SECTION 1 – IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Name, Address, and Telephone of the Responsible Party
Dyno Nobel Inc.
6440 S. Millrock Drive, Suite 150
Salt Lake City, Utah 84121
Phone: 801-364-4800  Fax: 801-321-6703
E-Mail: dnna.hse@am.dynonobel.com
www.dynonobel.com

1.1 Product Identifier
Trade Name: EZshot
Article Number: 

1.2 Recommended Use of the Chemical and Restrictions on Use
Application  Explosive detonator used in mining and commercial blasting applications.
Uses advised against  No specific uses advised against are identified.

1.3 Emergency Telephone Number
CHEMTREC  +1 800-424-9300  (USA)
CANUTEC  +1 613-996-6666  (CANADA)

SECTION 2 – HAZARD(S) IDENTIFICATION

2.1 Classification of the Substance or Mixture
OSHA Regulatory Status  This Product is Hazardous under the OSHA Hazard Communication Standard.
Comment(s)  As supplied, this product is an article. Expl. 1.1 - H201 Explosive; mass explosion hazard. This set contains many components.
Physical hazards  Expl. 1.1 - H201
Health hazards  Not classified
Environmental hazards  Not classified

2.2 Label Elements
Hazard Pictograms

Signal Word
Danger
Hazard Statements
:H201 - Explosive; mass explosion hazard.
P210 - Keep away from heat, sparks, open flames and hot surfaces. No smoking.
P230 - Keep wetted with water.
P240 - Ground/ bond container and receiving equipment.
P250 - Do not subject to grinding/ shock/ friction.
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.
Trade Name: EZshot

P370+P380 - In case of fire: Evacuate area.
P372 - Explosion risk in case of fire.
P373 - DO NOT fight fire when fire reaches explosives.
P401 - Store in accordance with national regulations.
P501 - Dispose of contents/container in accordance with national regulations.

2.3 Other Hazards
Results of PBT and vPvB Assessment
This product does not contain any substances classified as PBT or vPvB.

Explosive Product Notice
PREVENTION OF ACCIDENTS IN THE USE OF EXPLOSIVES - The prevention of accidents in the use of explosives is a result of careful planning and observance of the best-known practices. The explosives user must remember that he is dealing with a powerful force and that various devices and methods have been developed to assist him in directing this force. He should realize that this force, if misdirected, may either kill or injure both him and his fellow workers.

WARNING - All explosives are dangerous and must be carefully handled and used following approved safety procedures either by or under the direction of competent, experienced persons in accordance with all applicable federal, state, and local laws, regulations, or ordinances. If you have any questions or doubts as to how to use any explosive product, DO NOT USE IT before consulting with your supervisor, or the manufacturer, if you do not have a supervisor. If your supervisor has any questions or doubts, he should consult the manufacturer before use.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures
Description: This set contains many components. The information below relates to the chemical components contained in the explosive item.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 7778-74-7 Potassium perchlorate</td>
<td></td>
</tr>
<tr>
<td>Ox. Sol. 1 - H271; Acute Tox. 4 - H302</td>
<td></td>
</tr>
<tr>
<td>CAS: 9004-70-0 Nitrocellulose</td>
<td></td>
</tr>
<tr>
<td>Expl. 1.1 - H201</td>
<td></td>
</tr>
<tr>
<td>CAS: 2691-41-0 Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine</td>
<td></td>
</tr>
<tr>
<td>Expl. 1.1 - H201; Acute Tox. 4 - H302; Acute Tox. 3 - H311</td>
<td></td>
</tr>
<tr>
<td>CAS: 7440-67-7 Zirconium</td>
<td></td>
</tr>
<tr>
<td>Pyr. Sol. 1 - H250; Water-react. 1 - H260</td>
<td></td>
</tr>
<tr>
<td>CAS: 78-11-5 Pentaerythritol tetranitrate</td>
<td></td>
</tr>
<tr>
<td>Unst. Expl. - H200</td>
<td></td>
</tr>
<tr>
<td>CAS: 7439-93-2 Lithium</td>
<td></td>
</tr>
<tr>
<td>Water-react. 1 - H260; Skin Corr. 1B - H314; Eye Dam. 1 - H318</td>
<td></td>
</tr>
<tr>
<td>CAS: 25721-38-4 Lead picrate</td>
<td></td>
</tr>
<tr>
<td>Expl. 1.1 - H201; Acute Tox. 3 - H301; Acute Tox. 3 - H311;</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 3 - H331; Repr. 1A - H360; STOT RE 2 - H373;</td>
<td></td>
</tr>
<tr>
<td>Aquatic Chronic 1 - H410</td>
<td></td>
</tr>
<tr>
<td>CAS: 7429-90-5 Aluminium powder (stabilised)</td>
<td></td>
</tr>
<tr>
<td>Flam. Sol. 1 - H228; Water-react. 2 - H261</td>
<td></td>
</tr>
<tr>
<td>CAS: 51311-17-2 Polycarbonmonofluoride</td>
<td></td>
</tr>
<tr>
<td>Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; STOT SE 3 - H335</td>
<td></td>
</tr>
</tbody>
</table>
Trade Name: EZshot

| CAS: -          | Lead picramate                                                                 |
|                | Unst. Expl. - H200; Acute Tox. 4 - H302; Acute Tox. 4 - H332; Repr. 1A - H360Df; STOT RE 2 - H373; Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410 |
| CAS: 13424-46-9 | Lead diazide                                                                 |
| M factor (Acute) = 1 | Unst. Expl. - H200; Acute Tox. 4 - H302; Acute Tox. 4 - H332; Repr. 1A - H360Df; STOT RE 2 - H373; Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410 |
| M factor (Chronic) = 1 |

Additional Information: The full text for all hazard statements is displayed in Section 16.
Composition comments: The exact percentage is withheld as a trade secret in accordance with 29 CFR 1910.1200.

**SECTION 4 – FIRST AID MEASURES**

**4.1 Description of First Aid Measures**

**General Information:** Class 1: Explosive substances and articles. Get medical attention immediately. Show this Safety Data Sheet to the medical personnel. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**After Inhalation:** Due to the physical nature of this product, exposure by this route is unlikely. If exposed to the chemical contents, then proceed as follows:

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Supply fresh air; consult doctor in case of complaints.

**Inhalation:** Due to the physical nature of this product, it is unlikely that ingestion will occur. If exposed to the chemical contents, then proceed as follows: If swallowed:

Rinse nose and mouth with water.

Give plenty of water to drink.

Do not induce vomiting unless under the direction of medical personnel.

If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.

**After Skin Contact:** If exposed to the chemical contents, then proceed as follows:

Brush off loose particles from skin.

Wash skin thoroughly with soap and water.

**After Eye Contact:** Due to the physical nature of this product, exposure by this route is unlikely. If exposed to the chemical contents, then proceed as follows: If in eyes:

Rinse with water.

Remove any contact lenses and open eyelids wide apart.

Continue to rinse for at least 10 minutes. Do not rub eye.

**Protection of first aiders:** First aid personnel should wear appropriate protective equipment during any rescue.

**4.2 Most Important Symptoms and Effects, Both Acute and Delayed**

**General information**

The information below relates to the chemical components contained in the explosive item. The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Suspected of damaging fertility or the unborn child.

**Inhalation**

May cause respiratory irritation.

**Ingestion**

Harmful if swallowed. Stomach pain.

**Skin contact**

Prolonged skin contact may cause temporary irritation.

**Eye contact**

May cause temporary eye irritation.

**4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed**

Notes for the doctor

Treat symptomatically.
SECTION 5 – FIRE-FIGHTING MEASURES

5.1 Extinguishing Media
Suitable Extinguishing Agents: The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

For Safety Reasons Unsuitable Extinguishing Agents: Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special Hazards Arising from the Substance or Mixture
Risk of explosion: DO NOT ATTEMPT TO FIGHT FIRES INVOLVING EXPLOSIVE MATERIALS. Evacuate all personnel to a predetermined safe location, no less than 2,500 feet in all directions. Can explode or detonate under fire conditions. Burning material may produce toxic vapors. It is recommended that users of explosives material be familiar with the Institute of Makers of Explosives Safety Library publications.

Hazardous combustion products: Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors. Oxides of carbon. Carbon monoxide (CO).

5.3 Advice for Firefighters
Protective Equipment: Class 1: Explosive substances and articles. Regular protection may not be safe. Wear chemical protective suit. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

Additional Information
Leave danger zone immediately. Evacuate area. No action shall be taken without appropriate training or involving any personal risk. Keep upwind to avoid inhalation of gases, vapors, fumes and smoke. Fight fire remotely due to the risk of explosion. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures
Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. No smoking, sparks, flames or other sources of ignition near spillage. Evacuate area. Isolate area and prevent access.

6.2 Environmental Precautions
Avoid discharge into drains or watercourses or onto the ground. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

6.3 Methods and Material for Containment and Cleaning Up
Wear protective clothing as described in Section 8 of this safety data sheet. No smoking, sparks, flames or other sources of ignition near spillage. Pick up mechanically. Send for recovery or disposal in suitable receptacles. Use only non-sparking tools. For waste disposal, see Section 13.

6.4 Reference to Other Sections
For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.
Trade Name: EZshot

SECTION 7 – HANDLING AND STORAGE

7.1 Precautions for Safe Handling
Usage precautions:
Read and follow manufacturer's recommendations.
Wear protective clothing as described in Section 8 of this safety data sheet.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep away from food, drink and animal feeding stuffs.
Use only non-sparking tools.
Handle with care.
Do not drop or knock.
Risk of explosion.
Do not handle until all safety precautions have been read and understood.
Do not handle broken packages without protective equipment.
Do not disassemble.

Advice on general occupational hygiene:
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wash at the end of each work shift and before eating, smoking and using the toilet.
Change work clothing daily before leaving workplace.

7.2 Conditions for Safe Storage, Including Any Incompatibilities
Storage precautions:
Class 1: Explosive substances and articles. Store in accordance with local regulations. Licensed storage. Keep in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Ensure product is stored securely and cannot fall.
Storage class: Class 1: Explosive substances and articles. Compatibility group B.

7.3 Specific End Use(s): The identified uses for this product are detailed in Section 1.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters
Occupational exposure limits:
Ingredient comments: The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Ingredients with Limit Values that Require Monitoring at the Workplace:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Long-term exposure limit (8-hour TWA):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium powder (stabilised)</td>
<td>ACGIH 1 mg/m³ respirable fraction A4</td>
</tr>
<tr>
<td>Lead diazide</td>
<td>OSHA 0.05 mg/m³ as Pb</td>
</tr>
</tbody>
</table>

ACGIH = American Conference of Governmental Industrial Hygienists.
OSHA = Occupational Safety and Health Administration.
A4 = Not Classifiable as a Human Carcinogen.

8.2 Exposure Controls
Appropriate engineering controls:
Provide adequate ventilation. Ensure the ventilation system is regularly maintained and tested. Good general ventilation
SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

**Product comments:** This set contains many components. The information below relates to the chemical components contained in the explosive item.

<table>
<thead>
<tr>
<th>Appearance</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Solid.</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Not determined.</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Not determined.</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined.</td>
<td></td>
</tr>
<tr>
<td>pH-Value</td>
<td>Not determined.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Change in Condition</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Freezing point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Evaporation factor</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not relevant.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Not relevant.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not determined.</td>
</tr>
</tbody>
</table>

**Eye/face protection:** Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with OSHA 1910.133.

**Hand protection:** Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Wear protective gloves made of the following material: Polyethylene.

**Other skin and body protection:** Wear suitable coveralls to prevent exposure to the skin. Wear fire/flame resistant/retardant clothing. Wear anti-static protective clothing if there is a risk of ignition from static electricity.

**Hygiene measures:** Good personal hygiene procedures should be implemented. When using do not eat, drink or smoke.

**Respiratory Protection:** No specific requirements are anticipated under normal conditions of use. Provide adequate ventilation. Respiratory protection may be required if excessive airborne contamination occurs. Wear a respirator fitted with the following cartridge: Organic vapor + dust and mist filter.

**Thermal hazards:** If there is a risk of contact with hot product, all protective equipment worn should be suitable for use with high temperatures.

**Environmental exposure controls:** The product in its supplied state is not believed to present an exposure hazard.
Trade Name: EZshot

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Bulk density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not relevant.</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not relevant.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Class 1: Explosive substances and articles. Compatibility group B.</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Not considered to be oxidising.</td>
</tr>
<tr>
<td>9.2 Other information</td>
<td>No information required.</td>
</tr>
</tbody>
</table>

### SECTION 10 – STABILITY AND REACTIVITY

#### 10.1 Reactivity
See the other subsections of this section for further details.

#### 10.2 Chemical Stability
Risk of explosion by shock, friction, fire or other sources of ignition.
Stable at normal ambient temperatures and when used as recommended.
Stable under the prescribed storage conditions.

#### 10.3 Possibility of Hazardous Reactions
Risk of explosion.

#### 10.4 Conditions to Avoid
Protect from sunlight.
Avoid heat, flames and other sources of ignition.
Risk of explosion if heated under confinement.
Do not subject to grinding/shock/friction.

#### 10.5 Materials to avoid
Strong oxidizing agents. Strong reducing agents.

#### 10.6 Hazardous Decomposition Products
Does not decompose when used and stored as recommended.
Thermal decomposition or combustion products may include the following substances:
Harmful gases or vapors.
Carbon monoxide (CO).

### SECTION 11 – TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects:
**Toxicological effects:** Exposure to components of the product are limited due to the physical form of the product.
The information below relates to the chemical components contained in the explosive item.

**Acute toxicity:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 Oral</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>LD50 Dermal</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>LD50 Inhalation</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Skin corrosion/irritation:</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Animal data</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
</tbody>
</table>
### Genotoxicity - in vitro
- Carcinogenicity: Based on available data the classification criteria are not met.

### Carcinogenicity
- Reproductive toxicity: Based on available data the classification criteria are not met.

### Reproductive toxicity - fertility
- Reproductive toxicity development: Based on available data the classification criteria are not met.

### Specific target organ toxicity - single exposure:
- STOT - single exposure: Not classified as a specific target organ toxicant after a single exposure.

### Specific target organ toxicity - repeated exposure:
- STOT - repeated exposure: Based on available data the classification criteria are not met.

### Aspiration hazard
- General information: Based on available data the classification criteria are not met.

### Inhalation:
- May cause respiratory irritation.

### Ingestion:
- Harmful if swallowed. Stomach pain.

### Skin contact:
- Prolonged skin contact may cause temporary irritation.

### Eye contact:
- May cause temporary eye irritation.

### Route of exposure:
- Ingestion Inhalation Skin and/or eye contact

### Target Organs:
- No specific target organs known.

### SECTION 12 – ECOLOGICAL INFORMATION

#### 12.1 Toxicity
- **Aquatic Toxicity:** Harmful to aquatic life with long lasting effects.

#### 12.2 Persistence and Degradability
- The product contains inorganic substances which are not biodegradable.

#### 12.3 Bioaccumulative Potential
- No data available on bioaccumulation.
- **Partition coefficient:** Not determined.

#### 12.4 Mobility in Soil
- The product is water-soluble and may spread in water systems.

#### 12.5 Other Adverse Effects
- None known.

### SECTION 13 – DISPOSAL CONSIDERATIONS

#### 13.1 Waste Treatment Methods
- **General information:** This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Empty containers or liners may retain some product residues and hence be potentially hazardous. Do not handle broken packages without protective equipment. Do not disassemble.
- **Disposal methods:** Dispose of waste via a licensed waste disposal contractor. If broken/damaged and the contents exposed, submerge in water. Dispose of contents/container in accordance with local regulations.
Trade Name: EZshot

<table>
<thead>
<tr>
<th>SECTION 14 – TRANSPORT INFORMATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General:</strong> Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Handle with care. Do not drop or knock. Ensure product is stored securely and cannot fall.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14.1 UN-Number</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UN No. (TDG)</td>
<td>UN0360</td>
</tr>
<tr>
<td>UN No. (IMDG)</td>
<td>UN0360</td>
</tr>
<tr>
<td>UN No. (IATA)</td>
<td>FORBIDDEN</td>
</tr>
<tr>
<td>UN No. (DOT)</td>
<td>UN0360</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14.2 UN Proper Shipping Name</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper shipping name (TDG)</td>
<td>DETONATORS ASSEMBLIES, NON-ELECTRIC</td>
</tr>
<tr>
<td>Proper shipping name (IMDG)</td>
<td>DETONATORS ASSEMBLIES, NON-ELECTRIC</td>
</tr>
<tr>
<td>Proper shipping name (IATA)</td>
<td>FORBIDDEN</td>
</tr>
<tr>
<td>Proper shipping name (DOT)</td>
<td>DETONATORS ASSEMBLIES, NON-ELECTRIC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14.3 Transport Hazard Class(es)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Class</td>
<td>1.1B</td>
</tr>
<tr>
<td>Label</td>
<td>1.1B</td>
</tr>
<tr>
<td>TDG Class</td>
<td>1.1B</td>
</tr>
<tr>
<td>Label</td>
<td>1.1B</td>
</tr>
<tr>
<td>IMDG Class</td>
<td>1.1B</td>
</tr>
<tr>
<td>IATA Class</td>
<td>1.1B</td>
</tr>
<tr>
<td>Label</td>
<td>FORBIDDEN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport labels</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT packing group</td>
<td>II</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14.4 Packing Group</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Packing group (International)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>DOT packing group</td>
<td>II</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14.5 Environmental Hazards</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmentally Hazardous Substance</td>
<td>Hazardous Substance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14.6 Special Precautions for User</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. Compatibility group B: Article containing a primary explosive substance and not having two or more effective protective features. Some articles such as detonators for blasting, detonator assemblies for blasting and primers, cap-type, are included, even though they do not contain primary explosives.</td>
<td></td>
</tr>
</tbody>
</table>

| EMS Number: | F-B, S-X |

<table>
<thead>
<tr>
<th>SECTION 15 – REGULATORY INFORMATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15.1 US Federal RegulationsSARA</td>
<td></td>
</tr>
<tr>
<td>Section 302 (Extremely Hazardous Substances)</td>
<td></td>
</tr>
<tr>
<td>Tier II Threshold Planning Quantities</td>
<td></td>
</tr>
<tr>
<td>None of the ingredients are listed or exempt.</td>
<td></td>
</tr>
</tbody>
</table>
Safety Data Sheet

Trade Name: EZshot

<table>
<thead>
<tr>
<th>CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients are listed or exempt.</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>SARA Extremely Hazardous Substances EPCRA Reportable Quantities</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients are listed or exempt.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SARA 313 Emission Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>The following ingredients are listed or exempt:</td>
</tr>
<tr>
<td>0% Lead diazide</td>
</tr>
<tr>
<td>1.0 % aluminium powder (stabilised)</td>
</tr>
</tbody>
</table>

**CAA Accidental Release Prevention**

<table>
<thead>
<tr>
<th>None of the ingredients are listed or exempt.</th>
</tr>
</thead>
</table>

**FDA - Essential Chemical**

<table>
<thead>
<tr>
<th>None of the ingredients are listed or exempt.</th>
</tr>
</thead>
</table>

**FDA - Precursor Chemical**

<table>
<thead>
<tr>
<th>None of the ingredients are listed or exempt.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>SARA (311/312) Hazard Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients are listed or exempt.</td>
</tr>
</tbody>
</table>

**OSHA Highly Hazardous Chemicals**

| The following ingredients are listed or exempt:                |
| Nitrocellulose                                                  |
| Threshold Quantity: 2500 lbs                                   |

**US State Regulations**

**California Proposition 65 Carcinogens and Reproductive Toxins**

<table>
<thead>
<tr>
<th>None of the ingredients are listed or exempt.</th>
</tr>
</thead>
</table>

**California Air Toxics “Hot Spots” (A-I)**

| The following ingredients are listed or exempt:                |
| Aluminium powder (stabilised)                                  |

**California Air Toxics “Hot Spots” (A-II)**

| None of the ingredients are listed or exempt.                  |
| California Directors List of Hazardous Substances              |
| The following ingredients are listed or exempt:                |
| Aluminium powder (stabilised)                                  |

**Massachusetts “Right To Know” List**

| The following ingredients are listed or exempt:                |
| Potassium perchlorate                                          |
| Lead diazide                                                   |
| Nitrocellulose Lithium                                         |

**Aluminium powder (stabilised)**

**Rhode Island “Right To Know” List**

| The following ingredients are listed or exempt:                |
| Potassium perchlorate                                          |
| Nitrocellulose Lithium                                         |
| Aluminium powder (stabilised)                                  |

**Minnesota “Right To Know” List**

| The following ingredients are listed or exempt:                |
| Potassium perchlorate                                          |

**Aluminium powder (stabilised)**

**New Jersey “Right To Know” List**

| The following ingredients are listed or exempt:                |
| Potassium perchlorate                                          |
Safety Data Sheet

Trade Name: EZshot

<table>
<thead>
<tr>
<th>Nitrocellulose</th>
<th>Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentaerythritol tetranitrate Lithium</td>
<td>Aluminium powder (stabilised)</td>
</tr>
</tbody>
</table>

Pennsylvania “Right To Know” List

The following ingredients are listed or exempt:
Potassium perchlorate
Nitrocellulose
Lithium
aluminium powder (stabilised)

Inventories
US - TSCA
All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification
The following ingredients are listed or exempt:
Pentaerythritol tetranitrate

SECTION 16 – OTHER INFORMATION

Revision Date: 09/17/2018
Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

Relevant Phrases
- H200 Unstable explosive.
- H201 Explosive; mass explosion hazard.
- H228 Flammable solid.
- H250 Catches fire spontaneously if exposed to air.
- H260 In contact with water releases flammable gases which may ignite spontaneously.
- H261 In contact with water releases flammable gases.
- H271 May cause fire or explosion; strong oxidizer.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H331 Toxic if inhaled.
- H332 Harmful if inhaled.
- H360 May damage fertility or the unborn child.
- H360Df May damage the unborn child. Suspected of damaging fertility.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:
- C.A.S.: Chemical Abstracts Service
Safety Data Sheet

Trade Name: EZshot

- E.C. No: European Commission number
- GHS: Globally Harmonised System
- OSHA: Occupational Safety and Health Administration
- WHMIS: Workplace Hazardous Materials Information System
- DOT: Department of Transport
- TDG: Transport of Dangerous Goods Regulations
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transport Association
- SARA: Superfund Amendments and Reauthorization Act
- CERCLA: Comprehensive Environmental
- EPCRA: Emergency Planning and Community Right-to-Know Act
- TSCA: Toxic Substances Control Act
- LD/LC/EC: Lethal Dose, Lethal Concentration/Effect Concentration for 50% of population
- NOEC: No Overall Effect Concentration
- NOEL: No Overall Effect Level
- REACH: Registration, Evaluation, Authorisation & Restriction of Chemicals
- STOT-RE: Single Target Organ Toxicity - Repeat Exposure
- STOT-SE: Specific Target Organ Toxicity Single Exposure
- PBT: Persistent, Bioaccumulative, Toxic
- vPvB: Very Persistent, Very Bioaccumulative.

Sources
SDS Prepared by:
ChemTel Inc.
1305 North Florida Avenue
Tampa, Florida USA 33602-2902
Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
Website: www.chemtelinc.com

Party Responsible for the Preparation of this Document
Dyno Nobel Inc.
6440 S. Millrock Drive, Suite 150
Salt Lake City, Utah 84121
Phone: 801-364-4800

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Trade Name: EZshot

Dyno Nobel SDS
SECTION 1 – IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Name, Address, and Telephone of the Responsible Party
Dyno Nobel Inc.
6440 S. Millrock Drive, Suite 150
Salt Lake City, Utah 84121
Phone: 801-364-4800  Fax: 801-321-6703
E-Mail: dnna.hse@am.dynonobel.com
www.dynonobel.com

SDS #:  Date: 07/20/2020
Supersedes: 09/17/2018

1.1 Product Identifier
Trade Name: EZshot
Article Number:

1.2 Recommended Use of the Chemical and Restrictions on Use
Application
Explosive detonator used in mining and commercial blasting applications.
Uses advised against
No specific uses advised against are identified.

1.3 Emergency Telephone Number
CHEMTREC  +1 800-424-9300 (USA)
CANUTEC  +1 613-996-6666 (CANADA)

SECTION 2 – HAZARD(S) IDENTIFICATION

2.1 Classification of the Substance or Mixture
OSHA Regulatory Status
This Product is Hazardous under the OSHA Hazard Communication Standard.
Comment(s)
As supplied, this product is an article. Expl. 1.1 - H201 Explosive; mass explosion hazard. This set contains many components.
Physical hazards
Expl. 1.1 - H201
Health hazards
Not classified
Environmental hazards
Not classified
Physiochemical

2.2 Label Elements
Hazard Pictograms

Signal Word
: Danger

Hazard Statements
: H201 - Explosive; mass explosion hazard.
: P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.
P230 Keep wetted with water.
P240 Ground/ bond container and receiving equipment.
P250 Do not subject to grinding/ shock/ friction.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

SDS#  Date: 07/20/2020
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Trade Name: EZshot

P370+P380 In case of fire: Evacuate area.
P372 Explosion risk in case of fire.
P373 DO NOT fight fire when fire reaches explosives.
P401 Store in accordance with national regulations.
P501 Dispose of contents/container in accordance with national regulations.

2.3 Other Hazards
Results of PBT and vPvB Assessment
This product does not contain any substances classified as PBT or vPvB.

Explosive Product Notice
PREVENTION OF ACCIDENTS IN THE USE OF EXPLOSIVES - The prevention of accidents in the use of explosives is a result of careful planning and observance of the best-known practices. The explosives user must remember that he is dealing with a powerful force and that various devices and methods have been developed to assist him in directing this force. He should realize that this force, if misdirected, may either kill or injure both him and his fellow workers.
WARNING - All explosives are dangerous and must be carefully handled and used following approved safety procedures either by or under the direction of competent, experienced persons in accordance with all applicable federal, state, and local laws, regulations, or ordinances. If you have any questions or doubts as to how to use any explosive product, DO NOT USE IT before consulting with your supervisor, or the manufacturer, if you do not have a supervisor. If your supervisor has any questions or doubts, he should consult the manufacturer before use.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures
Description: This set contains many components. The information below relates to the chemical components contained in the explosive item.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 7778-74-7</td>
</tr>
<tr>
<td>Ox. Sol. 1 - H271; Acute Tox. 4 - H302</td>
</tr>
<tr>
<td>CAS: 9004-70-0</td>
</tr>
<tr>
<td>Expl. 1.1 - H201</td>
</tr>
<tr>
<td>CAS: 2691-41-0</td>
</tr>
<tr>
<td>Expl. 1.1 - H201; Acute Tox. 4 - H302; Acute Tox. 3 - H311</td>
</tr>
<tr>
<td>CAS: 7440-67-7</td>
</tr>
<tr>
<td>Pyr. Sol. 1 - H250; Water-react. 1 - H260</td>
</tr>
<tr>
<td>CAS: 78-11-5</td>
</tr>
<tr>
<td>Unst. Expl. - H200</td>
</tr>
<tr>
<td>CAS: 7439-93-2</td>
</tr>
<tr>
<td>Water-react. 1 - H260; Skin Corr. 1B - H314; Eye Dam. 1 - H318</td>
</tr>
<tr>
<td>CAS: 25721-38-4</td>
</tr>
<tr>
<td>M factor (Chronic) = 1</td>
</tr>
<tr>
<td>Expl. 1.1 - H201; Acute Tox. 3 - H301; Acute Tox. 3 - H311; Acute Tox. 3 - H331; Repr. 1A - H360; STOT RE 2 - H373; Aquatic Chronic 1 - H410</td>
</tr>
<tr>
<td>CAS: 7429-90-5</td>
</tr>
<tr>
<td>Flam. Sol. 1 - H228; Water-react. 2 - H261</td>
</tr>
<tr>
<td>CAS: 51311-17-2</td>
</tr>
<tr>
<td>Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; STOT SE 3 - H335</td>
</tr>
</tbody>
</table>
Trade Name: EZshot

<table>
<thead>
<tr>
<th>CAS: -</th>
<th>Lead picramate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unst. Expl. - H200; Acute Tox. 4 - H302; Acute Tox. 4 - H332; Repr. 1A - H360Df; STOT RE 2 - H373; Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 13424-46-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>M factor (Acute) = 1</td>
</tr>
<tr>
<td>M factor (Chronic) = 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 13424-46-9</th>
<th>Lead diazide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unst. Expl. - H200; Acute Tox. 4 - H302; Acute Tox. 4 - H332; Repr. 1A - H360Df; STOT RE 2 - H373; Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410</td>
<td></td>
</tr>
</tbody>
</table>

Additional Information: The full text for all hazard statements is displayed in Section 16.
Composition comments: The exact percentage is withheld as a trade secret in accordance with 29 CFR 1910.1200.

SECTION 4 – FIRST AID MEASURES

4.1 Description of First Aid Measures
General Information: Class 1: Explosive substances and articles. Get medical attention immediately. Show this Safety Data Sheet to the medical personnel. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
After Inhalation: Due to the physical nature of this product, exposure by this route is unlikely. If exposed to the chemical contents, then proceed as follows:
Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.
Ingestion: Due to the physical nature of this product, it is unlikely that ingestion will occur. If exposed to the chemical contents, then proceed as follows: If swallowed:
Rinse nose and mouth with water.
Give plenty of water to drink.
Do not induce vomiting unless under the direction of medical personnel.
If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.
After Skin Contact: If exposed to the chemical contents, then proceed as follows:
Brush off loose particles from skin.
Wash skin thoroughly with soap and water.
After Eye Contact: Due to the physical nature of this product, exposure by this route is unlikely. If exposed to the chemical contents, then proceed as follows: If in eyes:
Rinse with water.
Remove any contact lenses and open eyelids wide apart.
Continue to rinse for at least 10 minutes.
Do not rub eye.
Protection of first aiders: First aid personnel should wear appropriate protective equipment during any rescue.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed
General information The information below relates to the chemical components contained in the explosive item. The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Suspected of damaging fertility or the unborn child.
Inhalation May cause respiratory irritation.
Ingestion Harmful if swallowed. Stomach pain.
Skin contact Prolonged skin contact may cause temporary irritation.
Eye contact May cause temporary eye irritation.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed
Notes for the doctor Treat symptomatically.
### SECTION 5 – FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing Media

**Suitable Extinguishing Agents:** The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

**For Safety Reasons Unsuitable Extinguishing Agents:** Do not use water jet as an extinguisher, as this will spread the fire.

#### 5.2 Special Hazards Arising from the Substance or Mixture

**Risk of explosion:** DO NOT ATTEMPT TO FIGHT FIRES INVOLVING EXPLOSIVE MATERIALS. Evacuate all personnel to a predetermined safe location, no less than 2,500 feet in all directions. Can explode or detonate under fire conditions. Burning material may produce toxic vapors. It is recommended that users of explosives material be familiar with the Institute of Makers of Explosives Safety Library publications.

**Hazardous combustion products:** Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors. Oxides of carbon. Carbon monoxide (CO).

#### 5.3 Advice for Firefighters

**Protective Equipment:** Class 1: Explosive substances and articles. Regular protection may not be safe. Wear chemical protective suit. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter’s clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

**Additional Information**

Leave danger zone immediately. Evacuate area. No action shall be taken without appropriate training or involving any personal risk. Keep upwind to avoid inhalation of gases, vapors, fumes and smoke. Fight fire remotely due to the risk of explosion. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

### SECTION 6 – ACCIDENTAL RELEASE MEASURES

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

Wear protective clothing as described in Section 8 of this safety data sheet.

No action shall be taken without appropriate training or involving any personal risk.

No smoking, sparks, flames or other sources of ignition near spillage.

Evacuate area. Isolate area and prevent access.

#### 6.2 Environmental Precautions

Avoid discharge into drains or watercourses or onto the ground.

Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

#### 6.3 Methods and Material for Containment and Cleaning Up

Wear protective clothing as described in Section 8 of this safety data sheet.

No smoking, sparks, flames or other sources of ignition near spillage.

Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

Use only non-sparking tools.

For waste disposal, see Section 13.

#### 6.4 Reference to Other Sections

For personal protection, see Section 8.

See Section 11 for additional information on health hazards.

See Section 12 for additional information on ecological hazards.

For waste disposal, see Section 13.
SECTION 7 – HANDLING AND STORAGE

7.1 Precautions for Safe Handling
Usage precautions: Read and follow manufacturer’s recommendations.
Wear protective clothing as described in Section 8 of this safety data sheet.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep away from food, drink and animal feeding stuffs.
Use only non-sparking tools.
Handle with care.
Do not drop or knock.
Risk of explosion.
Do not handle until all safety precautions have been read and understood.
Do not handle broken packages without protective equipment.
Do not disassemble.
Advice on general occupational hygiene:
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wash at the end of each work shift and before eating, smoking and using the toilet.
Change work clothing daily before leaving workplace.

7.2 Conditions for Safe Storage, Including Any Incompatibilities
Storage precautions:
Class 1: Explosive substances and articles. Store in accordance with local regulations. Licenced storage. Keep in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Ensure product is stored securely and cannot fall.

Storage class: Class 1: Explosive substances and articles. Compatibility group B.

7.3 Specific End Use(s): The identified uses for this product are detailed in Section 1.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters
Occupational exposure limits:
Ingredient comments: The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Ingredients with Limit Values that Require Monitoring at the Workplace:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Long-term exposure limit (8-hour TWA):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium powder (stabilised)</td>
<td>ACGIH 1 mg/m³ respirable fraction A4</td>
</tr>
<tr>
<td></td>
<td>OSHA 5 mg/m³ respirable fraction as Al</td>
</tr>
<tr>
<td></td>
<td>Long-term exposure limit (8-hour TWA):</td>
</tr>
<tr>
<td></td>
<td>OSHA 15 mg/m³ total dust as Al</td>
</tr>
</tbody>
</table>

Lead diazide

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Long-term exposure limit (8-hour TWA):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OSHA 0.05 mg/m³ as Pb</td>
</tr>
</tbody>
</table>

ACGIH = American Conference of Governmental Industrial Hygienists.
OSHA = Occupational Safety and Health Administration.
A4 = Not Classifiable as a Human Carcinogen.

8.2 Exposure Controls
Personal Protective Equipment:
General Protective and Hygienic Measures:
Provide adequate ventilation.
Safety Data Sheet

Trade Name: EZshot

Ensure the ventilation system is regularly maintained and tested. Good general ventilation should be adequate to control worker exposure to airborne contaminants. Observe any occupational exposure limits for the product or ingredients. Take precautionary measures against static discharges.

**Eye/face protection:** Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with OSHA 1910.133.

**Hand protection:** Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Wear protective gloves made of the following material: Polyethylene.

**Other skin and body protection:** Wear suitable coveralls to prevent exposure to the skin. Wear fire/flame resistant/retardant clothing. Wear anti-static protective clothing if there is a risk of ignition from static electricity.

**Hygiene measures:** Good personal hygiene procedures should be implemented. When using do not eat, drink or smoke. **Respiratory Protection:** No specific requirements are anticipated under normal conditions of use. Provide adequate ventilation. Respiratory protection may be required if excessive airborne contamination occurs. Wear a respirator fitted with the following cartridge: Organic vapor + dust and mist filter. **Thermal hazards:** If there is a risk of contact with hot product, all protective equipment worn should be suitable for use with high temperatures. **Environmental exposure controls:** The product in its supplied state is not believed to present an exposure hazard.

### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>9.1 Information on Basic Physical and Chemical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product comments:</strong> This set contains many components. The information below relates to the chemical components contained in the explosive item.</td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
</tr>
<tr>
<td>Form : Solid</td>
</tr>
<tr>
<td>Color : Not determined.</td>
</tr>
<tr>
<td>Odor : Not determined.</td>
</tr>
<tr>
<td>Odor Threshold : Not determined.</td>
</tr>
<tr>
<td>pH-Value : Not determined.</td>
</tr>
<tr>
<td>Change in Condition</td>
</tr>
<tr>
<td>Freezing point : Not available.</td>
</tr>
<tr>
<td>Boiling point/Boiling range : Not available.</td>
</tr>
<tr>
<td>Flash Point : Not available.</td>
</tr>
<tr>
<td>Evaporation rate : Not determined.</td>
</tr>
<tr>
<td>Evaporation factor : Not determined.</td>
</tr>
<tr>
<td>Flammability (solid, gas) : Not relevant.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits : Not relevant.</td>
</tr>
</tbody>
</table>
Safety Data Sheet

Trade Name: EZshot

Vapor pressure : Not determined.
Vapor density  : Not determined.
Relative density : Not determined.
Bulk density : Not determined.
Solubility : Not determined.
Partition coefficient : Not determined.
Auto-ignition temperature : Not relevant.
Decomposition Temperature : Not relevant.
Viscosity : Not determined.
Explosive properties : Class 1: Explosive substances and articles. Compatibility group B.
Oxidizing properties : Not considered to be oxidising.

SECTION 10 – STABILITY AND REACTIVITY

10.1 Reactivity
See the other subsections of this section for further details.

10.2 Chemical Stability
Risk of explosion by shock, friction, fire or other sources of ignition.
Stable at normal ambient temperatures and when used as recommended.
Stable under the prescribed storage conditions.

10.3 Possibility of Hazardous Reactions
Risk of explosion.

10.4 Conditions to Avoid
Protect from sunlight.
Avoid heat, flames and other sources of ignition.
Risk of explosion if heated under confinement.
Do not subject to grinding/shock/friction.

10.5 Materials to avoid
Strong oxidizing agents. Strong reducing agents.

10.6 Hazardous Decomposition Products
Does not decompose when used and stored as recommended.
Thermal decomposition or combustion products may include the following substances:
Harmful gases or vapors.
Carbon monoxide (CO).

SECTION 11 – TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:
Toxicological effects: Exposure to components of the product are limited due to the physical form of the product.
The information below relates to the chemical components contained in the explosive item.

Acute toxicity:
LD50 Oral Based on available data the classification criteria are not met.
LD50 Dermal Based on available data the classification criteria are not met.
LD50 Inhalation Based on available data the classification criteria are not met.

Skin corrosion/irritation:
Animal data Based on available data the classification criteria are not met.
Serious eye damage/irritation Based on available data the classification criteria are not met.
Safety Data Sheet

Trade Name: EZshot

<table>
<thead>
<tr>
<th>Respiratory sensitization</th>
<th>Based on available data the classification criteria are not met.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin sensitization</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td></td>
</tr>
<tr>
<td>Genotoxicity - in vitro</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td></td>
</tr>
<tr>
<td>Reproductive toxicity - fertility</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Reproductive toxicity development</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
</tbody>
</table>

Specific target organ toxicity - single exposure:

STOT - single exposure: Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure:

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard

General information:
The information below relates to the chemical components contained in the explosive item. The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Suspected of damaging fertility or the unborn child.

Inhalation: May cause respiratory irritation.

Ingestion: Harmful if swallowed. Stomach pain.

Skin contact: Prolonged skin contact may cause temporary irritation.

Eye contact: May cause temporary eye irritation.

Route of exposure: Ingestion Inhalation Skin and/or eye contact

Target Organs: No specific target organs known.

SECTION 12 – ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic Toxicity: Harmful to aquatic life with long lasting effects.

12.2 Persistence and Degradability

The product contains inorganic substances which are not biodegradable.

12.3 Bioaccumulative Potential

No data available on bioaccumulation.

Partition coefficient: Not determined.

12.4 Mobility in Soil

The product is water-soluble and may spread in water systems.

12.5 Other Adverse Effects

None known.
**SECTION 13 – DISPOSAL CONSIDERATIONS**

13.1 Waste Treatment Methods

**General information:** This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Empty containers or liners may retain some product residues and hence be potentially hazardous. Do not handle broken packages without protective equipment. Do not disassemble.

**Disposal methods:** Dispose of waste via a licensed waste disposal contractor. If broken/damaged and the contents exposed, submerge in water. Dispose of contents/container in accordance with local regulations.

**SECTION 14 – TRANSPORT INFORMATION**

**General:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Handle with care. Do not drop or knock. Ensure product is stored securely and cannot fall.

### 14.1 UN-Number

<table>
<thead>
<tr>
<th>Number Type</th>
<th>UN Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDG</td>
<td>UN0361</td>
</tr>
<tr>
<td>IMDG</td>
<td>UN0361</td>
</tr>
<tr>
<td>IATA</td>
<td>UN0361</td>
</tr>
<tr>
<td>DOT</td>
<td>UN0361</td>
</tr>
</tbody>
</table>

### 14.2 UN Proper Shipping Name

<table>
<thead>
<tr>
<th>Proper shipping name (TDG)</th>
<th>DETONATORS ASSEMBLIES, NON-ELECTRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper shipping name (IMDG)</td>
<td>DETONATORS ASSEMBLIES, NON-ELECTRIC</td>
</tr>
<tr>
<td>Proper shipping name (IATA)</td>
<td>DETONATORS ASSEMBLIES, NON-ELECTRIC</td>
</tr>
<tr>
<td>Proper shipping name (DOT)</td>
<td>DETONATORS ASSEMBLIES, NON-ELECTRIC</td>
</tr>
</tbody>
</table>

### 14.3 Transport Hazard Class(es)

<table>
<thead>
<tr>
<th>Class</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>1.4B</td>
</tr>
<tr>
<td>TDG</td>
<td>1.4B</td>
</tr>
<tr>
<td>IMDG</td>
<td>1.4B</td>
</tr>
<tr>
<td>IATA</td>
<td>1.4B</td>
</tr>
</tbody>
</table>

### 14.4 Packing Group

<table>
<thead>
<tr>
<th>Packing group (International)</th>
<th>DOT packing group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable.</td>
<td>II</td>
</tr>
</tbody>
</table>

### 14.5 Environmental Hazards

| Environmentally Hazardous Substance | No |

### 14.6 Special Precautions for User

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. Compatibility group B: Article containing a primary explosive substance and not having two or more effective protective features. Some articles such as detonators for blasting, detonator assemblies for blasting and primers, cap-type, are included, even though they do not
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<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>EZshot</td>
<td>07/20/2020</td>
</tr>
</tbody>
</table>

**SECTION 15 – REGULATORY INFORMATION**

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture United States (USA)

<table>
<thead>
<tr>
<th>Regulation</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SARA</strong></td>
<td></td>
</tr>
<tr>
<td>Section 302 (Extremely Hazardous Substances)</td>
<td>Tier II Threshold Planning Quantities</td>
</tr>
<tr>
<td></td>
<td>None of the ingredients are listed or exempt.</td>
</tr>
<tr>
<td>CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)</td>
<td>None of the ingredients are listed or exempt.</td>
</tr>
<tr>
<td>SARA Extremely Hazardous Substances EPCRA Reportable Quantities</td>
<td>None of the ingredients are listed or exempt.</td>
</tr>
<tr>
<td><strong>SARA 313 Emission Reporting</strong></td>
<td></td>
</tr>
<tr>
<td>The following ingredients are listed or exempt:</td>
<td></td>
</tr>
<tr>
<td>0% Lead diazide</td>
<td></td>
</tr>
<tr>
<td>1.0 % aluminium powder (stabilised)</td>
<td></td>
</tr>
<tr>
<td><strong>CAA Accidental Release Prevention</strong></td>
<td></td>
</tr>
<tr>
<td>None of the ingredients are listed or exempt.</td>
<td></td>
</tr>
<tr>
<td><strong>FDA - Essential Chemical</strong></td>
<td></td>
</tr>
<tr>
<td>None of the ingredients are listed or exempt.</td>
<td></td>
</tr>
<tr>
<td><strong>FDA - Precursor Chemical</strong></td>
<td></td>
</tr>
<tr>
<td>None of the ingredients are listed or exempt.</td>
<td></td>
</tr>
<tr>
<td><strong>SARA (311/312) Hazard Categories</strong></td>
<td></td>
</tr>
<tr>
<td>None of the ingredients are listed or exempt.</td>
<td></td>
</tr>
<tr>
<td><strong>OSHA Highly Hazardous Chemicals</strong></td>
<td></td>
</tr>
<tr>
<td>The following ingredients are listed or exempt:</td>
<td></td>
</tr>
<tr>
<td>Nitrocellulose</td>
<td></td>
</tr>
<tr>
<td>Threshold Quantity: 2500 lbs</td>
<td></td>
</tr>
<tr>
<td><strong>US State Regulations</strong></td>
<td></td>
</tr>
<tr>
<td>California Proposition 65 Carcinogens and Reproductive Toxins</td>
<td>None of the ingredients are listed or exempt.</td>
</tr>
<tr>
<td>California Air Toxics “Hot Spots” (A-I)</td>
<td></td>
</tr>
<tr>
<td>The following ingredients are listed or exempt:</td>
<td></td>
</tr>
<tr>
<td>Aluminium powder (stabilised)</td>
<td></td>
</tr>
<tr>
<td>California Air Toxics “Hot Spots” (A-II)</td>
<td></td>
</tr>
<tr>
<td>None of the ingredients are listed or exempt.</td>
<td></td>
</tr>
<tr>
<td>California Directors List of Hazardous Substances</td>
<td></td>
</tr>
<tr>
<td>The following ingredients are listed or exempt:</td>
<td></td>
</tr>
<tr>
<td>Aluminium powder (stabilised)</td>
<td></td>
</tr>
<tr>
<td>Massachusetts “Right To Know” List</td>
<td></td>
</tr>
<tr>
<td>The following ingredients are listed or exempt:</td>
<td></td>
</tr>
<tr>
<td>Potassium perchlorate</td>
<td></td>
</tr>
<tr>
<td>Lead diazide</td>
<td></td>
</tr>
<tr>
<td>Nitrocellulose Lithium</td>
<td></td>
</tr>
<tr>
<td>Aluminium powder (stabilised)</td>
<td></td>
</tr>
<tr>
<td>Rhode Island “Right To Know” List</td>
<td></td>
</tr>
</tbody>
</table>
The following ingredients are listed or exempt:
- Potassium perchlorate
- Nitrocellulose
- Aluminium powder (stabilised)

**Minnesota “Right To Know” List**

The following ingredients are listed or exempt:
- Aluminium powder (stabilised)

**New Jersey “Right To Know” List**

The following ingredients are listed or exempt:
- Potassium perchlorate
- Nitrocellulose
- Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
- Pentaerythritol tetranitrate
- Lithium
- Aluminium powder (stabilised)

**Pennsylvania “Right To Know” List**

The following ingredients are listed or exempt:
- Potassium perchlorate
- Nitrocellulose
- Lithium
- Aluminium powder (stabilised)

**Inventories**

**US - TSCA**

All the ingredients are listed or exempt.

**US - TSCA 12(b) Export Notification**

The following ingredients are listed or exempt:
- Pentaerythritol tetranitrate

### SECTION 16 – OTHER INFORMATION

**Revision Date**: 09/17/2018

**Other Information**: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

**Relevant Phrases**

- H200 Unstable explosive.
- H201 Explosive; mass explosion hazard.
- H228 Flammable solid.
- H250 Catches fire spontaneously if exposed to air.
- H260 In contact with water releases flammable gases which may ignite spontaneously.
- H261 In contact with water releases flammable gases.
- H271 May cause fire or explosion; strong oxidizer.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H331 Toxic if inhaled.
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- H332 Harmful if inhaled.
- H360 May damage fertility or the unborn child.
- H360Df May damage the unborn child. Suspected of damaging fertility.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:
- C.A.S.: Chemical Abstracts Service
- E.C. No: European Commission number
- GHS: Globally Harmonised System
- OSHA: Occupational Safety and Health Administration
- WHMIS: Workplace Hazardous Materials Information System
- DOT: Department of Transport
- TDG: Transport of Dangerous Goods Regulations
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transport Association
- SARA: Superfund Amendments and Reauthorization Act
- CERCLA: Comprehensive Environmental
- EPCRA: Emergency Planning and Community Right-to-Know Act
- TSCA: Toxic Substances Control Act
- LD/LC/EC: Lethal Dose, Lethal Concentration/Effect Concentration for 50% of population
- NOEC: No Overall Effect Concentration
- NOEL: No Overall Effect Level
- REACH: Registration, Evaluation, Authorisation & Restriction of Chemicals
- STOT-RE: Single Target Organ Toxicity - Repeat Exposure
- STOT-SE: Specific Target Organ Toxicity Single Exposure
- PBT: Persistent, Bioaccumulative, Toxic
- vPvB: Very Persistent, Very Bioaccumulative.

Sources
SDS Prepared by:
ChemTel Inc.
1305 North Florida Avenue
Tampa, Florida USA 33602-2902
Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
Website: www.chemtelinc.com

Party Responsible for the Preparation of this Document
Dyno Nobel Inc.
6440 S. Millrock Drive, Suite 150
Salt Lake City, Utah 84121
Trade Name: EZshot

Phone: 801-364-4800
Safety Data Sheet

Trade Name: EZshot

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