



## Brand Binary Exploding Rifle Target Material Safety Data Sheet

### Product and Company Identification

**Product Name:** Tannerite® Brand Binary Exploding Rifle Targets  
**Product Codes:** All Tannerite® brand binary targets intended for use with center-fire rifles  
**Manufacturer:** Tannerite® Sports LLC  
 36366 Valley Rd.  
 Pleasant Hill, OR 97455  
 (541) 744-1406

**DESCRIPTION:** Tannerite® brand binary exploding rifle targets detonate on impact from a high power rifle and are used as a shot indicator to tell if you hit your mark from a distance. It is comprised of two individually packaged components that are mixed by the consumer immediately before using. The components are an oxidizer (Part A) and a fuel (Part B).

**SHIPPING:** This product can be shipped via ground or air carrier.

**Fire Testing:** Fire testing by an independent laboratory has demonstrated that these targets do not increase the burning rate of other combustible materials in a fire.

### Part A - Oxidizer

#### Composition and Information on Ingredients:

<u>Material</u>	<u>CAS#</u>	<u>%</u>
Ammonium Nitrate	6484-52-2	100

#### Hazard Identification:

- **Acute Health Effects** – Irritation to skin and eyes on contact. Irritation to the eyes will cause watering and redness. May cause scaling, itching, and reddening on skin contact. Inhalation may result in irritation to the lungs and mucus membrane.
- **Chronic Effects** – Prolonged exposure may cause methemoglobinemia, which is characterized by chocolate-brown colored blood, headache, weakness, dizziness, breath shortness, cyanosis (bluish skin due to deficient oxygenation of blood), rapid heart rate, unconsciousness and possible death.

#### First Aid Measures:

- Eyes – Flush with water for 15 minutes and call a physician.
- Skin – Flush with large quantities of water. Seek medical attention if irritation persists
- Inhalation – Move to fresh air. If breathing is difficult, give oxygen. Call a physician.
- Ingestion – Do not induce vomiting. Call a physician.

#### Fire and Explosion Data:

- Non-flammable and compatible with water as a fire fighting media. Do not use powder or CO<sub>2</sub> extinguishers
- If contaminated with combustible or organic materials, there is an explosive hazard on heating under confinement.

#### Accidental Release Measures:

- Clean spills in a manner that does not disperse dust in the air. Spill area can be washed with water, but collect wash water for approved disposal. Keep water or powder from entering ground water.

## Part A– Oxidizer Continued

### Handling and Storage:

- Avoid breathing dust and contact with skin or eyes.
- Store in a dry location away from direct sunlight.
- Wear safety glasses or goggles and gloves when handling.
- Wash hands and face before eating, drinking, or using tobacco products.

### Physical and Chemical Properties:

- White granular and odorless material that melts at 170°C and decomposes at 210°C.
- Auto ignition temperature = 300°C
- Soluble in water.

### Stability and Reactivity:

- In pure form this material is stable and will not undergo hazardous polymerization.
- This material is incompatible with combustibles, organic materials, fuels, metal powders or reducing agents
- Will decompose above 210°C

### Toxicological Information :

- Oral – Rat LD50 = 2217 mg/kg
- Acute toxic effects include irritation to the skin and eyes on contact. Inhalation will cause irritation to the lungs and mucus membranes. Follow safe industrial hygiene practices including appropriate personal protective equipment.

## Part B – Fuel or Catalyst

### Composition and Information on Ingredients:

<u>Material</u>	<u>CAS#</u>	<u>%</u>
Aluminum powder	7429-90-5	>80%
Inert/non-hazardous materials	NA	<20%

### Hazard Identification:

- Flammable solid. Dust may form explosive mixture with air. Avoid contact with water which could release hydrogen gas.
- Inhalation can result in irritation to the respiratory tract causing coughing and shortness of breath
- Ingestion not considered toxic but may cause nausea and vomiting.
- Contact with skin may cause irritation
- Pulmonary fibrosis from chronic inhalation has been reported

### First Aid Measures:

- Eyes – Flush with water for 15 minutes and call a physician.
- Skin – Wash with soap and water. Seek medical attention if irritation persists
- Inhalation – Move to fresh air. Call a physician if symptoms persist
- Ingestion – Give water to dilute. Do not induce vomiting. If large amounts were swallowed, get medical advice.

### Fire and Explosion Data:

- Reaction with water, strong acids, or strong bases yields hydrogen gas (highly flammable and explosive)
- Fine aluminum dust can form explosive mixtures with air that may be ignited with a static discharge. LEL = 30 oz/1000 ft<sup>3</sup>
- Contact with strong oxidizers can lead to fire or explosion
- Put fires out with Type D fire extinguisher or smother fire with dry sand

### Accidental Release Measures:

- Remove all ignition sources. Clean spills in a manner that does not disperse dust in the air using non-sparking tools. Avoid contact with water and pick up spilled material for recovery or disposal and place in a closed container.

**Part B – Fuel or Catalyst (Continued)****Handling and Storage:**

- Avoid breathing dust and contact with skin or eyes.
- Store in a dry location and protect from moisture.
- Wear safety glasses or goggles and gloves when handling.
- Wash hands and face before eating, drinking, or using tobacco products.
- Use spark proof implements for transfer of material

**Physical and Chemical Properties:**

- Odorless gray powder
- Melting point = 660°C and boiling point = 2327°C

**Stability and Reactivity:**

- In pure form this material is stable and will not undergo hazardous polymerization.
- This material is incompatible with water, strong oxidizing agents, and acids
- Avoid moisture, heat, flames, and incompatible materials as outlined above

**Toxicological Information:**

- No LD50/LC50 information found relating to normal route of occupational exposure
- This product is not listed by NTP, IARC, or regulated as a carcinogen by OSHA

**Exposure Controls:**

- OSHA PEL = 15 mg/m<sup>3</sup>

**Precautions with Mixed Composition**

- Parts A and B of this product must only be mixed at point of use. Mixed composition must not be stored or transported without the proper endorsements.
- This product must be mixed and used for non-commercial purpose as a shot indicator to be in compliance with 27 CFR 555.11.
- By mixing these components, the consumer becomes the manufacturer of an exploding target and assumes all liabilities.
- This product will not start a fire, but do not use when a special fire order is in effect.
- Do not place these targets directly on the ground to avoid flying debris on detonation.
- Place targets at a distance of 100 yards and shoot with center-fire rifle of caliber .223 or higher

