SECTION 1: Identification

1.1. Identification

<table>
<thead>
<tr>
<th>Product form:</th>
<th>Article</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name:</td>
<td>Centerfire Rifle and Centerfire Pistol Ammunition - with Frangible (powdered iron core) bullets</td>
</tr>
<tr>
<td>Synonyms:</td>
<td>Remington Disintegrator® Frangible</td>
</tr>
</tbody>
</table>

1.2. Recommended use and restrictions on use

<table>
<thead>
<tr>
<th>Recommended use:</th>
<th>Ammunition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrictions on use:</td>
<td>Uses other than listed on the manufacturer product label</td>
</tr>
</tbody>
</table>

1.3. Supplier

Remington Arms Company, LLC
1816 Remington Circle SW
Huntsville, AL 35824
T 1-800-243-9700 - F 1-336-548-7801

1.4. Emergency telephone number

| Emergency number: | CHEMTREC 1-800-424-9300 |

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

<table>
<thead>
<tr>
<th>GHS US classification:</th>
<th>Expl. 1.4 H204 Fire or projection hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full text of hazard classes and H-statements:</td>
<td>see section 16</td>
</tr>
</tbody>
</table>

2.2. GHS Label elements, including precautionary statements

**GHS US labeling**

<table>
<thead>
<tr>
<th>Hazard pictograms (GHS US):</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Signal word (GHS US):</th>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard statements (GHS US):</td>
<td>H204 - Fire or projection hazard</td>
</tr>
<tr>
<td>Precautionary statements (GHS US):</td>
<td></td>
</tr>
<tr>
<td>P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.</td>
<td></td>
</tr>
<tr>
<td>P240 - Ground/Bond container and receiving equipment</td>
<td></td>
</tr>
<tr>
<td>P250 - Do not subject to grinding/shock/friction.</td>
<td></td>
</tr>
<tr>
<td>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</td>
<td></td>
</tr>
<tr>
<td>P370+P380 - In case of fire: Evacuate area</td>
<td></td>
</tr>
<tr>
<td>P372 - Explosion risk in case of fire.</td>
<td></td>
</tr>
<tr>
<td>P373 - DO NOT fight fire when fire reaches explosives.</td>
<td></td>
</tr>
<tr>
<td>P374 - Fight fire with normal precautions from a reasonable distance.</td>
<td></td>
</tr>
<tr>
<td>P401 - Store in accordance with local regulations on explosives</td>
<td></td>
</tr>
<tr>
<td>P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation</td>
<td></td>
</tr>
</tbody>
</table>

2.3. Other hazards which do not result in classification

**Other hazards not contributing to the classification:** This product is considered an explosive article. Each product covered by this Safety Data Sheet is sealed ammunition. The ammunition contains hazardous substances, which under normal conditions of use are not in contact with the user. If the item is fractured or intentionally disassembled prior to actuation, exposure to the contents is fatal if inhaled, is toxic if swallowed, is toxic in contact with skin, may cause genetic defects, may cause cancer, causes damage to organs through prolonged or repeated exposure, is suspected of damaging fertility or the unborn child, may cause an allergic skin reaction and may cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.4. Unknown acute toxicity (GHS US)

Not applicable
Centerfire Rifle and Centerfire Pistol Ammunition - with Frangible (powdered iron core) bullets

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SECTION 3: Composition/Information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>(CAS-No.) 7440-50-8</td>
<td>30 - 50</td>
<td>Not classified</td>
</tr>
<tr>
<td>Nitrocellulose</td>
<td>(CAS-No.) 9004-70-0</td>
<td>2 - 12</td>
<td>Expl. 1, H201</td>
</tr>
<tr>
<td>Tin</td>
<td>(CAS-No.) 7440-31-5</td>
<td>0 - 8</td>
<td>Acute Tox. 4 (Oral), H302</td>
</tr>
<tr>
<td>Nitroglycerin</td>
<td>(CAS-No.) 55-63-0</td>
<td>0 - 2</td>
<td>Unst. Expl, H200, Acute Tox. 2 (Oral), H300, Acute Tox. 1 (Dermal), H310, Acute Tox. 2 (Inhalation:dust,mist), H330, STOT RE 2, H373, Aquatic Chronic 2, H411</td>
</tr>
<tr>
<td>Dibutyl phthalate</td>
<td>(CAS-No.) 84-74-2</td>
<td>0 - 0.75</td>
<td>Repr. 1B, H360, Aquatic Acute 1, H400</td>
</tr>
<tr>
<td>1,3-Benzenediol, 2,4,6-trinitro-, lead salt</td>
<td>(CAS-No.) 15245-44-0</td>
<td>&lt; 0.2</td>
<td>Unst. Expl, H200, Acute Tox. 4 (Oral), H302, Acute Tox. 4 (Inhalation:dust,mist), H332, Carc. 1B, H350, STOT RE 2, H373, Aquatic Acute 1, H400, Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Immediate medical attention and special treatment, if necessary
Not applicable.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media


5.2. Specific hazards arising from the chemical

Explosion hazard : Explosion risk in case of fire.
Reactivity : Fire or projection hazard.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Evacuate area. Do not fight fire when fire reaches explosives. Fight fire with normal precautions from a reasonable distance.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : No open flames, no sparks, and no smoking. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Centerfire Rifle and Centerfire Pistol Ammunition - with Frangible (powdered iron core) bullets
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6.2. Environmental precautions
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Notify authorities if product enters sewers or public waters. In case of large spillages: Shovel or sweep up and put in a closed container for disposal. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections
For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Do not subject to grinding, shock, friction. Wear personal protective equipment.

Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities
Technical measures: Ground/bond container and receiving equipment.
Storage conditions: Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (7440-50-8)</td>
<td>ACGIH TWA (mg/m³)</td>
<td>0.2 mg/m³ (fume)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 mg/m³ (dust and mist)</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>0.1 mg/m³ (fume)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 mg/m³ (dust and mist)</td>
</tr>
<tr>
<td>Zinc (7440-66-6)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Iron (7439-89-6)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Tin (7440-31-5)</td>
<td>ACGIH TWA (mg/m³)</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td>Nitrocellulose (9004-70-0)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Nitroglycerin (55-63-0)</td>
<td>ACGIH TWA (ppm)</td>
<td>0.05 ppm</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL (Ceiling) (mg/m³)</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL (Ceiling) (ppm)</td>
<td>0.2 ppm</td>
</tr>
<tr>
<td></td>
<td>OSHA Limit value category (OSHA)</td>
<td>prevent or reduce skin absorption</td>
</tr>
<tr>
<td>Dibutyl phthalate (84-74-2)</td>
<td>ACGIH TWA (mg/m³)</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>
Centerfire Rifle and Centerfire Pistol Ammunition - with Frangible (powdered iron core) bullets
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8.2. Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station.
Environmental exposure controls: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Protective gloves

Eye protection:
Safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Solid</td>
</tr>
<tr>
<td>Color</td>
<td>Metallic</td>
</tr>
<tr>
<td>Odor</td>
<td>odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not flammable.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
Fire or projection hazard.

10.2. Chemical stability
Stable under normal conditions.
10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced. On combustion, forms: carbon oxides (CO and CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity:
- Oral: Not classified.
- Dermal: Not classified.
- Inhalation: dust, mist: Not classified.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tin (7440-31-5)</td>
<td>LD50 oral rat 700 mg/kg</td>
</tr>
<tr>
<td></td>
<td>ATE US (oral) 700 mg/kg body weight</td>
</tr>
<tr>
<td>Nitrocellulose (9004-70-0)</td>
<td>LD50 oral rat &gt; 5 g/kg</td>
</tr>
<tr>
<td>Nitroglycerin (55-63-0)</td>
<td>LD50 oral rat 100 mg/kg</td>
</tr>
<tr>
<td></td>
<td>LD50 dermal rabbit &gt; 280 mg/kg</td>
</tr>
<tr>
<td></td>
<td>ATE US (oral) 5 mg/kg body weight</td>
</tr>
<tr>
<td></td>
<td>ATE US (dermal) 5 mg/kg body weight</td>
</tr>
<tr>
<td></td>
<td>ATE US (dust, mist) 0.05 mg/l/4h</td>
</tr>
<tr>
<td>Dibutyl phthalate (84-74-2)</td>
<td>LD50 oral rat 7499 mg/kg</td>
</tr>
<tr>
<td></td>
<td>LD50 dermal rabbit &gt; 20000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>LC50 inhalation rat (mg/l) &gt;= 15.68 mg/l/4h</td>
</tr>
<tr>
<td></td>
<td>ATE US (oral) 7499 mg/kg body weight</td>
</tr>
<tr>
<td>1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)</td>
<td>ATE US (oral) 500 mg/kg body weight</td>
</tr>
<tr>
<td></td>
<td>ATE US (dust, mist) 1.5 mg/l/4h</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Not classified
Serious eye damage/irritation: Not classified
Respiratory or skin sensitization: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified

1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)
National Toxicology Program (NTP) Status: Reasonably anticipated to be Human Carcinogen
In OSHA Hazard Communication Carcinogen list: Yes

Reproductive toxicity: Not classified.
STOT-single exposure: Not classified.

STOT-repeated exposure: Not classified.
Aspiration hazard: Not classified
Symptoms/effects: Not expected to present a significant hazard under anticipated conditions of normal use.
### CENTERFIRE RIFLE AND CENTERFIRE PISTOL AMMUNITION - WITH FRANGIBLE (POWDERED IRON CORE) BULLETS

**Safety Data Sheet**

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

---

#### SECTION 12: Ecological information

**12.1. Toxicity**

<table>
<thead>
<tr>
<th>Ecology - general</th>
<th>The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.</th>
</tr>
</thead>
</table>

**Copper (7440-50-8)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>0.0068 - 0.0156 mg/l (96 h)</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>0.03 mg/l (48 h)</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>&lt; 0.3 mg/l (96 h)</td>
</tr>
</tbody>
</table>

**Nitroglycerin (55-63-0)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>0.87 - 3.25 mg/l (96 h)</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>46 - 55 mg/l (48 h)</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>0.87 - 2.21 mg/l (96 h)</td>
</tr>
<tr>
<td>EC50 Daphnia 2</td>
<td>38 - 55 mg/l (48 h)</td>
</tr>
</tbody>
</table>

**Dibutyl phthalate (84-74-2)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>0.71 - 1.2 mg/l (96 h)</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>2.99 mg/l (48 h)</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>0.31 - 5.45 mg/l (96 h)</td>
</tr>
<tr>
<td>EC50 Daphnia 2</td>
<td>3.4 mg/l (48 h)</td>
</tr>
</tbody>
</table>

**12.2. Persistence and degradability**

**Centerfire Rifle and Centerfire Pistol Ammunition - with Frangible (powdered iron core) bullets**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

**12.3. Bioaccumulative potential**

**Centerfire Rifle and Centerfire Pistol Ammunition - with Frangible (powdered iron core) bullets**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioaccumulative potential</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

**Dibutyl phthalate (84-74-2)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Pow</td>
<td>5.38 (at 25 °C)</td>
</tr>
</tbody>
</table>

**12.4. Mobility in soil**

**Centerfire Rifle and Centerfire Pistol Ammunition - with Frangible (powdered iron core) bullets**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecology - soil</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

**12.5. Other adverse effects**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect on global warming</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

---

#### SECTION 13: Disposal considerations

**13.1. Disposal methods**

<table>
<thead>
<tr>
<th>Waste treatment methods</th>
<th>Dispose of contents/container in accordance with licensed collector’s sorting instructions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product/Packaging disposal recommendations</td>
<td>Dispose in a safe manner in accordance with local/national regulations.</td>
</tr>
</tbody>
</table>

---

#### SECTION 14: Transport information

**Department of Transportation (DOT)**

In accordance with DOT

<table>
<thead>
<tr>
<th>Transport document description</th>
<th>UN0012 Cartridges, small arms, 1.4, II</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN-No. (DOT)</td>
<td>UN0012</td>
</tr>
<tr>
<td>Proper Shipping Name (DOT)</td>
<td>Cartridges, small arms</td>
</tr>
</tbody>
</table>
Centerfire Rifle and Centerfire Pistol Ammunition - with Frangible (powdered iron core) bullets
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Class (DOT) : 1.4 - Class 1.4 - Explosives (with no significant blast hazard) 49 CFR 173.50
Packing group (DOT) : II - Medium Danger
DOT Packaging Non Bulk (49 CFR 173.xxx) : 62
DOT Packaging Bulk (49 CFR 173.xxx) : None
DOT Packaging Exceptions (49 CFR 173.xxx) : 63
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 25 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 100 kg
DOT Vessel Stowage Other : 25 - Protected from sources of heat
Other information : No supplementary information available.

Transport by sea

Transport document description (IMDG) : UN 0012 CARTRIDGES, SMALL ARMS
UN-No. (IMDG) : 0012
Proper Shipping Name (IMDG) : CARTRIDGES, SMALL ARMS
Class (IMDG) : Not regulated for transport
Limited quantities (IMDG) : 5 kg

Air transport

Transport document description (IATA) : UN 0012 Cartridges, small arms, 1.4S
UN-No. (IATA) : 0012
Proper Shipping Name (IATA) : Cartridges, small arms
Class (IATA) : Not regulated for transport

SECTION 15: Regulatory information

15.1. US Federal regulations

<table>
<thead>
<tr>
<th>Substance</th>
<th>Listed on the United States TSCA (Toxic Substances Control Act) inventory</th>
<th>Subject to reporting requirements of United States SARA Section 313</th>
<th>CERCLA RQ</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
<td>Subject to reporting requirements of United States SARA Section 313</td>
<td>5000 lb no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is &gt;100 µm</td>
<td></td>
</tr>
<tr>
<td>Zinc</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
<td>Subject to reporting requirements of United States SARA Section 313</td>
<td>454 kg no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is &gt;100 µm</td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tin</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrocellulose</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
<td></td>
<td>XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).</td>
<td></td>
</tr>
<tr>
<td>Nitroglycerin</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
<td>Subject to reporting requirements of United States SARA Section 313</td>
<td>10 lb</td>
<td></td>
</tr>
</tbody>
</table>
## Centerfire Rifle and Centerfire Pistol Ammunition - with Frangible (powdered iron core) bullets

### Safety Data Sheet

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dibutyl phthalate (84-74-2)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
<tr>
<td></td>
<td>Subject to reporting requirements of United States SARA Section 313</td>
</tr>
<tr>
<td></td>
<td>Listed on EPA Hazardous Air Pollutant (HAPS)</td>
</tr>
<tr>
<td>CERCLA RQ</td>
<td>10 lb</td>
</tr>
<tr>
<td>1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
</tbody>
</table>

### 15.2. International regulations

#### CANADA

<table>
<thead>
<tr>
<th>Substance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (7440-50-8)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Zinc (7440-66-6)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Iron (7439-89-6)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Tin (7440-31-5)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Nitrocellulose (9004-70-0)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Nitroglycerin (55-63-0)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Dibutyl phthalate (84-74-2)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
</tbody>
</table>

#### EU-Regulations

<table>
<thead>
<tr>
<th>Substance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (7440-50-8)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
<tr>
<td>Zinc (7440-66-6)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
<tr>
<td>Iron (7439-89-6)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
<tr>
<td>Tin (7440-31-5)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
<tr>
<td>Nitrocellulose (9004-70-0)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
<tr>
<td>Nitroglycerin (55-63-0)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
<tr>
<td>Dibutyl phthalate (84-74-2)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
<tr>
<td>1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
</tbody>
</table>

### National regulations

<table>
<thead>
<tr>
<th>Substance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centerfire Rifle and Centerfire Pistol Ammunition - with Frangible (powdered iron core) bullets</td>
<td>All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory</td>
</tr>
</tbody>
</table>
Centerfire Rifle and Centerfire Pistol Ammunition - with Frangible (powdered iron core) bullets
Safety Data Sheet

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on CICR (Turkish Inventory and Control of Chemicals)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

### Copper (7440-50-8)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Listed on the AICS (Australian Inventory of Chemical Substances)</th>
<th>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</th>
<th>Listed on the Korean ECL (Existing Chemicals List)</th>
<th>Listed on NZIoC (New Zealand Inventory of Chemicals)</th>
<th>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</th>
<th>Listed on INSQ (Mexican National Inventory of Chemical Substances)</th>
<th>Listed on CICR (Turkish Inventory and Control of Chemicals)</th>
<th>Listed on the TCSI (Taiwan Chemical Substance Inventory)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>Listed on the AICS (Australian Inventory of Chemical Substances)</td>
<td>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</td>
<td>Listed on the Korean ECL (Existing Chemicals List)</td>
<td>Listed on NZIoC (New Zealand Inventory of Chemicals)</td>
<td>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</td>
<td>Listed on INSQ (Mexican National Inventory of Chemical Substances)</td>
<td>Listed on CICR (Turkish Inventory and Control of Chemicals)</td>
<td>Listed on the TCSI (Taiwan Chemical Substance Inventory)</td>
</tr>
</tbody>
</table>

### Zinc (7440-66-6)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Listed on the AICS (Australian Inventory of Chemical Substances)</th>
<th>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</th>
<th>Listed on the Korean ECL (Existing Chemicals List)</th>
<th>Listed on NZIoC (New Zealand Inventory of Chemicals)</th>
<th>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</th>
<th>Listed on INSQ (Mexican National Inventory of Chemical Substances)</th>
<th>Listed on CICR (Turkish Inventory and Control of Chemicals)</th>
<th>Listed on the TCSI (Taiwan Chemical Substance Inventory)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc</td>
<td>Listed on the AICS (Australian Inventory of Chemical Substances)</td>
<td>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</td>
<td>Listed on the Korean ECL (Existing Chemicals List)</td>
<td>Listed on NZIoC (New Zealand Inventory of Chemicals)</td>
<td>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</td>
<td>Listed on INSQ (Mexican National Inventory of Chemical Substances)</td>
<td>Listed on CICR (Turkish Inventory and Control of Chemicals)</td>
<td>Listed on the TCSI (Taiwan Chemical Substance Inventory)</td>
</tr>
</tbody>
</table>

### Iron (7439-89-6)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Listed on the AICS (Australian Inventory of Chemical Substances)</th>
<th>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</th>
<th>Listed on the Korean ECL (Existing Chemicals List)</th>
<th>Listed on NZIoC (New Zealand Inventory of Chemicals)</th>
<th>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</th>
<th>Listed on INSQ (Mexican National Inventory of Chemical Substances)</th>
<th>Listed on CICR (Turkish Inventory and Control of Chemicals)</th>
<th>Listed on the TCSI (Taiwan Chemical Substance Inventory)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>Listed on the AICS (Australian Inventory of Chemical Substances)</td>
<td>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</td>
<td>Listed on the Korean ECL (Existing Chemicals List)</td>
<td>Listed on NZIoC (New Zealand Inventory of Chemicals)</td>
<td>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</td>
<td>Listed on INSQ (Mexican National Inventory of Chemical Substances)</td>
<td>Listed on CICR (Turkish Inventory and Control of Chemicals)</td>
<td>Listed on the TCSI (Taiwan Chemical Substance Inventory)</td>
</tr>
</tbody>
</table>

### Tin (7440-31-5)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Listed on the AICS (Australian Inventory of Chemical Substances)</th>
<th>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</th>
<th>Listed on the Korean ECL (Existing Chemicals List)</th>
<th>Listed on NZIoC (New Zealand Inventory of Chemicals)</th>
<th>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</th>
<th>Listed on INSQ (Mexican National Inventory of Chemical Substances)</th>
<th>Listed on CICR (Turkish Inventory and Control of Chemicals)</th>
<th>Listed on the TCSI (Taiwan Chemical Substance Inventory)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tin</td>
<td>Listed on the AICS (Australian Inventory of Chemical Substances)</td>
<td>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</td>
<td>Listed on the Korean ECL (Existing Chemicals List)</td>
<td>Listed on NZIoC (New Zealand Inventory of Chemicals)</td>
<td>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</td>
<td>Listed on INSQ (Mexican National Inventory of Chemical Substances)</td>
<td>Listed on CICR (Turkish Inventory and Control of Chemicals)</td>
<td>Listed on the TCSI (Taiwan Chemical Substance Inventory)</td>
</tr>
</tbody>
</table>

### Nitrocellulose (9004-70-0)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Listed on the AICS (Australian Inventory of Chemical Substances)</th>
<th>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</th>
<th>Listed on the Japanese ENCS (Existing &amp; New Chemical Substances) inventory</th>
<th>Listed on the Japanese ISHL (Industrial Safety and Health Law)</th>
<th>Listed on the Korean ECL (Existing Chemicals List)</th>
<th>Listed on NZIoC (New Zealand Inventory of Chemicals)</th>
<th>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</th>
<th>Listed on INSQ (Mexican National Inventory of Chemical Substances)</th>
<th>Listed on the TCSI (Taiwan Chemical Substance Inventory)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrocellulose</td>
<td>Listed on the AICS (Australian Inventory of Chemical Substances)</td>
<td>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</td>
<td>Listed on the Japanese ENCS (Existing &amp; New Chemical Substances) inventory</td>
<td>Listed on the Japanese ISHL (Industrial Safety and Health Law)</td>
<td>Listed on the Korean ECL (Existing Chemicals List)</td>
<td>Listed on NZIoC (New Zealand Inventory of Chemicals)</td>
<td>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</td>
<td>Listed on INSQ (Mexican National Inventory of Chemical Substances)</td>
<td>Listed on the TCSI (Taiwan Chemical Substance Inventory)</td>
</tr>
</tbody>
</table>

### Nitroglycerin (55-63-0)

| Substance | Listed on the AICS (Australian Inventory of Chemical Substances) | Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory | Listed on the Japanese ISHL (Industrial Safety and Health Law) | Listed on the Korean ECL (Existing Chemicals List) | Listed on NZIoC (New Zealand Inventory of Chemicals) | Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) | Listed on INSQ (Mexican National Inventory of Chemical Substances) | Japanese Pollutant Release and Transfer Register Law (PRTR Law) | Listed on INSQ (Mexican National Inventory of Chemical Substances) | Listed on the TCSI (Taiwan Chemical Substance Inventory) |
|-----------|---------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
| Nitroglycerin | Listed on the AICS (Australian Inventory of Chemical Substances) | Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory | Listed on the Japanese ISHL (Industrial Safety and Health Law) | Listed on the Korean ECL (Existing Chemicals List) | Listed on NZIoC (New Zealand Inventory of Chemicals) | Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) | Listed on INSQ (Mexican National Inventory of Chemical Substances) | Japanese Pollutant Release and Transfer Register Law (PRTR Law) | Listed on INSQ (Mexican National Inventory of Chemical Substances) | Listed on the TCSI (Taiwan Chemical Substance Inventory) |
Centerfire Rifle and Centerfire Pistol Ammunition - with Frangible (powdered iron core) bullets
Safety Data Sheet

Dibutyl phthalate (84-74-2)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on EPA Hazardous Air Pollutant (HAPS)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Japanese Poisonous and Deleterious Substances Control Law
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

<table>
<thead>
<tr>
<th>Chemical (CAS)</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Environmentally Hazardous</th>
<th>Right To Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dibutyl phthalate (84-74-2)</td>
<td>Yes</td>
<td>Yes</td>
<td>No significant risk level (NSRL)</td>
<td>Maximum allowable dose level (MADL)</td>
<td>8.7 µg/day</td>
</tr>
<tr>
<td>Copper (7440-50-8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc (7440-66-6)</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tin (7440-31-5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrocellulose (9004-70-0)</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitroglycerin (55-63-0)</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Centerfire Rifle and Centerfire Pistol Ammunition - with Frangible (powdered iron core) bullets

Safety Data Sheet

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

<table>
<thead>
<tr>
<th>Dibutyl phthalate (84-74-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - Massachusetts - Right To Know List</td>
</tr>
<tr>
<td>U.S. - New Jersey - Right to Know Hazardous Substance List</td>
</tr>
<tr>
<td>U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List</td>
</tr>
<tr>
<td>U.S. - Pennsylvania - RTK (Right to Know) List</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - Massachusetts - Right To Know List</td>
</tr>
<tr>
<td>U.S. - New Jersey - Right to Know Hazardous Substance List</td>
</tr>
</tbody>
</table>

**SECTION 16: Other information**

Revision date: 09/23/2019

Other information:

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H-phrases:

<table>
<thead>
<tr>
<th>Acute Tox. 1 (Dermal)</th>
<th>Acute toxicity (dermal) Category 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 2</td>
<td>Acute toxicity (inhalation:dust,mist) Category 2</td>
</tr>
<tr>
<td>(Inhalation:dust,mist)</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 2 (Oral)</td>
<td>Acute toxicity (oral) Category 2</td>
</tr>
<tr>
<td>Acute Tox. 4</td>
<td>Acute toxicity (inhalation:dust,mist) Category 4</td>
</tr>
<tr>
<td>(Inhalation:dust,mist)</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 4 (Oral)</td>
<td>Acute toxicity (oral) Category 4</td>
</tr>
<tr>
<td>Aquatic Acute 1</td>
<td>Hazardous to the aquatic environment - Acute Hazard Category 1</td>
</tr>
<tr>
<td>Aquatic Chronic 1</td>
<td>Hazardous to the aquatic environment - Chronic Hazard Category 1</td>
</tr>
<tr>
<td>Aquatic Chronic 2</td>
<td>Hazardous to the aquatic environment - Chronic Hazard Category 2</td>
</tr>
<tr>
<td>Carc. 1B</td>
<td>Carcinogenicity Category 1B</td>
</tr>
<tr>
<td>Expl. 1.1</td>
<td>Explosive Category 1.1</td>
</tr>
<tr>
<td>Expl. 1.4</td>
<td>Explosive Category 1.4</td>
</tr>
<tr>
<td>Repr. 1B</td>
<td>Reproductive toxicity Category 1B</td>
</tr>
<tr>
<td>STOT RE 2</td>
<td>Specific target organ toxicity (repeated exposure) Category 2</td>
</tr>
<tr>
<td>Unst. Expl</td>
<td>Unstable explosives</td>
</tr>
<tr>
<td>H200</td>
<td>Unstable explosive</td>
</tr>
<tr>
<td>H201</td>
<td>Explosive; mass explosion hazard</td>
</tr>
<tr>
<td>H204</td>
<td>Fire or projection hazard</td>
</tr>
<tr>
<td>H300</td>
<td>Fatal if swallowed</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H310</td>
<td>Fatal in contact with skin</td>
</tr>
<tr>
<td>H330</td>
<td>Fatal if inhaled</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled</td>
</tr>
<tr>
<td>H350</td>
<td>May cause cancer</td>
</tr>
<tr>
<td>H360</td>
<td>May damage fertility or the unborn child</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects</td>
</tr>
<tr>
<td>H411</td>
<td>Toxic to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>
Centerfire Rifle and Centerfire Pistol Ammunition - with Frangible (powdered iron core) bullets
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SDS US (GHS HazCom 2012)

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.