

Centerfire Primers

Safety Data Sheet

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

Revision Date: 08/06/2024



Version: 3.1

SECTION 1: IDENTIFICATION

Product Identifier

Product Name: Small arms primers

Product Code: 100, 150, 155, 200, 205, 210, 215, 215D, and Gold Medal. All Anoka produced centerfire primers with lead styphnate-basic. SDS# F4001

Intended Use of the Product

Small arms ammunition manufacturing and reloading

Name, Address, and Telephone of the Responsible Party

Company

Federal Cartridge Company

900 Ehlen Drive

Anoka, MN 55303

T 1-800-635-7656

dangerous.goods@tkghunt.com

Emergency Telephone Number

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

(Transportation

Incidents Only)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Physical Hazards:	Explosives	Division 1.4S
Health Hazards:	Acute Toxicity (Oral)	Category 4
	Skin Sensitization	Category 1A
	Carcinogenicity	Category 2
	Reproductive Toxicity	Category 1A
	Specific Target Organ Toxicity, Repeat Exposure	Category 2

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)

Prevention:

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.

Response:

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.

Storage: Store in accordance with applicable fire codes. Keep only in original packaging.

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Disposal: Dispose of ammunition in accordance with local regulations.

Supplemental information: The hazardous components of this product are encased and are not biologically available. Therefore, some health hazards do not apply to the overall product. Decomposition products, including lead, are released during the firing of primers. Use only outdoors or in a well-ventilated area. Do not attempt to open or dissect a primer, as it may explode causing projectiles dangerous to the eyes, skin and body. Keep in original factory packaging and trays provided ONLY – DO NOT STORE IN BULK.

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

Mixture

Name	Product identifier	% (w/w)
Copper	(CAS No) 7440-50-8	54 - 86
Zinc	(CAS No) 7440-66-6	3 - 37
Nickel**	(CAS No) 7440-02-0	≤ 1
Antimony Sulfide*	(CAS No) 1345-04-6	0.5 – 4
Barium*	(CAS No) 7440-39-3	1 – 8
Lead, dihydroxy[2,4,6-trinitro-1,3-benzenediolato(2-)]di-*	(CAS No) 12403-82-6	2 - 8
Aluminum*	(CAS No) 7429-90-5	0.1 - 2
Nitrocellulose*	(CAS No) 9004-70-0	0 – 2.0
Nitroglycerin*	(CAS No) 55-63-0	0 – 0.2
1-Tetrazene-1-carboximide acid, 4-(aminoiminomethyl)-, 2-nitrosohydrazide*	(CAS No) 109-27-3	< 0.1

*The hazardous components of this product are encased within the primer and are unlikely to be released under normal handling conditions. Therefore, the health and environmental hazards associated with certain components 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.

The ecotoxicological information applies to the materials encased within the product.

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 exposed or concerned: Get medical advice/attention.

Inhalation: When symptoms occur, go into open air and ventilate suspected area. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Call a POISON CENTER/doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

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

Ingestion: Rinse mouth. Do not induce vomiting. Get medical advice and attention if you feel unwell.

Most Important Symptoms and Effects Both Acute and Delayed

General: Toxic if swallowed, in contact with skin or if inhaled. Projectiles from fired cartridges can cause puncture wounds. When cartridges are fired or otherwise discharged, dust, vapors, and/or fumes may be absorbed by the digestive system and can result in both acute and chronic overexposure. Ingestion of a complete primer can cause irritation to the digestive system, and possibly other unknown health effects.

Inhalation: Fatal if inhaled.

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Ingestion: Toxic if swallowed.

Chronic Symptoms: May damage fertility. May damage the unborn child. May cause damage to organs through prolonged or repeated exposure.

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: DO NOT FIGHT FIRES INVOLVING EXPLOSIVES. Water may be applied through fixed extinguishing system (sprinklers) as long as people need not be present for the system to operate.

Unsuitable Extinguishing Media: DO NOT fight fires involving explosives.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: May ignite if heated to 250°F (121°C) causing projection of metal fragments. Mass explosion will not occur in factory packaging. LOOSE PRIMERS OUTSIDE OF FACTORY PACKAGING CAN MASS DETONATE. Hazardous chemical and toxic by-products from chemical decomposition may be formed during fire. These products vary depending on fire conditions and other combustibles present during fire. These may include smoke, carbon monoxide, carbon dioxide, oxides of nitrogen and lead fumes. Complete ventilation of structure is recommended.

Explosion Hazard: Explosive. Explosion risk in case of fire. Unpackaged primer detonations can propagate causing simultaneous detonation of surrounding primers resulting in a violent explosion.

Reactivity: May detonate with friction, impact, and heat.

Advice for Firefighters

Precautionary Measures Fire: Do not breathe fumes from fires or vapors from decomposition.

Firefighting Instructions: 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).

Protection During Firefighting: Firefighters should wear full protective gear when fighting or downwind of initial fire.

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

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 skin and eye contact. Do not breathe dust or fumes. Remove ignition sources. No exposed lights. No smoking. Evacuate danger area. Do not allow product to spread into the environment.

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: Ventilate area.

Environmental Precautions

Avoid release to the environment.

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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: DO NOT SWEEP SPILLED PRIMERS INTO A PILE. Spray spilled primers with a water/detergent mixture. Do not allow primers to become dry. Collect in original trays or submerge in oil.

Reference to Other Sections

See section 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: Do not breathe decomposition products. Lead containing compounds are released during the firing of primers. Projectiles from fired cartridges can cause puncture wounds. Remove cartridges 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. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Do not subject to mechanical shock.

Storage Conditions: KEEP IN ORIGINAL CONTAINER. Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep in fireproof place.

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

Storage Area: Store locked up.

Specific End Use(s) Small arms primer

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Copper (7440-50-8)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.2 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	0.1 mg/m ³
USA IDLH	US IDLH (mg/m ³)	100 mg/m ³
Alberta	OEL TWA (mg/m ³)	1 mg/m ³
British Columbia	OEL TWA (mg/m ³)	0.2 mg/m ³
Manitoba	OEL TWA (mg/m ³)	0.2 mg/m ³
New Brunswick	OEL TWA (mg/m ³)	1 mg/m ³
Newfoundland & Labrador	OEL TWA (mg/m ³)	0.2 mg/m ³
Nova Scotia	OEL TWA (mg/m ³)	0.2 mg/m ³
Nunavut	OEL STEL (mg/m ³)	2 mg/m ³
Nunavut	OEL TWA (mg/m ³)	1 mg/m ³
Northwest Territories	OEL STEL (mg/m ³)	2 mg/m ³
Northwest Territories	OEL TWA (mg/m ³)	1 mg/m ³
Ontario	OEL TWA (mg/m ³)	1 mg/m ³
Prince Edward Island	OEL TWA (mg/m ³)	0.2 mg/m ³
Québec	VEMP (mg/m ³)	1 mg/m ³
Saskatchewan	OEL STEL (mg/m ³)	3 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	1 mg/m ³
Yukon	OEL STEL (mg/m ³)	2 mg/m ³
Yukon	OEL TWA (mg/m ³)	1 mg/m ³
Aluminum (7429-90-5)		
Mexico	OEL TWA (mg/m ³)	10 mg/m ³
USA ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	5 mg/m ³
Alberta	OEL TWA (mg/m ³)	10 mg/m ³

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British Columbia	OEL TWA (mg/m ³)	1.0 mg/m ³
Manitoba	OEL TWA (mg/m ³)	1 mg/m ³
New Brunswick	OEL TWA (mg/m ³)	10 mg/m ³
Newfoundland & Labrador	OEL TWA (mg/m ³)	1 mg/m ³
Nova Scotia	OEL TWA (mg/m ³)	1 mg/m ³
Nunavut	OEL STEL (mg/m ³)	20 mg/m ³
Nunavut	OEL TWA (mg/m ³)	10 mg/m ³
Northwest Territories	OEL STEL (mg/m ³)	20 mg/m ³
Northwest Territories	OEL TWA (mg/m ³)	10 mg/m ³
Ontario	OEL TWA (mg/m ³)	1 mg/m ³
Prince Edward Island	OEL TWA (mg/m ³)	1 mg/m ³
Québec	VEMP (mg/m ³)	10 mg/m ³
Saskatchewan	OEL STEL (mg/m ³)	20 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	10 mg/m ³
Antimony (7440-36-0)		
Mexico	OEL TWA (mg/m ³)	0.5 mg/m ³
USA ACGIH	ACGIH TWA (mg/m ³)	0.5 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	0.5 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	0.5 mg/m ³
USA IDLH	US IDLH (mg/m ³)	50 mg/m ³
Alberta	OEL TWA (mg/m ³)	0.5 mg/m ³
British Columbia	OEL TWA (mg/m ³)	0.5 mg/m ³
Manitoba	OEL TWA (mg/m ³)	0.5 mg/m ³
New Brunswick	OEL TWA (mg/m ³)	0.5 mg/m ³
Newfoundland & Labrador	OEL TWA (mg/m ³)	0.5 mg/m ³
Nova Scotia	OEL TWA (mg/m ³)	0.5 mg/m ³
Nunavut	OEL STEL (mg/m ³)	1.5 mg/m ³
Nunavut	OEL TWA (mg/m ³)	0.5 mg/m ³
Northwest Territories	OEL STEL (mg/m ³)	1.5 mg/m ³
Northwest Territories	OEL TWA (mg/m ³)	0.5 mg/m ³
Ontario	OEL TWA (mg/m ³)	0.5 mg/m ³
Prince Edward Island	OEL TWA (mg/m ³)	0.5 mg/m ³
Québec	VEMP (mg/m ³)	0.5 mg/m ³
Saskatchewan	OEL STEL (mg/m ³)	1.5 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	0.5 mg/m ³
Yukon	OEL STEL (mg/m ³)	0.75 mg/m ³
Yukon	OEL TWA (mg/m ³)	0.5 mg/m ³
Barium (7440-39-3)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.5 mg/m ³
Alberta	OEL TWA (mg/m ³)	0.5 mg/m ³
British Columbia	OEL TWA (mg/m ³)	0.5 mg/m ³
Manitoba	OEL TWA (mg/m ³)	0.5 mg/m ³
New Brunswick	OEL TWA (mg/m ³)	0.5 mg/m ³
Newfoundland & Labrador	OEL TWA (mg/m ³)	0.5 mg/m ³
Nova Scotia	OEL TWA (mg/m ³)	0.5 mg/m ³
Ontario	OEL TWA (mg/m ³)	0.5 mg/m ³
Prince Edward Island	OEL TWA (mg/m ³)	0.5 mg/m ³
Saskatchewan	OEL STEL (mg/m ³)	1.5 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	0.5 mg/m ³
Nitroglycerin (55-63-0)		
Mexico	OEL TWA (mg/m ³)	0.5 mg/m ³

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Mexico	OEL TWA (ppm)	0.05 ppm
Mexico	OEL STEL (mg/m ³)	1 mg/m ³
Mexico	OEL STEL (ppm)	0.1 ppm
USA ACGIH	ACGIH TWA (ppm)	0.05 ppm
USA OSHA	OSHA PEL (Ceiling) (mg/m ³)	2 mg/m ³
USA OSHA	OSHA PEL (Ceiling) (ppm)	0.2 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	0.1 mg/m ³
USA IDLH	US IDLH (mg/m ³)	75 mg/m ³
Alberta	OEL TWA (mg/m ³)	0.5 mg/m ³
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/m ³)	0.46 mg/m ³
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 ³)	0.46 mg/m ³
Nunavut	OEL STEL (ppm)	0.05 ppm
Nunavut	OEL TWA (mg/m ³)	1.9 mg/m ³
Nunavut	OEL TWA (ppm)	0.02 ppm
Northwest Territories	OEL STEL (mg/m ³)	0.46 mg/m ³
Northwest Territories	OEL STEL (ppm)	0.05 ppm
Northwest Territories	OEL TWA (mg/m ³)	1.9 mg/m ³
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 ³)	1.86 mg/m ³
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 ³)	2 mg/m ³
Yukon	OEL STEL (ppm)	0.2 ppm
Yukon	OEL TWA (mg/m ³)	2 mg/m ³
Yukon	OEL TWA (ppm)	0.2 ppm
Lead (7439-92-1)		
Mexico	OEL TWA (mg/m ³)	0.15 mg/m ³
USA ACGIH	ACGIH TWA (mg/m ³)	0.05 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	50 µg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	0.050 mg/m ³
USA IDLH	US IDLH (mg/m ³)	100 mg/m ³
Alberta	OEL TWA (mg/m ³)	0.05 mg/m ³
British Columbia	OEL TWA (mg/m ³)	0.05 mg/m ³
Manitoba	OEL TWA (mg/m ³)	0.05 mg/m ³
New Brunswick	OEL TWA (mg/m ³)	0.05 mg/m ³
Newfoundland & Labrador	OEL TWA (mg/m ³)	0.05 mg/m ³
Nova Scotia	OEL TWA (mg/m ³)	0.05 mg/m ³
Nunavut	OEL STEL (mg/m ³)	0.45 mg/m ³
Nunavut	OEL TWA (mg/m ³)	0.15 mg/m ³
Northwest Territories	OEL STEL (mg/m ³)	0.45 mg/m ³
Northwest Territories	OEL TWA (mg/m ³)	0.15 mg/m ³
Ontario	OEL TWA (mg/m ³)	0.05 mg/m ³ (applies to workplaces to which the designated

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		substances regulation does not apply)
Prince Edward Island	OEL TWA (mg/m ³)	0.05 mg/m ³
Québec	VEMP (mg/m ³)	0.05 mg/m ³
Saskatchewan	OEL STEL (mg/m ³)	0.15 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	0.05 mg/m ³
Yukon	OEL STEL (mg/m ³)	0.45 mg/m ³
Yukon	OEL TWA (mg/m ³)	0.15 mg/m ³

Nickel (7440-02-0)		
Mexico	OEL TWA (mg/m ³)	1 mg/m ³
USA ACGIH	ACGIH TWA (mg/m ³)	1.5 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	0.015 mg/m ³
USA IDLH	US IDLH (mg/m ³)	10 mg/m ³
Alberta	OEL TWA (mg/m ³)	1.5 mg/m ³
British Columbia	OEL TWA (mg/m ³)	0.05 mg/m ³
Manitoba	OEL TWA (mg/m ³)	1.5 mg/m ³
New Brunswick	OEL TWA (mg/m ³)	1 mg/m ³
Newfoundland & Labrador	OEL TWA (mg/m ³)	1.5 mg/m ³
Nova Scotia	OEL TWA (mg/m ³)	1.5 mg/m ³
Nunavut	OEL STEL (mg/m ³)	2 mg/m ³
Nunavut	OEL TWA (mg/m ³)	1 mg/m ³
Northwest Territories	OEL STEL (mg/m ³)	2 mg/m ³
Northwest Territories	OEL TWA (mg/m ³)	1 mg/m ³
Ontario	OEL TWA (mg/m ³)	1 mg/m ³
Prince Edward Island	OEL TWA (mg/m ³)	1.5 mg/m ³
Québec	VEMP (mg/m ³)	1 mg/m ³
Saskatchewan	OEL STEL (mg/m ³)	3 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	1.5 mg/m ³
Yukon	OEL STEL (mg/m ³)	3 mg/m ³
Yukon	OEL TWA (mg/m ³)	1 mg/m ³

Barium (7440-39-3)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.5 mg/m ³
Alberta	OEL TWA (mg/m ³)	0.5 mg/m ³
British Columbia	OEL TWA (mg/m ³)	0.5 mg/m ³
Manitoba	OEL TWA (mg/m ³)	0.5 mg/m ³
New Brunswick	OEL TWA (mg/m ³)	0.5 mg/m ³
Newfoundland & Labrador	OEL TWA (mg/m ³)	0.5 mg/m ³
Nova Scotia	OEL TWA (mg/m ³)	0.5 mg/m ³
Ontario	OEL TWA (mg/m ³)	0.5 mg/m ³
Prince Edward Island	OEL TWA (mg/m ³)	0.5 mg/m ³
Saskatchewan	OEL STEL (mg/m ³)	1.5 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	0.5 mg/m ³

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. Protective goggles. Protective clothing.



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Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

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.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: Nickel plated or brass cup.
Odor	: Not available
Odor Threshold	: Not available
pH	: 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
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
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	: Fire or projection hazard
Explosion Data – Sensitivity to Mechanical Impact	: Sensitive to mechanical impact
Explosion Data – Sensitivity to Static Discharge	: Not sensitive

SECTION 10: STABILITY AND REACTIVITY

Reactivity: May detonate with friction, impact, and heat. WILL PROPAGATE OUTSIDE OF ORIGINAL PACKAGING.

Chemical Stability: Risk of explosion by shock, friction, fire or other sources of ignition.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

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

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

Hazardous Decomposition Products: None known.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Fatal if swallowed. Fatal if inhaled.

LD50 and LC50 Data:

Centerfire Primers	
ATE US (oral)	5.00 mg/kg body weight
ATE US (dermal)	50.00 mg/kg body weight
ATE US (dust, mist)	0.05 mg/l/4h

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

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Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available

Carcinogenicity: The National Toxicology Program (NTP) considers lead compounds reasonably anticipated to be a human carcinogen.

Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs through prolonged or repeated exposure.

Reproductive Toxicity: May damage fertility or the unborn child.

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Fatal if inhaled.

Symptoms/Injuries After Skin Contact: May cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: Fatal if swallowed.

Chronic Symptoms: May damage fertility. May cause cancer. May damage the unborn child. May cause damage to organs through prolonged or repeated exposure.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Barium (7440-39-3)	
LD50 Oral Rat	132 mg/kg
Lead, dihydroxy[2,4,6-trinitro-1,3-benzenediolato(2-)]di- (12403-82-6)	
ATE US (oral)	500.00 mg/kg body weight
ATE US (dust, mist)	1.50 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
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

Ecology - General: The ecotoxicological information applies to the materials encased within the product.

Zinc (7440-66-6)	
LC50 Fish 1	2.16 - 3.05 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	0.139 - 0.908 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC 50 Fish 2	0.211 - 0.269 mg/l (Exposure time: 96 h - Species: Pimephales promelas [semi-static])
Copper (7440-50-8)	
LC50 Fish 1	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 Organisms 1	0.0426 - 0.0535 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata [static])
LC 50 Fish 2	0.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Other Aquatic Organisms 2	0.031 - 0.054 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata [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 µg/l (Exposure time: 48 h - Species: water flea)

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LC 50 Fish 2	1.17 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
Nickel (7440-02-0)	
LC50 Fish 1	100 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)
EC50 Daphnia 1	100 mg/l (Exposure 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])
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

Rifle/Pistol Primers	
Persistence and Degradability	Not established. May cause long-term adverse effects in the environment.
Copper (7440-50-8)	
Persistence and Degradability	Not readily biodegradable.

Bioaccumulative Potential

Rifle/Pistol Primers	
Bioaccumulative Potential	Not established.

Mobility in Soil

Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations. **DO NOT CONSOLIDATE PRIMERS OUTSIDE OF FACTORY PACKAGING.**

Ecology – Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

In Accordance with DOT

The environmentally hazardous substance mark is not required when transported in sizes of .5 L or ≤5 kg.

Proper Shipping Name : PRIMERS, CAP TYPE
Hazard Class : 1.4S
Identification Number : UN0044
Label Codes : 1.4S
Packing Group : None
ERG Number : 114



In Accordance with IMDG

Proper Shipping Name : PRIMERS, CAP TYPE
Hazard Class : 1
Identification Number : UN0044
Label Codes : 1.4S
EmS-No. (Fire) : F-B
EmS-No. (Spillage) : S-X
MFAG Number : 114



In Accordance with IATA

Proper Shipping Name : Check with air carrier prior to shipment via air.
Identification Number :
Hazard Class :
Label Codes :
ERG Code (IATA) :

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In Accordance with TDG

Proper Shipping Name : PRIMERS, CAP TYPE
Packing Group : None
Hazard Class : 1.4S
Identification Number : UN0044
Label Codes : 1.4S



SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Centerfire Primers	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard Sudden release of pressure hazard
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)
Nickel (7440-02-0)	
Listed on the United States TSCA (Toxic Substances Control Act) 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 µm)
SARA Section 313 - Emission Reporting	0.1 %
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)
1-Tetrazene-1-carboximidic acid, 4-(aminoiminomethyl)-, 2-nitrosohydrazide (109-27-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
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 %
Lead, dihydroxy[2,4,6-trinitro-1,3-benzenediolato(2-)]di- (12403-82-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
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 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 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 %
Barium (7440-39-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on United States SARA Section 313	

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SARA Section 313 - Emission Reporting	1.0 %
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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.
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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 - Female	WARNING: This product contains chemicals known to the State of California to cause (Female) reproductive harm.
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	WARNING: This product contains chemicals known to the State of California to cause (Male) reproductive harm.

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

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

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

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

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




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

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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	
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	
Centerfire Primers	
WHMIS Classification	Class B Division 6 - Reactive Flammable Material Class B Division 4 - Flammable Solid Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects 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.
  	
Zinc (7440-66-6)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
Nickel (7440-02-0)	
Listed on the Canadian DSL (Domestic Substances List) inventory. Listed on the Canadian Ingredient Disclosure List	
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
Nitrocellulose (9004-70-0)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Note: Explosives are not regulated under WHMIS. They are subject to the regulations of the Explosives Act of Canada.
Lead (7439-92-1)	
Listed on the Canadian DSL (Domestic Substances List) inventory. Listed on the Canadian Ingredient Disclosure List	
IDL Concentration 0.1 %	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
Lead, dihydroxy[2,4,6-trinitro-1,3-benzenediolato(2-)]di- (12403-82-6)	
Listed on Non-Domestic Substances List (NDSL)	
Aluminum (7429-90-5)	
Listed on the Canadian DSL (Domestic 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

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Antimony (7440-36-0)	
Listed on the Canadian DSL (Domestic Substances List) inventory. Listed on the Canadian Ingredient Disclosure List	
IDL Concentration 1 %	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
1-Tetrazene-1-carboximidic acid, 4-(aminoiminomethyl)-, 2-nitrosohydrazide (109-27-3)	
Listed on Non-Domestic Substances List (NDSL)	
Copper (7440-50-8)	
Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
Nitroglycerin (55-63-0)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Note: Explosives are not regulated under WHMIS. They are subject to the regulations of the Explosives Act of Canada.
Barium (7440-39-3)	
Listed on the Canadian DSL (Domestic Substances List)	
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.

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

Revision date	: 08/06/2024
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	: This product may also additionally contain the following label provided in accordance with various State, Federal, and International regulations.



WARNING: Fire or projection hazard. Keep away from heat – no smoking. Do not subject to shock. Wear eye protection. Fight fire with normal precautions from a reasonable distance. Store and dispose of in accordance 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@tkghunt.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