

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Force on Force Blank Training Ammunition

Synonyms: FF9BLK2, FF556BLK1

Intended Use of the Product

Small Arms Simulation Training Ammunition - Blank

Name, Address, and Telephone of the Responsible Party

Company

Federal Cartridge Company

900 Ehlen Drive

Anoka, MN 55303

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

Acute Tox. 4 (oral) H302

Acute Tox. 4 (Inh) H332

Skin Irrit. 3 H316

Eye Irrit. 2A H319

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)

:



GHS07

Signal Word (GHS-US)

: Warning

Hazard Statements (GHS-US)

: H204 - Fire or projection hazard
 H302+H332 – Harmful if swallowed or if inhaled
 H316 – Causes mild skin irritation
 H319 – Causes serious eye irritation

Precautionary Statements (GHS-US)

: P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking.
 P234 - Keep 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.
 P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 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

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regulations.

Other Hazards

Other Hazards Not Contributing to the Classification: Barium is a toxic metal 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 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 barium in the work environment.

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

Substances

| Name | Product identifier | % (w/w) | Classification (GHS-US) |
|------------------|--------------------|---------|--|
| Polyethylene | (CAS No) 9002-88-4 | 2-5 | Not classified |
| Polystyrene | (CAS No) 9003-53-6 | 0.5-3 | Not classified |
| Copper | (CAS No) 7440-50-8 | 3-10 | Not classified |
| Zinc | (CAS No) 7440-66-6 | 0.1-4 | Not classified |
| Aluminum | (CAS No) 7429-90-5 | 60-90 | Not classified |
| Nylon | NA | 0-25 | Not classified |
| Nitrocellulose | (CAS No) 9004-70-0 | 0.1-0.5 | Flam. Sol. 1, H228 |
| Nitroglycerin* | (CAS No) 55-63-0 | <0.1 | Unst. Expl, H200 Acute Tox. 2 (Oral), H300 Acute Tox. 2 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 STOT RE 2, H373 Aquatic Acute 2, H401 Aquatic Chronic 2, H411 |
| Barium Nitrate** | (CAS No) 7440-39-3 | 0-0.5 | Oxidizing solids 2, H272 Acute tox. 4 (Oral), H302 Acute tox. 4 (Inh), H332 Skin Irrit. 3, H316 Eye Irrit. 2A, H319 |

*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 necessary due to varying composition.

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

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.

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Most Important Symptoms and Effects Both Acute and Delayed

General: May cause skin and eye irritation. Projectiles from fired ammunition can cause puncture wounds.

Inhalation: May cause mild irritation of the respiratory tract.

Skin Contact: May cause skin irritation.

Eye Contact: May cause serious eye irritation.

Ingestion: Not a likely route of exposure. 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: 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 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: Do not enter fire area without proper protective equipment, including respiratory protection.

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

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: 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 not 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.

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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

| Copper (7440-50-8) | | |
|--------------------------------|---|------------------------|
| Mexico | OEL TWA (mg/m ³) | 1 mg/m ³ |
| Mexico | OEL STEL (mg/m ³) | 2 mg/m ³ |
| 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 |
| Nitroglycerin (55-63-0) | | |
| Mexico | OEL TWA (mg/m ³) | 0.5 mg/m ³ |
| 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 |

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| | | |
|-----------------------|-------------------------------|------------------------|
| 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 |

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 |
| 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 |

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 |

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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.

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 |
| Appearance | : Aluminum case with plastic and/or nylon bullet containing marking compound. |
| Odor | : Not available |
| Odor Threshold | : Not available |
| pH | : Not available |
| Relative Evaporation Rate (butylacetate=1) | : 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 | : 2.9 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 |

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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 Marker Training 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

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

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

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.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

| 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 |

| Barium (7440-39-3) | |
|--------------------|-----------|
| LD50 Oral Rat | 132 mg/kg |

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not classified

| 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 Organisms 1 | 0.043 - 0.054 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]) |

| Nitroglycerin (55-63-0) | |
|-------------------------|--|
| LC50 Fish 1 | 0.87 - 3.25 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through]) |

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| | |
|----------------|--|
| 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

Small Arms Marker Training Ammunition

Persistence and Degradability : Not established.

Copper (7440-50-8)

Persistence and Degradability : Not readily biodegradable.

Bioaccumulative Potential

Small Arms Marker Training Ammunition

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.

Ecology – Waste Materials: Avoid release to the environment.

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
Packing Group : II
ERG Number : 114



14.1.1 Domestic Ground packaged per 49CFR173.63

Proper Shipping Name : None
Hazard Class : Limited Quantity
Identification Number : None
Label Codes : None
Packing Group : None



14.2 In Accordance with IMDG

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 : 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
Packing Group : II
Hazard Class : 1.4S
Identification Number : UN0012
Label Codes : 1.4S



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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 Ammunition

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 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) 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 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 %

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)

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

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

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| | 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. |

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

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

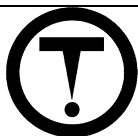
Barium (7440-39-3)

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

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| | |
|----------------------|---|
| 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. |
|----------------------|---|



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| Zinc (7440-66-6) | |
| Listed on the Canadian DSL (Domestic Substances List) inventory. | |
| WHMIS Classification | Class B Division 6 - Reactive Flammable Material |
| Nitrocellulose (9004-70-0) | |
| Listed on the Canadian DSL (Domestic Substances List) inventory. | |
| WHMIS Classification | Class B Division 4 - Flammable Solid Class F - Dangerously Reactive Material |
| 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 |
| Copper (7440-50-8) | |
| 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 |
| Nitroglycerin (55-63-0) | |
| Listed on the Canadian DSL (Domestic Substances List) inventory. | |
| 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 |
| 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.

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

Revision date : 02/04/2015
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 (Inhalation:dust,mist) | Acute toxicity (inhalation:dust,mist) Category 2 |
| Acute Tox. 2 (Oral) | Acute toxicity (oral) Category 2 |
| Acute Tox. 3 (Dermal) | Acute toxicity (dermal) Category 3 |
| Acute Tox. 3 (Inhalation:dust,mist) | Acute toxicity (inhalation:dust,mist) Category 3 |
| Acute Tox. 3 (Oral) | Acute toxicity (oral) Category 3 |
| Acute Tox. 4 (Inhalation) | Acute toxicity (inhalation) Category 4 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral) Category 4 |
| 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 |

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| | |
|----------------|---|
| Carc. 2 | Carcinogenicity Category 2 |
| Comb. Dust | Combustible Dust |
| Expl. 1.1 | Explosive Category 1.1 |
| Expl. 1.4 | Explosive Category 1.4 |
| Eye Irrit. 2A | Serious eye damage/eye irritation Category 2A |
| Flam. Sol. 1 | Flammable solids Category 1 |
| Repr. 1A | Reproductive toxicity Category 1A |
| Skin Irrit. 2 | Skin corrosion/irritation Category 2 |
| 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 |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| Unst. Expl | Unstable explosives |
| Water-react. 2 | Substances and mixtures which in contact with water emit flammable gases Category 2 |
| H200 | Unstable explosives |
| H201 | Explosive; mass explosion hazard |
| H204 | Fire or projection hazard |
| H228 | Flammable solid |
| Comb. Dust | May form combustible dust concentrations in air |
| H261 | In contact with water releases flammable gases |
| H300 | Fatal if swallowed |
| H301 | Toxic if swallowed |
| H302 | Harmful if swallowed |
| H310 | Fatal in contact with skin |
| H311 | Toxic in contact with skin |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H319 | Causes serious eye irritation |
| H330 | Fatal if inhaled |
| H331 | Toxic if inhaled |
| H332 | Harmful if inhaled |
| H335 | May cause respiratory irritation |
| H351 | Suspected of causing cancer |
| H360 | May damage fertility or the unborn child |
| H372 | Causes damage to organs through prolonged or repeated exposure |
| H373 | May cause damage to organs through prolonged or repeated exposure |
| H400 | Very toxic to aquatic life |
| 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.

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North America GHS US 2012 & WHMIS 2