

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 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	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.
Center Fire Primer					
Lead Styphnate	.05mg/m ³	.15mg/m ³			15245-44-0
Barium Nitrate	.5mg/m ³	.5mg/m ³			10022-31-8
Antimony Sulfide	.5mg/m ³	.5mg/m ³			1345-04-6
RED DOT® smokeless powder					
Nitroglycerin		.46mg/m ³	.1mg/m ³ OSHA STEL	.51gm	55-63-0
Diphenylamine		10mg/m ³			122-39-4
Methylene Chloride					
	25ppm	50ppm	125ppm OSHA STEL		75-09-2
Chloroacetophenone					
	.05ppm	.05ppm			532-27-4

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	40mm cartridge black 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	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. Net Explosive Weight (NEW) .51gm (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"/>	I.A.R.C. Monographs	Yes	<input type="checkbox"/>	OSHA	Yes	<input type="checkbox"/>	
				No	<input checked="" type="checkbox"/>		No	<input checked="" 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	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 (Specify Type)	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.