

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 3215 37/40mm CTG. Smoke 5-Projectiles

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) (chemical & common name(s)) | OSHA PEL | ACGIH TLV | Other Exposure Limits | % (Optional) | CAS No. |
|---|---------------------|---------------------|--------------------------|-----------------|-----------|
| Primer, Shot Shell, W209 | | | | | |
| Propellant, Black Powder | | | | 2gm | |
| Starter Mixture | | | | 5gm | |
| Potassium Nitrate | | | | | 7557-79-1 |
| Silicon | | 10mg/m ³ | | | 7440-21-3 |
| Charcoal | | 15Mppcf | | | |
| Smoke Mixture | | | | 120gm | |
| Potassium Chlorate | | 5mg/m ³ | | | 3811-04-1 |
| Sucrose | 15mg/m ³ | 10mg/m ³ | | | 57-50-1 |
| Magnesium Carbonate | 15mg/m ³ | 10mg/m ³ | | | 546-93-0 |
| Nitrocellulose | | | | | 9004-70-0 |
| Anthraquinone | | | | | 84-65-1 |

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS

| | | | | | |
|--------------------------|--|--|-------------------------|---------------------------|----|
| Boiling Point | NA | Specific Gravity H ₂ O=1 | NA | Vapor Pressure (mm Hg) | NA |
| Vapor Density (Air=1) | NA | Solubility in Water | Not soluble in water | Reactivity in Water | NA |
| Appearance & Odor | 37/40mm cartridge silver in color, no odor | | | Melting Point | NA |

SECTION 4 - FIRE & EXPLOSION DATA

| | | | | | | | | |
|----------------------------------|----|--|---------------------------------------|-------------------------------------|-----------|----|-----------|----|
| Flash Point | NA | Method Used | NA | Flammable Limits in Air % by Volume | LEL Lower | NA | UEL Upper | NA |
| Auto-Ignition Temperature | NA | Extinguisher Media | CO ² , Dry Chemical, water | | | | | |
| Special Fire Fighting Procedures | | Do Not Fight Fire, If ignition occurs evacuate downwind area, allow unit to burn out | | | | | | |
| Unusual Fire & Explosion Hazards | | Net Explosive Weight (NEW) 2gm | | | | | | |

SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)

| | | | | |
|--------------------------------------|---|-------------------------------------|---------------------|--------------|
| Stability | Unstable | <input type="checkbox"/> | Conditions to Avoid | Heat, flames |
| | Stable | <input checked="" type="checkbox"/> | | |
| Incompatibility (Materials to Avoid) | Strong oxidizing agents | | | |
| Hazardous Decomposition Products | Burning may produce carbon monoxide and/or carbon dioxide | | | |
| Hazardous Polymerization | May Occur | <input type="checkbox"/> | Conditions to Avoid | None |
| | 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 | | | None Known | | |
| Medical Conditions Generally Aggravated by Exposure | | | None Known | | |
| Listed as Carcinogen or Potential Carcinogen | National Toxicology Program | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | I.A.R.C. Monographs | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | OSHA Yes <input type="checkbox"/> 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. | | | |
| ROUTES OF ENTRY | 1. Inhalation | N/A | | | |
| | 2. Eyes | N/A | | | |
| | 3. Skin | N/A | | | |
| | 4. Ingestion | N/A | | | |

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 devices per Federal, State and Local Laws. |
| Steps to be Taken in Case Material is released or Spilled | Wear suitable protective clothing, Undamaged units may be picked up and returned to shipping container |
| 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 (Specify Type) | | N/A | | | | | | | |
| Ventilation | N/A | Local Exhaust | N/A | Mechanical (General) | N/A | Special | N/A | Other | N/A |
| Protective Gloves | N/N | Eye Protection | Yes | Other Protective Clothing or Equipment | | N/A | | | |
| Work / Hygienic Practices | | Normal Hygiene Practices | | | | | | | |

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