

# Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910. 1200. Standard must be consulted for specific requirements

## MODEL 2330 12ga CS Liquid Barricade Projectile

### QUICK IDENTIFIER

Common Name: (used on label and list)

### SECTION 1

|                                                            |                                 |                         |              |
|------------------------------------------------------------|---------------------------------|-------------------------|--------------|
| Manufacturer's Name                                        | Combined Tactical Systems, Inc. |                         |              |
| Address                                                    | 388 Kinsman Road                | Emergency Telephone No. | 800-424-9300 |
| City, State and ZIP                                        | Jamestown, PA 16134             | Other Information Calls | 724-932-2177 |
| Signature of Person Responsible for Preparation (Optional) | Date Prepared                   |                         | 12/29/98     |

### SECTION 2 - HAZARDOUS INGREDIENTS / IDENTITY

| Hazardous Component(s)<br>(chemical & common name(s)) | OSHA<br>PEL          | ACGIH<br>TLV         | Other Exposure<br>Limits         | %<br>(Optional) | CAS No.    |
|-------------------------------------------------------|----------------------|----------------------|----------------------------------|-----------------|------------|
| <b>Center Fire Primer</b>                             |                      |                      |                                  |                 |            |
| Lead Styphnate                                        | .05mg/m <sup>3</sup> | .15mg/m <sup>3</sup> |                                  |                 | 15245-44-0 |
| Barium Nitrate                                        | .5mg/m <sup>3</sup>  | .5mg/m <sup>3</sup>  |                                  |                 | 10022-31-8 |
| Antimony Sulfide                                      | .5mg/m <sup>3</sup>  | .5mg/m <sup>3</sup>  |                                  |                 | 1345-04-6  |
| <b>RED DOT® smokeless powder</b>                      |                      |                      |                                  |                 |            |
| Nitroglycerin                                         |                      | .46mg/m <sup>3</sup> | .1mg/m <sup>3</sup><br>OSHA STEL | 1gm             | 55-63-0    |
| Diphenylamine                                         |                      | 10mg/m <sup>3</sup>  |                                  |                 | 122-39-4   |
| <b>Methylene Chloride</b>                             | 25ppm                | 50ppm                | 125ppm<br>OSHA STEL              | 2gm             | 75-09-2    |
| <b>o-Chlorobenzalmalononitrile</b>                    |                      | .4mg/m <sup>3</sup>  |                                  | .7gm            | 2698-41-1  |

### SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS

|                          |                                              |                                        |                         |                           |    |
|--------------------------|----------------------------------------------|----------------------------------------|-------------------------|---------------------------|----|
| Boiling Point            | NA                                           | Specific Gravity<br>H <sub>2</sub> O=1 | NA                      | Vapor Pressure<br>(mm Hg) | NA |
| Vapor Density<br>(Air=1) | NA                                           | Solubility in<br>Water                 | Not soluble in<br>water | Reactivity in<br>Water    | NA |
| Appearance &<br>Odor     | 12ga cartridge translucent in color, no odor |                                        |                         | Melting Point             | NA |

### SECTION 4 - FIRE & EXPLOSION DATA

|                                  |    |                                                                                                   |                                              |                                        |              |    |              |    |
|----------------------------------|----|---------------------------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------|--------------|----|--------------|----|
| Flash Point                      | NA | Method<br>Used                                                                                    | NA                                           | Flammable Limits<br>in Air % by Volume | LEL<br>Lower | NA | UEL<br>Upper | NA |
| Auto-Ignition<br>Temperature     | NA | Extinguisher<br>Media                                                                             | Water spray, Apply by mechanical means only. |                                        |              |    |              |    |
| Special Fire Fighting Procedures |    | Fight all fires from a remote and explosion resistant site. Evacuate all non-essential personnel. |                                              |                                        |              |    |              |    |
| Unusual Fire & Explosion Hazards |    | Use water to cool containers exposed to fire.<br>Net Explosive Weight (NEW) 1gm (approx)          |                                              |                                        |              |    |              |    |

**SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)**

|                                      |                                                    |                                     |                     |                                  |
|--------------------------------------|----------------------------------------------------|-------------------------------------|---------------------|----------------------------------|
| Stability                            | Unstable                                           | <input type="checkbox"/>            | Conditions to Avoid | Heat, flames, mechanical impact, |
|                                      | Stable                                             | <input checked="" type="checkbox"/> |                     |                                  |
| Incompatibility (Materials to Avoid) | Acids, caustics and strong oxidizing agents        |                                     |                     |                                  |
| Hazardous Decomposition Products     | Burning may produce Nitrogen oxide carbon monoxide |                                     |                     |                                  |
| Hazardous Polymerization             | May Occur                                          | <input type="checkbox"/>            | Conditions to Avoid | N/A                              |
|                                      | Will Not Occur                                     | <input checked="" type="checkbox"/> |                     |                                  |

**SECTION 6 - HEALTH HAZARDS**

|                                                     |                                                                                                                   |                                                                        |                                                                                            |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| 1. Acute                                            | None under normal handling                                                                                        | 2. Chronic                                                             | None under normal handling                                                                 |
| Signs and Symptoms of Exposure                      | Tearing of eyes, irritation of respiratory tract and mucous membranes                                             |                                                                        |                                                                                            |
| Medical Conditions Generally Aggravated by Exposure | Respiratory tract – Asthma                                                                                        |                                                                        |                                                                                            |
| Listed as Carcinogen or Potential Carcinogen        | National Toxicology Program                                                                                       | Yes <input type="checkbox"/><br>No <input checked="" type="checkbox"/> | I.A.R.C. Monographs Yes <input type="checkbox"/><br>No <input checked="" type="checkbox"/> |
|                                                     |                                                                                                                   |                                                                        | OSHA Yes <input type="checkbox"/><br>No <input checked="" type="checkbox"/>                |
| Emergency and First Aid Procedures                  | If any medical problem arises from the use of this product seek medical attention from qualified medical persons. |                                                                        |                                                                                            |
| <b>ROUTES OF ENTRY</b>                              | 1. Inhalation                                                                                                     | Fresh Air, Oxygen if needed                                            |                                                                                            |
|                                                     | 2. Eyes                                                                                                           | Flush with copious amounts of water, fresh air                         |                                                                                            |
|                                                     | 3. Skin                                                                                                           | Wash with copious amounts of water                                     |                                                                                            |
|                                                     | 4. Ingestion                                                                                                      | Contact Physician                                                      |                                                                                            |

**SECTION 7 - SPECIAL PRECAUTIONS & SPILL / LEAK PROCEDURES**

|                                                                      |                                                                                                        |
|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Precautions in Handling and Storage                                  | Keep away from heat, flames or strong oxidizers                                                        |
| Other precautions                                                    | Handle as DOD, UN and DOT explosive device per Federal, State and Local laws.                          |
| Steps to be Taken in Case Material is released or Spilled            | Undamaged units may be picked up and returned to shipping container. Wear suitable protective clothing |
| Waste Disposal Method (Consult Federal, State and local Regulations) | By persons qualified to dispose of explosives at an approved site under approved procedures.           |

**SECTION 8 - SPECIAL PROTECTION INFORMATION / CONTROL MEASURES**

| Respiratory Protection<br>(Specify Type) |     | Full face respirator with organic cartridge, or Self Contained Breathing Apparatus<br>(SCBA) |     |                                           |     |                                      |    |       |    |
|------------------------------------------|-----|----------------------------------------------------------------------------------------------|-----|-------------------------------------------|-----|--------------------------------------|----|-------|----|
| Ventilation                              | Yes | Local Exhaust                                                                                | Yes | Mechanical<br>(General)                   | Yes | Special                              | No | Other | No |
| Protective<br>Gloves                     | Yes | Eye Protection                                                                               | Yes | Other Protective Clothing<br>or Equipment |     | As necessary to prevent skin contact |    |       |    |
| Work / Hygienic Practices                |     | Wash thoroughly after handling                                                               |     |                                           |     |                                      |    |       |    |

**IMPORTANT** - Do not leave any blank spaces. If required information is unavailable, unknown or does not apply, so indicate.