

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision Date: 06/13/2017

Version: 2.2

## SECTION 1: IDENTIFICATION

Product IdentifierProduct Form: MixtureProduct Name: Centerfire rifle and pistol ammunition (all calibers)Synonyms: Speer, Lawman, Blazer Brass, Blazer Aluminum, Estate, Independence, SDS# F6000Intended Use of the ProductSmall Arms AmmunitionName, Address, and Telephone of the Responsible PartyCompanyFederal Cartridge Company (d/b/a CCI/Speer)2299 Snake River AveLewison, ID 83501

T 1-800-635-7656

dangerous.goods@vistaoutdoor.com

#### **Emergency Telephone Number**

Emergency number : 1-800-424-9300 (Inside US), 01-703-527-3887 (Outside US) - (CHEMTREC, Day or Night)

## SECTION 2: HAZARDS IDENTIFICATION

### **Classification of the Substance or Mixture**

Classification	(GHS-US)
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Physical Hazards:	Explosives	Division 1.4S
Health Hazards:	Acute Toxicity (inhalation)	Category 3
	Skin Sensitization	Category 1A
	Carcinogenicity	Category 2
	Reproductive Toxicity	Category 1A
	Specific Target Organ Toxicity,	Category 1
	Repeat Exposure	
	Specific Target Organ Toxicity,	Category 2
	Repeat Exposure	

Label Elements			
GHS-US Labeling			
Hazard Pictograms (GHS-US)	:	^	

Signal Word (GHS-US)	: DANGER
Hazard Statements (GHS-US)	: Fire or projection hazard. Suspected of causing cancer. May damage fertility or the unborn child. Causes damage to organs (central nervous system, blood, kidney, reproductive system) through prolonged or repeated exposure.
Precautionary Statements (GHS-US)	<ul> <li><u>Prevention:</u></li> <li>Do not handle until all safety precautions have been read and understood. Keep away from heat. No smoking. Do not subject to shock. Wear eye protection. Do not breathe fumes. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. <u>Response:</u></li> <li>In case of fire: Evacuate area. Fight fire with normal precautions from a reasonable distance. If exposed, concerned or you feel unwell: Call a doctor or get medical attention. <u>Storage</u>: Store in accordance with applicable fire codes. Keep only in original packaging. <u>Disposal</u>: Dispose of ammunition in accordance with local regulations.</li> <li><u>Supplemental information</u>: The hazardous components of this product are encased and are</li> </ul>

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### not biologically available.

Therefore, some health hazards do not apply to the overall product. Decomposition products, including lead, are released during the firing of cartridges. Use only outdoors or in a well-ventilated area.

#### **Other Hazards**

**Other Hazards Not Contributing to the Classification**: Lead and barium are toxic metals that may be released during the firing of primers. Care should be taken in the cleaning of range facilities to minimize the exposure potential to lead and barium. Persons engaged in these activities should wear protective clothing with an appropriate respirator. Range operators should consult OSHA 1910.1025 for details pertaining to the handling of lead in the work environment. Severe lead intoxication has been associated in the past with sterility, spontaneous abortion, and stillbirth. Exposure to lead can aggravate pre-existing anemia, cardiovascular and respiratory diseases and conditions related to the gastrointestinal, reproductive, renal (kidney), and central nervous systems. **Accidental Injury From Fired Cartridge:** Fired ammunition can create serious injury, possibly both entrance and exit wounds. To avoid serious injury, use ammunition only in good condition and originally chambered for a particular caliber. Always keep the barrel free of any obstruction. If the gun fails to fire, a delayed firing may occur, or the gun may fire upon being opened. Keep gun muzzle pointed in a safe direction. Wait 30 seconds. Avoid exposure to breech. Carefully unload. A fired bullet has an extremely long range and can cause serious injury or death. Always be sure of the backstop, and practice safe muzzle control at all times. Avoid firing at surfaces.

#### Unknown Acute Toxicity (GHS-US) Not available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>Substances</u>		
Name	Product identifier	% (w/w)
Lead	(CAS No) 7439-92-1	30 - 60
Copper	(CAS No) 7440-50-8	25 - 41
Zinc	(CAS No) 7440-66-6	1 - 16
Aluminum	(CAS No) 7429-90-5	0 - 29
Nitrocellulose	(CAS No) 9004-70-0	0.5 - 12
Nitroglycerin	(CAS No) 55-63-0	≤ 7
Antimony	(CAS No) 7440-36-0	≤ 3
Nickel	(CAS No) 7440-02-0	≤ 1
Zinc oxide	(CAS No) 1314-13-2	< 0.25
Graphite	(CAS No) 7782-42-5	≤ 0.25

\*The hazardous components of this product are encased within a shell and are unlikely to be released under normal handling conditions. Therefore, the health and environmental hazards associated with nitrocellulose and nitroglycerin do not apply to the product overall.

\*\*It is suspected that nickel causes cancer and damage to the respiratory tract via inhalation. Because this product is in massive form, it is unlikely that respiration is a potential route of exposure. Therefore, the hazards usually associated with nickel do not apply to this product.

More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where neccesary due to varying composition.

Full text of H-phrases: see section 16

### **SECTION 4: FIRST AID MEASURES**

### **Description of First Aid Measures**

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area.

Skin Contact: Wash with plenty of soap and water. If skin irritation or rash occurs: Seek medical advice.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion: Rinse mouth. Do NOT induce vomiting.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### Most Important Symptoms and Effects Both Acute and Delayed

General: May cause an allergic skin reaction. Projectiles from fired ammunition can cause puncture wounds.

Inhalation: Not expected to be a primary route of exposure.

Skin Contact: May cause an allergic skin reaction.

Eye Contact: None expected under normal conditions of use.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

#### Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

### SECTION 5: FIRE-FIGHTING MEASURES

#### **Extinguishing Media**

Suitable Extinguishing Media: Straight water stream; Water fog. Class A foam.

Unsuitable Extinguishing Media: None

#### Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Explosive. The effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire shall not cause virtually instantaneous explosion of almost the entire contents of the package. Do not expose to heat, or ignition sources as this could cause an explosion. If heated above 200 °C (392 °F) may explode. **Reactivity:** Hazardous reactions are unlikely to occur under normal circumstances.

#### Advice for Firefighters

**Precautionary Measures Fire:** Do not breathe fumes from fires or vapors from decomposition. Exercise caution when fighting any chemical fire. If product is unconfined, there is a greater risk for injury from projectiles.

Firefighting Instructions: In case of fire: Evacuate area. Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Self-contained breathing apparatus (SCBA) and full structural protective clothing should be worn for any fire or exposure to heat. This includes, but is not limited to, protective coat, pants, boots, firefighting gloves, SCBA with facepiece and helmet, protective hood and eye protection. (NFPA 1971)

Hazardous Combustion Products: Oxides of Barium, Lead, Antimony, Aluminum, Magnesium, Nitrogen, Carbon, and Sulfur. Specific Methods:

Perform a risk assessment before engaging in offensive firefighting operations. Unless life safety risk or significant risk of property loss is present, consider taking defensive posture, protecting exposures and maintaining safe distance until material is consumed. For further information see the video "Ammunition and the Fire Fighter" by the Sporting Arms and Ammunition Manufacturers' Institute (SAAMI).

Evacuate personnel to a safe area according to pre-determined public protection zones. Refer to pre-incident response and structural plans to determine potential for involvement of other hazardous materials. Direct water streams at product to reduce projectile hazard from exploding cartridges. After the fire is controlled, heated products can still re-ignite and project pieces of metal posing risk to fire-fighters. Full PPE including respiratory protection should be worn during salvage, overhaul and fire investigation. Do not disturb the involved area until the fire is completely extinguished and the product and packaging are allowed to cool down to ambient temperatures.

#### **Reference to Other Sections**

Refer to section 9 for flammability properties.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all unnecessary exposure.

#### For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

#### For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

**Emergency Procedures:** Eliminate ignition sources.

#### Environmental Precautions

Avoid release to the environment.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid. Use only non-sparking tools.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely.

#### **Reference to Other Sections**

See heading 8, Exposure Controls and Personal Protection.

### **SECTION 7: HANDLING AND STORAGE**

### **Precautions for Safe Handling**

Additional Hazards When Processed: Projectiles from fired ammunition can cause puncture wounds. Avoid striking the primer of unchambered cartridges. Remove ammunition from service if any of the following conditions have occurred: corrosion, physical damage, exposure to oil or spray type lubricants.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Do no eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

### Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Store as defined in the Explosives Act of Canada and the provisions of the Bureau of Alcohol, Tobacco and Firearms regulations contained in 27 CFR Part 555. Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep/Store away from heat sources, ignition sources, and incompatible materials. Keep container closed when not in use.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

Storage Area: Keep only in original container.

Specific End Use(s) Small Arms Ammunition

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Zinc oxide (1314-13-2)		
Mexico	OEL TWA (mg/m³)	10 mg/m <sup>3</sup>
Mexico	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
USA ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup>
USA IDLH	US IDLH (mg/m <sup>3</sup> )	500 mg/m <sup>3</sup>
Alberta	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Alberta	OEL TWA (mg/m³)	2 mg/m <sup>3</sup>
British Columbia	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
British Columbia	OEL TWA (mg/m³)	2 mg/m <sup>3</sup>
Manitoba	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Manitoba	OEL TWA (mg/m³)	2 mg/m <sup>3</sup>
New Brunswick	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
New Brunswick	OEL TWA (mg/m³)	5 mg/m <sup>3</sup>
Newfoundland & Labrador	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Newfoundland & Labrador	OEL TWA (mg/m³)	2 mg/m <sup>3</sup>
Nova Scotia	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Nova Scotia	OEL TWA (mg/m³)	2 mg/m <sup>3</sup>
Nunavut	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Nunavut	OEL TWA (mg/m³)	10 mg/m <sup>3</sup> (total mass)
Northwest Territories	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Northwest Territories	OEL TWA (mg/m³)	10 mg/m <sup>3</sup> (total mass)
Ontario	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Ontario	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Prince Edward Island	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Prince Edward Island	OEL TWA (mg/m³)	2 mg/m <sup>3</sup>
Québec	VECD (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Québec	VEMP (mg/m³)	5 mg/m <sup>3</sup>
Saskatchewan	OEL STEL (mg/m³)	10 mg/m <sup>3</sup>
Saskatchewan	OEL TWA (mg/m³)	2 mg/m <sup>3</sup>
Yukon	OEL STEL (mg/m³)	20 mg/m <sup>3</sup>
Yukon	OEL TWA (mg/m³)	10 mg/m <sup>3</sup>
Nickel (7440-02-0)		
Mexico	OEL TWA (mg/m³)	1 mg/m <sup>3</sup>
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1.5 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	0.015 mg/m <sup>3</sup>
USA IDLH	US IDLH (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Alberta	OEL TWA (mg/m <sup>3</sup> )	1.5 mg/m <sup>3</sup>
British Columbia	OEL TWA (mg/m <sup>3</sup> )	0.05 mg/m <sup>3</sup>
Manitoba	OEL TWA (mg/m <sup>3</sup> )	1.5 mg/m <sup>3</sup>
New Brunswick	OEL TWA (mg/m <sup>3</sup> )	1.5 mg/m <sup>3</sup>
Newfoundland & Labrador	OEL TWA (mg/m <sup>3</sup> )	1.5 mg/m <sup>3</sup>
Nova Scotia	OEL TWA (mg/m <sup>3</sup> )	1.5 mg/m <sup>3</sup>
Nunavut	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
	OEL TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Nunavut Northwest Territories	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
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Northwest Territories	OEL TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Ontario	OEL TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Prince Edward Island	OEL TWA (mg/m <sup>3</sup> )	1.5 mg/m <sup>3</sup>
Québec	VEMP (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Saskatchewan	OEL STEL (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Saskatchewan	OEL TWA (mg/m <sup>3</sup> )	1.5 mg/m <sup>3</sup>
Yukon	OEL STEL (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Yukon	OEL TWA (mg/m³)	1 mg/m <sup>3</sup>
Lead (7439-92-1)	1	
Mexico	OEL TWA (mg/m³)	0.15 mg/m <sup>3</sup>
USA ACGIH	ACGIH TWA (mg/m³)	0.05 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (mg/m³)	50 μg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.050 mg/m <sup>3</sup>
USA IDLH	US IDLH (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup>
Alberta	OEL TWA (mg/m³)	0.05 mg/m <sup>3</sup>
British Columbia	OEL TWA (mg/m³)	0.05 mg/m <sup>3</sup>
Manitoba	OEL TWA (mg/m³)	0.05 mg/m <sup>3</sup>
New Brunswick	OEL TWA (mg/m³)	0.05 mg/m <sup>3</sup>
Newfoundland & Labrador	OEL TWA (mg/m³)	0.05 mg/m <sup>3</sup>
Nova Scotia	OEL TWA (mg/m³)	0.05 mg/m <sup>3</sup>
Nunavut	OEL STEL (mg/m <sup>3</sup> )	0.45 mg/m <sup>3</sup>
Nunavut	OEL TWA (mg/m <sup>3</sup> )	0.15 mg/m <sup>3</sup>
Northwest Territories	OEL STEL (mg/m <sup>3</sup> )	0.45 mg/m <sup>3</sup>
Northwest Territories	OEL TWA (mg/m <sup>3</sup> )	0.15 mg/m <sup>3</sup>
Ontario	OEL TWA (mg/m <sup>3</sup> )	0.05 mg/m <sup>3</sup> (applies to workplaces to which the designated
		substances regulation does not apply)
Prince Edward Island	OEL TWA (mg/m³)	0.05 mg/m <sup>3</sup>
Québec	VEMP (mg/m <sup>3</sup> )	0.05 mg/m <sup>3</sup>
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Safety Data Sheet

Saskatchewan	OEL STEL (mg/m <sup>3</sup> )	0.15 mg/m <sup>3</sup>
Saskatchewan	OEL TWA (mg/m³)	0.05 mg/m <sup>3</sup>
Yukon	OEL STEL (mg/m <sup>3</sup> )	0.45 mg/m³
Yukon	OEL TWA (mg/m³)	0.15 mg/m³
Copper (7440-50-8)		
Mexico	OEL TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Mexico	OEL STEL (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup>
USA IDLH	US IDLH (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup>
Alberta	OEL TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
British Columbia	OEL TWA (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
Manitoba	OEL TWA (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
New Brunswick	OEL TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Newfoundland & Labrador	OEL TWA (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
Nova Scotia	OEL TWA (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
Nunavut	OEL STEL (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Nunavut	OEL TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Northwest Territories	OEL STEL (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Northwest Territories	OEL TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Ontario	OEL TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Prince Edward Island	OEL TWA (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup>
Québec	VEMP (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Saskatchewan	OEL STEL (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Saskatchewan	OEL TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Yukon	OEL STEL (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Yukon	OEL TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
	OEL TWA (mg/m²)	
Nitroglycerin (55-63-0)		
Mexico	OEL TWA (mg/m <sup>3</sup> )	0.5 mg/m <sup>3</sup>
Mexico	OEL TWA (ppm)	0.05 ppm
Mexico	OEL STEL (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Mexico	OEL STEL (ppm)	0.1 ppm
USA ACGIH	ACGIH TWA (ppm)	0.05 ppm
USA OSHA	OSHA PEL (Ceiling) (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (Ceiling) (ppm)	0.2 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup>
USA IDLH	US IDLH (mg/m <sup>3</sup> )	75 mg/m <sup>3</sup>
Alberta	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Alberta	OEL TWA (ppm)	0.05 ppm
British Columbia	OEL TWA (ppm)	0.05 ppm
Manitoba	OEL TWA (ppm)	0.05 ppm
New Brunswick	OEL TWA (mg/m³)	0.46 mg/m <sup>3</sup>
New Brunswick	OEL TWA (ppm)	0.05 ppm
Newfoundland & Labrador	OEL TWA (ppm)	0.05 ppm
Nova Scotia	OEL TWA (ppm)	0.05 ppm
Nunavut	OEL STEL (mg/m <sup>3</sup> )	0.46 mg/m <sup>3</sup>
Nunavut	OEL STEL (ppm)	0.05 ppm
Nunavut	OEL TWA (mg/m <sup>3</sup> )	1.9 mg/m <sup>3</sup>
Nunavut	OEL TWA (ppm)	0.02 ppm
Northwest Territories	OEL STEL (mg/m <sup>3</sup> )	0.46 mg/m <sup>3</sup>
	,	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Northwest Territories	OEL STEL (ppm)	0.05 ppm
Northwest Territories	OEL TWA (mg/m³)	1.9 mg/m <sup>3</sup>
Northwest Territories	OEL TWA (ppm)	0.02 ppm
Ontario	OEL TWA (ppm)	0.05 ppm
Prince Edward Island	OEL TWA (ppm)	0.05 ppm
Québec	PLAFOND (mg/m <sup>3</sup> )	1.86 mg/m <sup>3</sup>
Québec	PLAFOND (ppm)	0.2 ppm
Saskatchewan	OEL STEL (ppm)	0.15 ppm
Saskatchewan	OEL TWA (ppm)	0.05 ppm
Yukon	OEL STEL (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Yukon	OEL STEL (ppm)	0.2 ppm
Yukon	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Yukon	OEL TWA (ppm)	0.2 ppm
Graphite (7782-42-5)	·	
Mexico	OEL TWA (mg/m³)	2 mg/m <sup>3</sup> (synthetic and natural)
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (all forms except graphite fibers)
USA OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m <sup>3</sup> (synthetic)
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	2.5 mg/m <sup>3</sup> (natural)
USA IDLH	US IDLH (mg/m <sup>3</sup> )	1250 mg/m <sup>3</sup>
Alberta	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (all forms except Graphite fibres)
British Columbia	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (all forms except Graphite fibres)
Manitoba	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (all forms except Graphite fibers)
New Brunswick	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (all forms except graphite fibres)
Newfoundland & Labrador	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (all forms except Graphite fibers)
Nova Scotia	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (all forms except Graphite fibers)
Nunavut	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (synthetic, total mass)
Northwest Territories	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (synthetic, total mass)
Ontario	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (except Graphite fibres)
Prince Edward Island	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (all forms except Graphite fibers)
Québec	VEMP (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (containing no Asbestos and <1% Crystalline silica,
		except Graphite fibres)
Saskatchewan	OEL STEL (mg/m <sup>3</sup> )	4 mg/m <sup>3</sup> (natural, except Graphite fibres)
Saskatchewan	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (natural, except Graphite fibres)
Yukon	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (synthetic)
Aluminum (7429-90-5)		
Mexico	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Alberta	OEL TWA (mg/m³)	10 mg/m <sup>3</sup>
British Columbia	OEL TWA (mg/m <sup>3</sup> )	1.0 mg/m <sup>3</sup>
Manitoba	OEL TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
New Brunswick	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Newfoundland & Labrador	OEL TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Nova Scotia	OEL TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Nunavut	OEL STEL (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup>
Nunavut	OEL TWA (mg/m³)	10 mg/m <sup>3</sup>
Northwest Territories	OEL STEL (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup>
Northwest Territories	OEL TWA (mg/m³)	10 mg/m <sup>3</sup>
Ontario	OEL TWA (mg/m³)	1 mg/m <sup>3</sup>
Prince Edward Island	OEL TWA (mg/m³)	1 mg/m <sup>3</sup>
00/10/2017		

EN (English US)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Québec	VEMP (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Saskatchewan	OEL STEL (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup>
Saskatchewan	OEL TWA (mg/m³)	10 mg/m <sup>3</sup>
Antimony (7440-36-0)	·	
Mexico	OEL TWA (mg/m <sup>3</sup> )	0.5 mg/m <sup>3</sup>
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.5 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (mg/m³)	0.5 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	0.5 mg/m <sup>3</sup>
USA IDLH	US IDLH (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup>
Alberta	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
British Columbia	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Manitoba	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
New Brunswick	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Newfoundland & Labrador	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Nova Scotia	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Nunavut	OEL STEL (mg/m <sup>3</sup> )	1.5 mg/m <sup>3</sup>
Nunavut	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Northwest Territories	OEL STEL (mg/m <sup>3</sup> )	1.5 mg/m <sup>3</sup>
Northwest Territories	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Ontario	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Prince Edward Island	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Québec	VEMP (mg/m <sup>3</sup> )	0.5 mg/m <sup>3</sup>
Saskatchewan	OEL STEL (mg/m <sup>3</sup> )	1.5 mg/m <sup>3</sup>
Saskatchewan	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Yukon	OEL STEL (mg/m <sup>3</sup> )	0.75 mg/m <sup>3</sup>
Yukon	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Barium (7440-39-3)		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.5 mg/m <sup>3</sup>
Alberta	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
British Columbia	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Manitoba	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
New Brunswick	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Newfoundland & Labrador	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Nova Scotia	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Ontario	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Prince Edward Island	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Saskatchewan	OEL STEL (mg/m <sup>3</sup> )	1.5 mg/m <sup>3</sup>
Saskatchewan	OEL TWA (mg/m³)	0.5 mg/m <sup>3</sup>
Evenesure Controle		

### **Exposure Controls**

**Appropriate Engineering Controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Safety glasses.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

**Eye Protection:** In case of projectile hazard: Safety glasses. Face shield.

Skin and Body Protection: Wash contaminated clothing before reuse.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**Respiratory Protection:** Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

**Other Information:** Do not eat, drink or smoke during use. If noise levels exceed OSHA limits while firing this product, use hearing protection in accordance with OSHA's Hearing Conservation Standard, 29 CFR 1910.95.

### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Information on Basic Physical and Chemical Properties **Physical State** Solid Aluminum, brass or nickel plated brass case with plastic, lead, copper Appearance jacketed lead, or nylon clad lead bullet. Odor Not available **Odor Threshold** Not available nН Not available **Relative Evaporation Rate (butylacetate=1)** Not available **Melting Point** Not available **Freezing Point** Not available Not available **Boiling Point Flash Point** Not available **Auto-ignition Temperature** Not available **Decomposition Temperature** Not available Flammability (solid, gas) Not available **Lower Flammable Limit** Not available Not available **Upper Flammable Limit** Vapor Pressure Not available Relative Vapor Density at 20 °C Not available **Relative Density** Not available **Specific Gravity**  $3.1 - 8.0 \text{ g/cm}^3$ Solubility Not available Partition coefficient: n-octanol/water Not available Viscosity Not available **Explosive properties** Explosive; fire or projection hazard Explosion Data – Sensitivity to Mechanical Impact Sensitive to mechanical impact **Explosion Data – Sensitivity to Static Discharge** Insensitive

### **SECTION 10: STABILITY AND REACTIVITY**

**Reactivity:** Hazardous reactions are unlikely to occur under normal circumstances.

**Chemical Stability:** Stable under recommended handling and storage conditions (see section 7). However, because of the design of ammunition and its components, partial detonation upon impact or intense heat may occur. Mass detonation will not occur.

### Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

**Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Open flame. Overheating.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

### Hazardous Decomposition Products: Metal oxides.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### Information on Toxicological Effects - Product

Acute Toxicity: Not classified

#### LD50 and LC50 Data:

Small Arms Ammunition – Centerfire Rifle & Pistol Ammunition	
ATE US (oral)	100.00 mg/kg body weight
ATE US (dermal)	300.00 mg/kg body weight
ATE US (dust, mist)	0.50 mg/l/4h

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations			
Respiratory or Skin Sensitization: May ca	ause an allergic skin r	reaction.	
Germ Cell Mutagenicity: Not classified			
Teratogenicity: Not classified			
Carcinogenicity: Reasonably anticipated	to be human carcino	gen.	
Specific Target Organ Toxicity (Repeated	<b>d Exposure):</b> Not clas	sified	
Reproductive Toxicity: Not classified			
Specific Target Organ Toxicity (Single Ex	posure): Not classifie	d	
Aspiration Hazard: Not classified			
Symptoms/Injuries After Inhalation: No	t expected to be a pr	imary route of exposure.	
Symptoms/Injuries After Skin Contact: N			
Symptoms/Injuries After Eye Contact: N	-		
Symptoms/Injuries After Ingestion: Inge	-		
Chronic Symptoms: None expected under		of use.	
Information on Toxicological Effects	- Ingredient(s)		
LD50 and LC50 Data:			
Zinc oxide (1314-13-2) LD50 Oral Rat		> 5000 mg/kg	
		> 5000 mg/kg	
ATE US (dust, mist)		5.80 mg/l/4h	
Nickel (7440-02-0)			
LD50 Oral Rat		> 9000 mg/kg	
Nitroglycerin (55-63-0)			
LD50 Oral Rat		105 mg/kg	
LD50 Dermal Rabbit		> 280 mg/kg	
ATE US (dust, mist)		0.05 mg/l/4h	
Graphite (7782-42-5)			
		> 2000 mg/kg	
Antimony (7440-36-0)		·	
LD50 Oral Rat 100 mg/kg			
Barium (7440-39-3)			
LD50 Oral Rat			
Nickel (7440-02-0)		28	
IARC Group National Toxicity Program (NTP) Status		Reasonably anticipated to be Human Carcinogen.	
IARC Group	Lead (7439-92-1) IARC Group 2A		
National Toxicity Program (NTP) Status     Reasonably anticipated to be Human Carcinogen.			
SECTION 12: ECOLOGICAL INFORMATION			
	Toxicity Not classified		
Zinc oxide (1314-13-2)	700 // C		
LC50 Fish 1		imephales promelas	
NOEC chronic fish	0.026 mg/l Species: Jordanella floridae		
Nickel (7440-02-0)			
LC50 Fish 1	100 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)		
EC50 Daphnia 1		e time: 48 h - Species: Daphnia magna)	
LC 50 Fish 2	1.3 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])		
EC50 Daphnia 2	1 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])		
EC50 Other Aquatic Organisms 2       0.174 - 0.311 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata [static])			
Zinc (7440-66-6)			
LC50 Fish 12.16 - 3.05 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])			

Safety Data Sheet

EC50 Daphnia 1	0.139 - 0.908 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])	
LC 50 Fish 2	0.119 - 0.908 mg/l (exposure time: 48 h - species: Daphna magna [static]) 0.211 - 0.269 mg/l (Exposure time: 96 h - Species: Pimephales promelas [semi-static])	
	0.211 - 0.209 mg/r (exposure time: 96 n - Species: Pimephales prometas [semi-static])	
Lead (7439-92-1) LC50 Fish 1	0.44 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])	
EC50 Daphnia 1	$600 \ \mu\text{g/l} (\text{Exposure time: } 48 \ \text{h} - \text{Species: water flea})$	
LC 50 Fish 2	1.17 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])	
Copper (7440-50-8)		
LC50 Fish 1	≤ 0.0068 (0.0068 - 0.0156) mg/l (Exposure time: 96 h - Species: Pimephales promelas)	
EC50 Daphnia 1	0.03 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])	
EC50 Other Aquatic Organis		
LC 50 Fish 2	0.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])	
EC50 Other Aquatic Organisr		
Nitroglycerin (55-63-0)		
LC50 Fish 1	0.87 - 3.25 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])	
EC50 Daphnia 1	46 - 55 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
LC 50 Fish 2	0.87 - 2.21 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])	
EC50 Daphnia 2	38 - 55 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])	
Persistence and Degradal		
	Centerfire Rifle & Pistol Ammunition	
Persistence and Degradabilit		
	y Not established.	
Copper (7440-50-8)	Not readily biodegradable	
Persistence and Degradabilit		
Bioaccumulative Potentia		
	Centerfire Rifle & Pistol Ammunition	
Bioaccumulative Potential Not established.		
Mobility in Soil Not availab	ne	
Other Adverse Effects		
Other Information: Avoid re		
SECTION 13: DISPOSAL O		
-	dations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial	
and international regulation		
	Avoid release to the environment.	
SECTION 14: TRANSPOR		
14.1 In Accordance with I		
Proper Shipping Name	: CARTRIDGES, SMALL ARMS	
Hazard Class	: 1.45	
Identification Number	: UN0012	
Label Codes	: 1.4S	
Packing Group ERG Number	: None : 114	
	packaged per 49CFR173.63	
Proper Shipping Name	: None	
Hazard Class Identification Number	: Limited Quantity	
	: None	
Label Codes Packing Group	: None : None	

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

14.2 In Accordance with IMD	3
Proper Shipping Name	: CARTRIDGES, SMALL ARMS
Hazard Class	: 1.4S
Identification Number	: UN0012
Label Codes	: 1.4S
EmS-No. (Fire)	: F-B
EmS-No. (Spillage)	: S-X
14.3 In Accordance with IATA	
Proper Shipping Name	: Check with air carrier for latest requirements.
Identification Number	:
Hazard Class	:
Label Codes	:
ERG Code (IATA)	:
14.4 In Accordance with TDG	
Proper Shipping Name	: CARTRIDGES, SMALL ARMS
Packing Group	: None
Hazard Class	: 1.4S
Identification Number	: UN0012
Label Codes	: 1.4S
Dev ACCEDATO CO/LA distant au	antitica of Contriduce on all annes. Contriduce and

**Per 49CFR173.63(b)**: *Limited quantities of Cartridges, small arms, Cartridges, power device, Cartridges for tools, blank, and Cases, cartridge, empty with primer.* (1)(i) Cartridges, small arms, Cartridges, power device (used to project fastening devices), Cartridges for tools, blank, and Cases, cartridge, empty with primer that have been classed as Division 1.4S explosive may be offered for transportation and transported as limited quantities when packaged in accordance with paragraph (b)(2) of this section. Packages containing such articles may be marked with either the marking prescribed in §172.315(a) or (b) of this subchapter and offered for transportation and transported by any mode. For transportation by aircraft, the package must conform to the applicable requirements of §173.27 of this part. In addition, packages containing such articles offered for transportation by aircraft must be marked with the proper shipping name as prescribed in the §172.101 Hazardous Materials Table of this subchapter. Packages containing such articles are not subject to the shipping paper requirements of subpart C of part 172 of this subchapter unless the material meets the definition of a hazardous substance, hazardous waste, marine pollutant, or is offered for transportation and transported by aircraft or vessel. Additionally, packages containing such articles are excepted from the requirements of subparts E (Labeling) and F (Placarding) of part 172 of this subchapter.

SECTION 15: REGULATORY INFORMATION US Federal Regulations		
Small Arms Ammunition – Centerfire Rifle & Pistol Ammunitie	on	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	
	Delayed (chronic) health hazard	
	Sudden release of pressure hazard	
Zinc oxide (1314-13-2)		
Listed on the United States TSCA (Toxic Substances Control Act	t) inventory	
Nickel (7440-02-0)		
Listed on the United States TSCA (Toxic Substances Control Act	t) inventory	
Listed on SARA Section 313 (Specific toxic chemical listings)		
RQ (Reportable Quantity, Section 304 of EPA's List of Lists):	100 lb (only applicable if particles are < 100 $\mu$ m)	
SARA Section 313 - Emission Reporting	0.1 %	
Zinc (7440-66-6)		
Listed on the United States TSCA (Toxic Substances Control Act	t) inventory	
Listed on SARA Section 313 (Specific toxic chemical listings)		
SARA Section 313 - Emission Reporting	1.0 % (dust or fume only)	
Nitrocellulose (9004-70-0)		
Listed on the United States TSCA (Toxic Substances Control Act	t) inventory	
06/13/2017 EN (English US)		12/16

Safety Data Sheet

Lead (7439-92-1)	
Listed on the United States TSCA (Toxic Substances Control Act	inventory
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	0.1 %
Copper (7440-50-8)	
Listed on the United States TSCA (Toxic Substances Control Act	inventory
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	1.0 %
Nitroglycerin (55-63-0)	
Listed on the United States TSCA (Toxic Substances Control Act	) inventory
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	1.0 %
Graphite (7782-42-5)	
Listed on the United States TSCA (Toxic Substances Control Act	inventory
Aluminum (7429-90-5)	
Listed on the United States TSCA (Toxic Substances Control Act	inventory
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	1.0 % (dust or fume only)
Antimony (7440-36-0)	
Listed on the United States TSCA (Toxic Substances Control Act	inventory
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	1.0 %
Barium (7440-39-3)	
Listed on the United States TSCA (Toxic Substances Control Act	) inventory
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	1.0 %
US State Regulations	
Nickel (7440-02-0)	
Nickel (7440-02-0)	WARNING: This product contains chemicals known to the
Nickel (7440-02-0) U.S California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.
U.S California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.
U.S California - Proposition 65 - Carcinogens List Lead (7439-92-1)	State of California to cause cancer.
U.S California - Proposition 65 - Carcinogens List	State of California to cause cancer. WARNING: This product contains chemicals known to the
U.S California - Proposition 65 - Carcinogens List Lead (7439-92-1) U.S California - Proposition 65 - Carcinogens List	State of California to cause cancer.         WARNING: This product contains chemicals known to the         State of California to cause cancer.
U.S California - Proposition 65 - Carcinogens List Lead (7439-92-1)	State of California to cause cancer.         WARNING: This product contains chemicals known to the         State of California to cause cancer.         WARNING: This product contains chemicals known to the
U.S California - Proposition 65 - Carcinogens List Lead (7439-92-1) U.S California - Proposition 65 - Carcinogens List	State of California to cause cancer.         WARNING: This product contains chemicals known to the         State of California to cause cancer.         WARNING: This product contains chemicals known to the         State of California to cause birth defects.
U.S California - Proposition 65 - Carcinogens List Lead (7439-92-1) U.S California - Proposition 65 - Carcinogens List U.S California - Proposition 65 - Developmental Toxicity	State of California to cause cancer.         WARNING: This product contains chemicals known to the         State of California to cause cancer.         WARNING: This product contains chemicals known to the         State of California to cause birth defects.
U.S California - Proposition 65 - Carcinogens List Lead (7439-92-1) U.S California - Proposition 65 - Carcinogens List U.S California - Proposition 65 - Developmental Toxicity	State of California to cause cancer.         WARNING: This product contains chemicals known to the State of California to cause cancer.         WARNING: This product contains chemicals known to the State of California to cause birth defects.         ale       WARNING: This product contains chemicals known to the State of California to cause (Female) reproductive harm.
U.S California - Proposition 65 - Carcinogens List Lead (7439-92-1) U.S California - Proposition 65 - Carcinogens List U.S California - Proposition 65 - Developmental Toxicity U.S California - Proposition 65 - Reproductive Toxicity - Fem	State of California to cause cancer.         WARNING: This product contains chemicals known to the State of California to cause cancer.         WARNING: This product contains chemicals known to the State of California to cause birth defects.         ale       WARNING: This product contains chemicals known to the State of California to cause (Female) reproductive harm.
U.S California - Proposition 65 - Carcinogens List Lead (7439-92-1) U.S California - Proposition 65 - Carcinogens List U.S California - Proposition 65 - Developmental Toxicity U.S California - Proposition 65 - Reproductive Toxicity - Fem U.S California - Proposition 65 - Reproductive Toxicity - Mak	State of California to cause cancer.         WARNING: This product contains chemicals known to the State of California to cause cancer.         WARNING: This product contains chemicals known to the State of California to cause birth defects.         ale       WARNING: This product contains chemicals known to the State of California to cause (Female) reproductive harm.         e       WARNING: This product contains chemicals known to the
U.S California - Proposition 65 - Carcinogens List Lead (7439-92-1) U.S California - Proposition 65 - Carcinogens List U.S California - Proposition 65 - Developmental Toxicity U.S California - Proposition 65 - Reproductive Toxicity - Fem U.S California - Proposition 65 - Reproductive Toxicity - Make Zinc oxide (1314-13-2)	State of California to cause cancer.         WARNING: This product contains chemicals known to the State of California to cause cancer.         WARNING: This product contains chemicals known to the State of California to cause birth defects.         ale       WARNING: This product contains chemicals known to the State of California to cause (Female) reproductive harm.         e       WARNING: This product contains chemicals known to the
U.S California - Proposition 65 - Carcinogens List Lead (7439-92-1) U.S California - Proposition 65 - Carcinogens List U.S California - Proposition 65 - Developmental Toxicity U.S California - Proposition 65 - Reproductive Toxicity - Fem U.S California - Proposition 65 - Reproductive Toxicity - Mak	State of California to cause cancer.         WARNING: This product contains chemicals known to the State of California to cause cancer.         WARNING: This product contains chemicals known to the State of California to cause birth defects.         ale       WARNING: This product contains chemicals known to the State of California to cause (Female) reproductive harm.         e       WARNING: This product contains chemicals known to the
U.S California - Proposition 65 - Carcinogens List Lead (7439-92-1) U.S California - Proposition 65 - Carcinogens List U.S California - Proposition 65 - Developmental Toxicity U.S California - Proposition 65 - Reproductive Toxicity - Fem U.S California - Proposition 65 - Reproductive Toxicity - Fem U.S California - Proposition 65 - Reproductive Toxicity - Make U.S California - Proposition 65 - Reproductive Toxicity - Make U.S California - Proposition 65 - Reproductive Toxicity - Make	State of California to cause cancer.         WARNING: This product contains chemicals known to the State of California to cause cancer.         WARNING: This product contains chemicals known to the State of California to cause birth defects.         ale       WARNING: This product contains chemicals known to the State of California to cause (Female) reproductive harm.         e       WARNING: This product contains chemicals known to the State of California to cause (Male) reproductive harm.
U.S California - Proposition 65 - Carcinogens List Lead (7439-92-1) U.S California - Proposition 65 - Carcinogens List U.S California - Proposition 65 - Developmental Toxicity U.S California - Proposition 65 - Reproductive Toxicity - Fem U.S California - Proposition 65 - Reproductive Toxicity - Male Zinc oxide (1314-13-2) U.S Massachusetts - Right To Know List U.S New Jersey - Right to Know Hazardous Substance List	State of California to cause cancer.         WARNING: This product contains chemicals known to the State of California to cause cancer.         WARNING: This product contains chemicals known to the State of California to cause birth defects.         ale       WARNING: This product contains chemicals known to the State of California to cause (Female) reproductive harm.         e       WARNING: This product contains chemicals known to the State of California to cause (Male) reproductive harm.
<ul> <li>U.S California - Proposition 65 - Carcinogens List</li> <li>Lead (7439-92-1)</li> <li>U.S California - Proposition 65 - Carcinogens List</li> <li>U.S California - Proposition 65 - Developmental Toxicity</li> <li>U.S California - Proposition 65 - Reproductive Toxicity - Fem</li> <li>U.S California - Proposition 65 - Reproductive Toxicity - Fem</li> <li>U.S California - Proposition 65 - Reproductive Toxicity - Male</li> <li>Zinc oxide (1314-13-2)</li> <li>U.S Massachusetts - Right To Know List</li> <li>U.S New Jersey - Right to Know Hazardous Substance List</li> <li>U.S Pennsylvania - RTK (Right to Know) - Environmental Hazar</li> <li>U.S Pennsylvania - RTK (Right to Know) List</li> </ul>	State of California to cause cancer.         WARNING: This product contains chemicals known to the State of California to cause cancer.         WARNING: This product contains chemicals known to the State of California to cause birth defects.         ale       WARNING: This product contains chemicals known to the State of California to cause (Female) reproductive harm.         e       WARNING: This product contains chemicals known to the State of California to cause (Male) reproductive harm.
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Safety Data Sheet

Zinc (7440-66-6)
U.S Massachusetts - Right To Know List
U.S New Jersey - Right to Know Hazardous Substance List
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S Pennsylvania - RTK (Right to Know) List
Nitrocellulose (9004-70-0)
U.S Massachusetts - Right To Know List
U.S New Jersey - Right to Know Hazardous Substance List
U.S Pennsylvania - RTK (Right to Know) List
Lead (7439-92-1)
U.S Massachusetts - Right To Know List
U.S New Jersey - Right to Know Hazardous Substance List
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S Pennsylvania - RTK (Right to Know) List
Copper (7440-50-8)
U.S Massachusetts - Right To Know List
U.S New Jersey - Right to Know Hazardous Substance List
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S Pennsylvania - RTK (Right to Know) List
Nitroglycerin (55-63-0)
U.S Massachusetts - Right To Know List
U.S New Jersey - Right to Know Hazardous Substance List
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S Pennsylvania - RTK (Right to Know) List
Graphite (7782-42-5)
U.S Massachusetts - Right To Know List
U.S New Jersey - Right to Know Hazardous Substance List
U.S Pennsylvania - RTK (Right to Know) List
Aluminum (7429-90-5)
U.S Massachusetts - Right To Know List
U.S New Jersey - Right to Know Hazardous Substance List
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S Pennsylvania - RTK (Right to Know) List
Antimony (7440-36-0)
U.S Massachusetts - Right To Know List
U.S New Jersey - Right to Know Hazardous Substance List
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S Pennsylvania - RTK (Right to Know) List
Barium (7440-39-3)
U.S Massachusetts - Right To Know List
U.S New Jersey - Right to Know Hazardous Substance List
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S Pennsylvania - RTK (Right to Know) List
Canadian Regulations

Small Arms Ammunition – Centerfire Rifle & Pistol Ammunition	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
	Class F - Dangerously Reactive Material
	Note: Explosives are not regulated under WHMIS. They are subject to the regulations of the
	Explosives Act of Canada.

Safety Data Sheet

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1,3-Benzenediol, 2,4,6-trinitro	a load salt (15345 44 0)	
Listed on Non-Domestic Subst		
Zinc oxide (1314-13-2)	omestic Substances List) inventory.	
Listed on the Canadian Ingred		
IDL Concentration 1 %		
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria	
Nickel (7440-02-0)	omestic Substances List) inventory.	
Listed on the Canadian Ingred		
IDL Concentration 0.1 %		
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects	
	Class D Division 2 Subdivision B - Toxic material causing other toxic effects	
Zinc (7440-66-6)		
	omestic Substances List) inventory.	
WHMIS Classification	Class B Division 6 - Reactive Flammable Material	
Nitrocellulose (9004-70-0)		
	omestic Substances List) inventory.	
WHMIS Classification	Class B Division 4 - Flammable Solid	
	Class F - Dangerously Reactive Material	
Lead (7439-92-1)		
	omestic Substances List) inventory.	
Listed on the Canadian Ingred	ient Disclosure List	
IDL Concentration 0.1 %		
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects	
Copper (7440-50-8)		
	omestic Substances List) inventory.	
Listed on the Canadian Ingred	ient Disclosure List	
IDL Concentration 1 %		
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria	
Nitroglycerin (55-63-0)		
Listed on the Canadian DSL (D	omestic Substances List) inventory.	
Graphite (7782-42-5)		
Listed on the Canadian DSL (D	omestic Substances List) inventory.	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects	
Aluminum (7429-90-5)		
Listed on the Canadian DSL (D	omestic Substances List) inventory.	
Listed on the Canadian Ingredient Disclosure List		
IDL Concentration 1 %		
WHMIS Classification	Class B Division 6 - Reactive Flammable Material	
	Class B Division 4 - Flammable Solid	
Antimony (7440-36-0)		
	omestic Substances List) inventory.	
Listed on the Canadian Ingredient Disclosure List		
IDL Concentration 1 %		
00/112/2017		

#### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

WHMIS Classification	Uncontrolled product according to WHMIS classification criteria	
Barium (7440-39-3)		
Listed on the Canadian DSL (Domestic Substances List) inventory.		
WHMIS Classification	Class B Division 6 - Reactive Flammable Material	
	Class D Division 2 Subdivision B - Toxic material causing other toxic effects	
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS		
contains all of the information required by CPR.		

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<b>Revision date</b>	: 06/13/2017
Other Information	: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.
Alt. product labeling	<ul> <li>This product may also additionally contain the following label provided in accordance with various State, Federal, and International regulations.</li> </ul>
eye	<b>ARNING:</b> Fire or projection hazard. Keep away from heat – no smoking. Do not subject to shock. Wear e protection. Fight fire with normal precautions from a reasonable distance. Store and dispose of in cordance with local, national and international regulations.

### Party Responsible for the Preparation of This Document

Federal Cartridge Company 900 Ehlen Drive Anoka, MN 55303 1-800-635-7656 dangerous.goods@vistaoutdoor.com

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS 2