

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision Date: 02/05/2015 Date of issue: 02/05/2015 Supersedes Date: None

Version: 1.0

SECTION 1: IDENTIFICATION

<u>Product Identifier</u> <u>Product Form: Mixture</u>

Product Name: Centerfire Pistol Ammunition – Nickel Plated Brass Case

Synonyms: MSDS #213, #53904 - Singapore Narcotics TMJ CF

Intended Use of the Product

Small arms ammunition

Name, Address, and Telephone of the Responsible Party

Company

Federal Cartridge Company (d/b/a CCI/Speer)

2299 Snake River Ave Lewison, ID 83501 T 1-800-635-7656

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)

Expl. 1.4S H204 Skin Sens. 1 H317 **Label Elements**

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US) : Warning

Hazard Statements (GHS-US) : H204 - Fire or projection hazard.

H317 - May cause an allergic skin reaction.

Precautionary Statements (GHS-US): P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking. P234 - Keep only in original packaging.

254 Reep only in original packaging.

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

P261 - Avoid breathing dust, fumes.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P280 - Wear face protection, protective gloves, protective clothing. P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P321 - Specific treatment (see Section 4).

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P374 - Fight fire with normal precautions from a reasonable distance.

P501 - Dispose of contents/container according to local, regional, national, and international

regulations.

Other Hazards

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

08/15/2014 EN (English US) 1/13

Safety Data Sheet

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

surfaces that could result in a ricochet, such as water, rocks, or any other hard, flat surface.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Lead	(CAS No) 7439-92-1	40 - 55	Not classified
Copper	(CAS No) 7440-50-8	27 - 30, 30 - 46	Comb. Dust
			Aquatic Acute 1, H400
			Aquatic Chronic 3, H412
Zinc	(CAS No) 7440-66-6	8 - 11	Aquatic Acute 1, H400
			Aquatic Chronic 1, H410
Nitrocellulose	(CAS No) 9004-70-0	1 - 5, 5 - 6	Expl. 1.1, H201
			Flam. Sol. 1, H228
Nitroglycerin*	(CAS No) 55-63-0	0.1 - 1, 1 - 2	Unst. Expl, H200
			Acute Tox. 3 (Oral), H301
			Acute Tox. 2 (Dermal), H310
			Acute Tox. 2 (Inhalation:dust,mist), H330
			STOT RE 2, H373
			Aquatic Acute 2, H401
			Aquatic Chronic 2, H411
Antimony	(CAS No) 7440-36-0	0.1 - 1, 1 - 2	Not classified
Nickel**	(CAS No) 7440-02-0	0.1 - 1	Skin Sens. 1, H317
			Carc. 2, H351
			STOT RE 1, H372
			Aquatic Acute 1, H400

^{*}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 nitroglycerin do not apply to the product overall.

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.

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).

02/05/2015 EN (English US) 2/13

^{**}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.

Safety Data Sheet

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

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Fight fire with normal precautions from a reasonable distance.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

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 appreicable 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: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Metal oxides. Fumes.

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.

Methods and Material for Containment and Cleaning Up

For Containment: Dry sweeping can contain spilled product. 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

Precautions for Safe Handling: 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. 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.

Special Rules on Packaging: Keep only in original container.

Specific End Use(s)

Small arms ammunition.

02/05/2015 EN (English US) 3/13

Safety Data Sheet

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Nickel (7440-02-0)		
Mexico	OEL TWA (mg/m³)	1 mg/m³
USA ACGIH	ACGIH TWA (mg/m³)	1.5 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.015 mg/m³
USA IDLH	US IDLH (mg/m³)	10 mg/m³
Alberta	OEL TWA (mg/m³)	1.5 mg/m³
British Columbia	OEL TWA (mg/m³)	0.05 mg/m³
Manitoba	OEL TWA (mg/m³)	1.5 mg/m³
New Brunswick	OEL TWA (mg/m³)	1 mg/m³
Newfoundland & Labrador	OEL TWA (mg/m³)	1.5 mg/m³
Nova Scotia	OEL TWA (mg/m³)	1.5 mg/m³
Nunavut	OEL STEL (mg/m³)	2 mg/m³
Nunavut	OEL TWA (mg/m³)	1 mg/m³
Northwest Territories	OEL STEL (mg/m³)	2 mg/m³
Northwest Territories	OEL TWA (mg/m³)	1 mg/m³
Ontario	OEL TWA (mg/m³)	1 mg/m³
Prince Edward Island	OEL TWA (mg/m³)	1.5 mg/m³
Québec	VEMP (mg/m³)	1 mg/m³
Saskatchewan	OEL STEL (mg/m³)	3 mg/m³
Saskatchewan	OEL TWA (mg/m³)	1.5 mg/m³
Yukon	OEL STEL (mg/m³)	3 mg/m³
Yukon	OEL TWA (mg/m³)	1 mg/m³
Lead (7439-92-1)	0	
Mexico	OEL TWA (mg/m³)	0.15 mg/m³
USA ACGIH	ACGIH TWA (mg/m³)	0.05 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	50 μg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.050 mg/m³
USA IDLH	US IDLH (mg/m³)	100 mg/m³
Alberta	OEL TWA (mg/m³)	0.05 mg/m³
British Columbia	OEL TWA (mg/m³)	0.05 mg/m³
Manitoba	OEL TWA (mg/m²)	0.05 mg/m³
New Brunswick	OEL TWA (mg/m³)	0.05 mg/m³
Newfoundland & Labrador	OEL TWA (mg/m³)	0.05 mg/m³
Nova Scotia	OEL TWA (mg/m³)	0.05 mg/m³
Nunavut	OEL STEL (mg/m³)	0.45 mg/m³
Nunavut	OEL TWA (mg/m³)	0.15 mg/m³
Northwest Territories	OEL STEL (mg/m³)	0.45 mg/m³
Northwest Territories	OEL TWA (mg/m³)	0.15 mg/m³
Ontario	OEL TWA (mg/m³)	0.05 mg/m³ (applies to workplaces to which the designated
Sintario	OLL WWW (IIIIS) III)	substances regulation does not apply)
Prince Edward Island	OEL TWA (mg/m³)	0.05 mg/m³
Québec	VEMP (mg/m³)	0.05 mg/m³
Saskatchewan	OEL STEL (mg/m³)	0.15 mg/m³
Saskatchewan	OEL TWA (mg/m³)	0.05 mg/m³
Yukon	OEL STEL (mg/m³)	0.45 mg/m³
TUKUN	I OEL STEL HIIB/III i	1 0.43 1118/111

02/05/2015 EN (English US) 4/13

Safety Data Sheet

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

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

02/05/2015 EN (English US) 5/13

Safety Data Sheet

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

Prince Edward Island	OEL TWA (ppm)	0.05 ppm
Québec	PLAFOND (mg/m³)	1.86 mg/m³
Québec	PLAFOND (ppm)	0.2 ppm
Saskatchewan	OEL STEL (ppm)	0.15 ppm
Saskatchewan	OEL TWA (ppm)	0.05 ppm
Yukon	OEL STEL (mg/m³)	2 mg/m³
Yukon	OEL STEL (ppm)	0.2 ppm
Yukon	OEL TWA (mg/m³)	2 mg/m³
Yukon	OEL TWA (ppm)	0.2 ppm
Antimony (7440-36-0)	***	
Mexico	OEL TWA (mg/m³)	0.5 mg/m ³
USA ACGIH	ACGIH TWA (mg/m³)	0.5 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m³)	0.5 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.5 mg/m ³
USA IDLH	US IDLH (mg/m³)	50 mg/m ³
Alberta	OEL TWA (mg/m³)	0.5 mg/m ³
British Columbia	OEL TWA (mg/m³)	0.5 mg/m ³
Manitoba	OEL TWA (mg/m³)	0.5 mg/m ³
New Brunswick	OEL TWA (mg/m³)	0.5 mg/m³
Newfoundland & Labrador	OEL TWA (mg/m³)	0.5 mg/m³
Nova Scotia	OEL TWA (mg/m³)	0.5 mg/m³
Nunavut	OEL STEL (mg/m³)	1.5 mg/m³
Nunavut	OEL TWA (mg/m³)	0.5 mg/m ³
Northwest Territories	OEL STEL (mg/m³)	1.5 mg/m³
Northwest Territories	OEL TWA (mg/m³)	0.5 mg/m ³
Ontario	OEL TWA (mg/m³)	0.5 mg/m³
Prince Edward Island	OEL TWA (mg/m³)	0.5 mg/m³
Québec	VEMP (mg/m³)	0.5 mg/m ³
Saskatchewan	OEL STEL (mg/m³)	1.5 mg/m ³
Saskatchewan	OEL TWA (mg/m³)	0.5 mg/m ³
Yukon	OEL STEL (mg/m³)	0.75 mg/m³
Yukon	OEL TWA (mg/m³)	0.5 mg/m ³
Evenesius Controls		

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.

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.

Consumer Exposure Controls: 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.

02/05/2015 EN (English US) 6/13

Safety Data Sheet

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<u>Information on Basic Physical and Chemical Properties</u>

Physical State : Solid

Appearance Not available Not available Odor **Odor Threshold** Not available Ηα Not available **Evaporation Rate** Not available **Melting Point** Not available **Freezing Point** Not available **Boiling Point** Not available **Flash Point** Not available **Auto-ignition Temperature** Not available Not available **Decomposition Temperature** Flammability (solid, gas) Not available **Lower Flammable Limit** Not available **Upper Flammable Limit** Not available Not available **Vapor Pressure** Relative Vapor Density at 20 °C Not available **Relative Density** Not available

 Specific Gravity
 : Not available

 Solubility
 : Not available

 Partition coefficient: n-octanol/water
 : Not available

 Viscosity
 : Not available

 Explosive properties
 : Explosive; fire, or projection hazard

Explosive properties

Explosive, me, or projection maze

Explosive, me, or projection maze

Explosive 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:

Centerfire Pistol Ammunition – Nickel Plated Brass Case CLEAN-FIRE	
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

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

02/05/2015 EN (English US) 7/13

Safety Data Sheet

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

Carcinogenicity: Reasonably anticipated to be human carcinogen. **Specific Target Organ Toxicity (Repeated Exposure):** Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Not expected to be a primary route of exposure.

Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: None expected under normal conditions of use. **Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

<u>Information on Toxicological Effects - Ingredient(s)</u>

LD50 and LC50 Data:

Nickel (7440-02-0)	
LD50 Oral Rat	> 9000 mg/kg
Nitrocellulose (9004-70-0)	
LD50 Oral Rat	5000 mg/kg
Nitroglycerin (55-63-0)	
LD50 Oral Rat	105 mg/kg
LD50 Dermal Rabbit	> 280 mg/kg
ATE (dust, mist)	0.05 mg/l/4h
Antimony (7440-36-0)	
LD50 Oral Rat	100 mg/kg
Nickel (7440-02-0)	
IARC Group	2B
National Toxicity Program (NTP) Status	Reasonably anticipated to be Human Carcinogen.
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

	
Nickel (7440-02-0)	
LC50 Fish 1	100 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)
EC50 Daphnia 1	13 (13 - 200) μg/l (Exposure time: 48h - Species: Ceriodaphnia dubia [static])
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 (0.174 - 0.311) mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata
	[static])

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 Degradability

Copper (7440-50-8)	
Persistence and Degradability	Not readily biodegradable.

Bioaccumulative Potential Not available

Mobility in Soil Not available

02/05/2015 EN (English US) 8/13

Safety Data Sheet

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

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Destroy and dispose of in accordance with applicable local, state, provincial, territorial, federal and international regulations. Comply with regulations 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.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT

Proper Shipping Name : CARTRIDGES, SMALL ARMS

Hazard Class : 1.4S Identification Number : UN0012 Label Codes : 1.4S



14.1.1 Domestic Ground packaged per 49CFR173.63

Proper Shipping Name : None

Hazard Class : Limited Quantity

Identification Number: NoneLabel Codes: NonePacking Group: None



14.2 In Accordance with IMDG

Proper Shipping Name : CARTRIDGES FOR WEAPONS, INERT PROJECTILE

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 : CARTRIDGES, SMALL ARMS

Identification Number : UN0012 Hazard Class : 1

Label Codes : 1.4S
ERG Code (IATA) : 3L



14.4 In Accordance with TDG

Proper Shipping Name : CARTRIDGES, SMALL ARMS

Hazard Class : 1.4S Identification Number : UN0012 Label Codes : 1.4S



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

Centerfire Pistol Ammunition - Nickel Plated Brass Case CLEAN-FIRE

02/05/2015 EN (English US) 9/13

Safety Data Sheet

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

SARA Section 311/312 Hazard Classes	Sudden release of pressure hazard
o, the tocollon off, off indicate classes	Immediate (acute) health hazard
Nickel (7440-02-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on United States SARA Section 313	
RQ (Reportable Quantity, Section 304 of EPA's List of Lists):	100 lb (only applicable if particles are < 100 μm)
SARA Section 313 - Emission Reporting	0.1 %
Zinc (7440-66-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on United States SARA Section 313	
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) inventory
Lead (7439-92-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on United States SARA Section 313	
SARA Section 313 - Emission Reporting	0.1 %
Copper (7440-50-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on United States SARA Section 313	
SARA Section 313 - Emission Reporting	1.0 %
Nitroglycerin (55-63-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on United States SARA Section 313	
SARA Section 313 - Emission Reporting	1.0 %
Antimony (7440-36-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on United States SARA Section 313	
SARA Section 313 - Emission Reporting	1.0 %

US State Regulations

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.
Lead (7439-92-1)	
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 - Developmental Toxicity	WARNING: This product contains chemicals known to the State of
	California to cause birth defects.
U.S California - Proposition 65 - Reproductive Toxicity -	WARNING: This product contains chemicals known to the State of
Female	California to cause (Female) reproductive harm.
U.S California - Proposition 65 - Reproductive Toxicity -	WARNING: This product contains chemicals known to the State of
Male	California to cause (Male) reproductive harm.

Nickel (7440-02-0)

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

02/05/2015 EN (English US) 10/13

Safety Data Sheet

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

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

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

Listed on the Canadian DSL (Domestic Sustances List) Listed on the Canadian IDL (Ingredient Disclosure List)

Canadian Regulations

IDL Concentration 0.1 %

Canadian Regulations	
Centerfire Pistol Ammunit	ion – Nickel Plated Brass Case CLEAN-FIRE
WHMIS Classification	Note: Explosives are not regulated under WHMIS. They are subject to the regulations of the
	Explosives Act of Canada.
Nickel (7440-02-0)	
Listed on the Canadian DSL	. (Domestic Sustances List)
Listed on the Canadian IDL	(Ingredient Disclosure List)
IDL Concentration 0.1 %	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Zinc (7440-66-6)	
Listed on the Canadian DSL	. (Domestic Sustances List)
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
Nitrocellulose (9004-70-0)	
Listed on the Canadian DSL	(Domestic Sustances List)
WHMIS Classification	Note: Explosives are not regulated under WHMIS. They are subject to the regulations of the
	Explosives Act of Canada.

02/05/2015 EN (English US) 11/13

Safety Data Sheet

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

Uncontrolled product according to WHMIS classification criteria		
Copper (7440-50-8)		
Listed on the Canadian DSL (Domestic Sustances List)		
Listed on the Canadian IDL (Ingredient Disclosure List)		
Uncontrolled product according to WHMIS classification criteria		
Nitroglycerin (55-63-0)		
Listed on the Canadian DSL (Domestic Sustances List)		
Note: Explosives are not regulated under WHMIS. They are subject to the regulations of the		
Explosives Act of Canada.		
Listed on the Canadian DSL (Domestic Sustances List)		
Listed on the Canadian IDL (Ingredient Disclosure List)		
Uncontrolled product according to WHMIS classification criteria		

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.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 02/05/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 2 (Dermal)	Acute toxicity (dermal) Category 2
Acute Tox. 2	Acute toxicity (inhalation:dust,mist) Category 2
(Inhalation:dust,mist)	
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Carc. 2	Carcinogenicity Category 2
Comb. Dust	Combustible Dust
Expl. 1.1	Explosive Category 1.1
Expl. 1.4	Explosive Category 1.4
Flam. Sol. 1	Flammable solids Category 1
Skin Sens. 1	Skin sensitization Category 1
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
Unst. Expl	Unstable explosives
H200	Unstable explosives
H201	Explosive; mass explosion hazard
H204	Fire or projection hazard
H228	Flammable solid
H232	May form combustible dust concentrations in air
H301	Toxic if swallowed
H310	Fatal in contact with skin

02/05/2015 EN (English US) 12/13

Safety Data Sheet

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

H317	May cause an allergic skin reaction
H330	Fatal if inhaled
H351	Suspected of causing cancer
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Party Responsible for the Preparation of This Document

Federal Cartridge Company 900 Ehlen Drive Anoka, MN 55303 1-800-635-7656

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

02/05/2015 EN (English US) 13/13