3-benzenediol lead salt	15245-44-0	Not Listed
Barium	7440-39-3	Not Listed
• Copper	7440-50-8	Not Listed
• Antimony	7440-36-0	Not Listed
• Aluminum	7429-90-5	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)

· H201 - Explosive; mass explosion hazard

H228 - Flammable solid

H261 - In contact with water releases flammable gas

H302 - Harmful if swallowed H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Revision Date

Preparation Date

Disclaimer/Statement of Liability

· No data available

25/October/2010

• 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