

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 5211 Triple Phaser Smoke Grenade

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.
Separation Mixture				2.3gm	
Black Powder					
Starter Mixture				15gm	
Potassium Nitrate					7757-79-1
Silicon		10mg/m ³			7440-21-3
Charcoal		15Mppcf			
Smoke Mixture				216gm	
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	N/A	Specific Gravity H ₂ O=1	N/A	Vapor Pressure (mm Hg)	N/A
Vapor Density (Air=1)	N/A	Solubility in Water	Not soluble in water	Reactivity in Water	N/A
Appearance & Odor	White Smoke, Slight odor			Melting Point	N/A

SECTION 4 - FIRE & EXPLOSION DATA

Flash Point	N/A	Method Used	N/A	Flammable Limits in Air % by Volume	LEL Lower	N/A	UEL Upper	N/A
Auto-Ignition Temperature	N/A	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) 2.3gm (approx.) Ignited units may separate into three separate units expelling smoke.						

SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)

Stability	Unstable	<input type="checkbox"/>	Conditions to Avoid	High heat sources, open flames and fire
	Stable	<input checked="" type="checkbox"/>		
Incompatibility (Materials to Avoid)		Strong oxidizing agents		
Hazardous Decomposition Products				
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		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	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/A	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.