Material Safety Data Sheet

MODEL 4320 40mm
CN 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
City, State and ZIP: Jamestown, PA 16134
Emergency Telephone No.: 800-424-9300
Other Information Calls: 724-932-2177
Signature of Person Responsible for Preparation (Optional):
Date Prepared: 12/29/98

SECTION 2 - HAZARDOUS INGREDIENTS / IDENTITY

<table>
<thead>
<tr>
<th>Hazardous Component(s) (chemical &amp; common name(s))</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other Exposure Limits</th>
<th>% (Optional)</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Fire Primer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead Styphnate</td>
<td>.05mg/m³</td>
<td>.15mg/m³</td>
<td></td>
<td></td>
<td>15245-44-0</td>
</tr>
<tr>
<td>Barium Nitrate</td>
<td>.5mg/m³</td>
<td>.5mg/m³</td>
<td></td>
<td></td>
<td>10022-31-8</td>
</tr>
<tr>
<td>Antimony Sulfide</td>
<td>.5mg/m³</td>
<td>.5mg/m³</td>
<td></td>
<td></td>
<td>1345-04-6</td>
</tr>
<tr>
<td>RED DOT® smokeless powder</td>
<td></td>
<td></td>
<td></td>
<td>.51gm</td>
<td></td>
</tr>
<tr>
<td>Nitroglycerin</td>
<td>.46mg/m³</td>
<td>.1mg/m³</td>
<td>OSHA STEL</td>
<td></td>
<td>55-63-0</td>
</tr>
<tr>
<td>Diphenylamine</td>
<td>10mg/m³</td>
<td></td>
<td></td>
<td></td>
<td>122-39-4</td>
</tr>
<tr>
<td>Methylene Chloride</td>
<td>25ppm</td>
<td>50ppm</td>
<td>125ppm</td>
<td>OSHA STEL</td>
<td>75-09-2</td>
</tr>
<tr>
<td>Chloroacetophenone</td>
<td>.05ppm</td>
<td>.05ppm</td>
<td></td>
<td></td>
<td>532-27-4</td>
</tr>
</tbody>
</table>

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>NA</th>
<th>Specific Gravity</th>
<th>H₂O=1</th>
<th>Vapor Pressure (mm Hg)</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor Density (Air=1)</td>
<td>NA</td>
<td>Solubility in Water</td>
<td>Not soluble in water</td>
<td>Reactivity in Water</td>
<td>NA</td>
</tr>
<tr>
<td>Appearance &amp; Odor</td>
<td>40mm cartridge black in color, no odor</td>
<td>Melting Point</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 4 - FIRE & EXPLOSION DATA

<table>
<thead>
<tr>
<th>Flash Point</th>
<th>NA</th>
<th>Method Used</th>
<th>NA</th>
<th>Flammable Limits In Air % by Volume</th>
<th>LEL Lower</th>
<th>NA</th>
<th>UEL Upper</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-Ignition Temperature</td>
<td>NA</td>
<td>Extinguisher Media</td>
<td>Water spray, Apply by mechanical means only.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Fire Fighting Procedures</td>
<td></td>
<td></td>
<td></td>
<td>Fight all fires from a remote and explosion resistant site. Evacuate all non-essential personnel.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unusual Fire &amp; Explosion Hazards</td>
<td></td>
<td></td>
<td></td>
<td>Use water to cool containers exposed to fire.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Explosive Weight (NEW)</td>
<td>.51gm (approx)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Page 1 of 2
SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)

Stability
- Unstable
- Stable

Conditions to Avoid
- Heat, flames, mechanical impact,
- Conditions to Avoid

Incompatibility (Materials to Avoid)
Acids, caustics and strong oxidizing agents

Hazardous Decomposition Products
Burning may produce Nitrogen oxide carbon monoxide

Hazardous Polymerization
- May Occur
- Will Not Occur

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

I.A.R.C. Monographs
Yes

OSHA
Yes

Emergency and First Aid Procedures
If any medical problem arises from the use of this product seek medical attention from qualified medical persons.

ROUTES OF ENTRY
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
By persons qualified to dispose of explosives at an approved site under approved procedures.

SECTION 8 - SPECIAL PROTECTION INFORMATION / CONTROL MEASURES

Respiratory Protection
Full face respirator with organic cartridge, or Self Contained Breathing Apparatus (SCBA)

Ventilation
Yes

Local Exhaust
Yes

Mechanical (General)
Yes

Special
No

Other
No

Protective Gloves
Yes

Eye Protection
Yes

Other Protective Clothing 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.