

## SAFETY DATA SHEET (SDS)

### 1. PRODUCT IDENTIFICATION

<b>DOT Hazard Shipping Description:</b>	MERA Prime Cast Booster
<b>Trade Names and Synonyms:</b>	Boosters, without detonator, 1.1D UN0042, PG II
<b>Худалдааны нэршил болон бусад нэршил:</b>	Cast Boosters & Cord Sensitive Boosters MERA Prime Boosters
<b>Manufacturer information / Distributor information:</b>	City Tower Business center, Sukhbaatar Square 8/1, Sukhbaatar District-8, Ulaanbaatar, Mongolia
<b>Transportation Emergency in Mongolia:</b>	+976 9905 4231

### 2. 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 explosive 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, might 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.

### 3. HAZARDOUS INGREDIENTS

Ingredients	Cas#	%	TLV
Trinitrotoluene (TNT)	118-96-7	30-90	0.5 mg/M <sup>3</sup>
Pentaerythritol Tetranitrate (PETN)	78-11-5	0-70	N/E
Cyclotrimethylene Trinitramine (RDX)	121-82-4	0-60	N/E

Ingredients that are not mentioned above, which are used in this product are not hazardous as defined under the current Department of Labor regulations.  
 N/A = Not applicable                      N/E = Not established

### 4. PHYSICAL DATA

Boiling Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Solubility in Water	Insoluble
Specific Gravity	1,5-1,6
Melting Point	176oF (80oC)
Evaporation Rate	N/A
Appearance and Odor	Tan to brown solid with no odor

### 5. FIRE AND EXPLOSION DATA

**Flashpoint:** N/A

**Flammable Limits:** N/A

**Extinguishing Media:** None

**Unusual Fire and Explosive Hazards:** Will detonate if suitably primed by heat, flame or severe impact. Hazardous gases produced in fire are Nitrogen Oxides and Carbon Monoxide.

**Special Fire Fighting Procedures:** See below

**ALL EXPLOSIVES:** DO NOT fight fires involving Explosives. Try to keep fire from reaching explosives. Isolate area and evacuate personnel to a safe place. Evacuate the area in all directions for one (1) km or more if any amount of explosives is involved in a fire.

General extinguishers may be used on the initial fire not involving explosives, such as electrical equipment fires, tire fires or a general plant fire. Water may be used to cool explosives not involved in the initial fire.

## 6. HEALTH HAZARD DATA

**General:** Referenced is Division 1.1 explosives, and detonation may cause severe physical injury, including death. All explosives are dangerous and must be handled carefully and used following approved safety procedures under the direction of competent, experienced persons in accordance with all applicable federal, state and local laws, regulations and ordinances.

Inhalation of explosive powders may cause nervous system irregularities, including headaches and dizziness. Nitrogen oxides and Carbon Monoxides generated during use are skin, eye and respiratory tract irritants.

**Carcinogenicity:** National Toxicology Program (NTP), International Agency for Research for Cancer (IARC), or Occupational Safety and Health Administration (OSHA) does not list the components as a carcinogen.

**Effects of Overexposure:**

*Eyes:* May cause irritation, redness and tearing.

*Skin:* Prolonged contact may cause irritation.

*Ingestion:* Harmful if swallowed. May cause headache, weakness, anemia or liver injury.

*Inhalation:* May cause dizziness and nausea.

*Systemic or Other Effects:* None known

**Emergency and First Aid Procedures**

**Inhalation:** If detonation fumes are inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen and call a physician.

**Eye Contact:** Flush eyes with water for fifteen minutes and seek medical care.

**Skin Contact:** Wash skin with soap and water.

**Ingestion:** Induce vomiting immediately by giving two glasses of water and sticking finger down throat.

**Injury from Detonation:** Seek prompt medical attention.

## 7. HAZARDOUS REACTIVITY DATA

**Stability:** Stable under normal conditions.

**Conditions to Avoid:** Keep away from ignition sources, strong shock, heat and flame.

**Incompatibility:** No data applicable

**Hazardous Decomposition:** Nitrous Oxide and Carbon Monoxide

**Hazardous Polymerization:** Will not occur

## 8. SPILL OR LEAK PROCEDURES

**Spill/Leak Response:** Review fire and explosion hazards before proceeding with clean up. Remove and protect all ignition sources. Wear protective equipment during clean up. Mop up with water using soft non-sparking tools. It is suggested that only personnel trained in emergency response should respond. Verify a complete account of the product('s). Notify authorities and follow applicable Federal, State and local spill reporting requirements.

**Waste Disposal Method:** Dispose of in compliance with China national regulations under the authority of the Regulation on Civil Blasting Accessories.

## 9. SPECIAL PROTECTION INFORMATION

**Ventilation Respiratory:** General ventilation with local exhaust in operation area. Wear fitted National Institute of Occupational Safety and Health (NIOSH) approved respirator with proper ventilation.

**Eye Protection:** Chemical goggles and/or safety goggles.

**Protective Clothing:** Wear protective gloves made of rubber or neoprene. Wear clothing to protect exposed skin such as flameproof coveralls and conductive boots.

## 10. SPECIAL PRECAUTIONS

**Precautions in handling and storage:** Store in compliance with all Federal/National, State/Province and Local regulations. Keep away from ignition sources, strong shock, flames and heat. Store in cool, dry location.

**Storage Conditions:** Store in accordance with the requirements of Mongolian or user's national regulations on hazard chemical.

## 11. SHIPPING INFORMATION

**Proper Shipping Name:** Boosters, without detonator

**Hazard Class:** 1.1D

**UN Number:** UN0042

**Packaging Group:** II

**DOT Label & Placard:** DOT Label EXPLOSIVE 1.1D, DOT Placard EXPLOSIVES 1.1