



MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MK4 First Defense Stream		DATE: August 11, 2008	
PRODUCT NUMBER(S): 5047			
TRADE NAME: MK4 First Defense Stream GENERAL USE: Crowd control CHEMICAL FAMILY: Capsaicins solution PRODUCT DESCRIPTION: Creamy pungent liquid aerosol		 DEFENSE TECHNOLOGY	
MANUFACTURED FOR: Safariland LLC		DATE PREPARED: August 11, 2008	
ADDRESS (NUMBER, STREET, P.O. BOX) 13386 International Parkway		SUPERSEDES: November 1, 2006	
(CITY, STATE AND ZIP CODE) Jacksonville, FL 32218		TELEPHONE NUMBER FOR INFORMATION / Customer Service 904-741-5400	
COUNTRY USA		CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBER	
			
		1-800-255-3924 01-813-248-0585 North America Toll Free International	

SECTION 2 - HAZARDOUS INGREDIENTS

Hazardous Components	% (by Weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 15)
Capsaicinoids	<1	404-86-4	206-969-8	None	None
Propylene Glycol USP	10-20	57-55-6	200-338-0	None	None
Specialty Denatured Alcohol (SDA) 40B*	25-35	64-17-5	200-578-6	(+F)	R11
Deionized Water	50-60	NR	NR	None	None
FD&C #10 Food Coloring	NR	NR	NR	NR	NR

*Contains trace amounts of t-Butyl alcohol and Bitrex (denatonium benzoate)

Notes: Hazard symbols and risk phrases based on maximum listed concentration of each hazardous ingredient.

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Acute eye, skin, digestive and respiratory system irritation. Contents under pressure - may release product at elevated temperatures.

POTENTIAL HEALTH EFFECTS

INHALATION:

Burning sensation and irritation. Cough, rhinorrhea, sneezing, chest tightness, and laryngospasm may occur shortly following exposure due to the irritant effects. Ingredients may cause irritation through all routes of entry. Repeated contact may cause dermatitis.

SKIN:

Liquid concentrate can cause irritation and may be absorbed.

EYES:

Burning sensation and irritation.

INGESTION:

Ingestion may cause nausea, vomiting, and/or diarrhea.

CARCINOGENICITY:

NTP? No	IARC MONOGRAPHS? No	OSHA REGULATED? No
CALIFORNIA, Prop.65? No	ESIS? No	

SECTION 4 - FIRST AID MEASURES

INHALATION:

Remove patient to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration.

EYES:

First check the victim for contact lenses and remove if present. Flush victim's eyes with water for at least 15 minutes. Do not put any ointments, oils, or medication in the victim's eyes without specific instructions from a physician. Seek medical attention for severe or continued irritation.

SKIN:

Wash with cool water & soap.

INGESTION:

Rinse mouth with plenty of water. If conscious, give milk or water, then seek medical attention.

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SECTION 5 - FIRE FIGHTING MEASURES

GENERAL HAZARDS:
 Not Generally Flammable, as solution is water-based.

EXTINGUISHING MEDIA:
 Use dry chemical, CO₂, or water spray. Wear self-contained breathing apparatus.

FIRE FIGHTING PROCEDURES:
 Use NIOSH or European EN149 approved chemical respirator. Use solvent-resistant type clothing with full jacket. Avoid absorption of product on clothing. If absorbed in clothing, remove and wash clothes at once. Use chemical-resistant goggles.
 Use dry chemical, CO₂, or water spray to fight surrounding fires.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
 Pungent fumes may be emitted on exposure to elevated temperatures. Package is under pressure, and may release product when exposed to elevated temperatures.

HAZARDOUS COMBUSTION PRODUCTS:
 Carbon dioxide, carbon monoxide, various hydrocarbons and small amounts of phosgene.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
 Soak up material in absorbent material and shovel into properly marked hazardous waste container for disposal at a licenced facility.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
 Keep product in cool, dry place.. Do not store at temperatures above 130° F. Do not puncture, crush, or incinerate cans.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

HAZARDOUS COMPONENTS	NIOSH				ACGIH		OSHA	
	TWA ppm	TWA mg/m ³	STEL ppm	STEL mg/m ³	TLV/TWA ppm	TWA mg/m ³	PEL ppm	PELmg/m ³
Capsaicinoids	NE		NE		NE		NE	
Propylene Glycol USP	NE		NE		NE		NE	
Specialty Denatured Alcohol (SDA) 40B*	1000	1900			1000		1000	1900
Deionized Water	NE				NE		NR	
FD&C #10 Food Coloring	NE				NE		NR	

PERSONAL PROTECTION

RESPIRATORY PROTECTION:
 Wear positive pressure NIOSH or Eurpoean EN149 approved self-contained breathing apparatus (SCBA).

PROTECTIVE GLOVES:
 Use solvent or chemical resistant rubber gloves.

EYE PROTECTION:
 Use chemical-resistant goggles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
 Use solvent-resistant type clothing with full jacket.

WORK / HYGIENIC PRACTICES:
 Avoid absorption of product on clothing. If absorbed in clothing, remove and wash clothes at once.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR Creamy, pungent liquid aerosol.	VAPOR PRESSURE NE
VOC NA Volatility Aerosol	SPECIFIC GRAVITY (WATER = 1) NA
BOILING POINT / BOILING RANGE >220°F	SOLUBILITY IN WATER Soluble
FLASH POINT >220°F	VISCOSITY NE
FLAMMABLE LIMITS LEL: NA UEL: NA	VAPOR DENSITY (AIR = 1) NE
AUTOIGNITION TEMPERATURE NA	EVAPORATION RATE BUTYL ACETATE = 1) NA

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SECTION 10 - STABILITY AND REACTIVITY

STABILITY	STABLE	x	CONDITIONS TO AVOID: Avoid exposure to extreme heat. Pungent fumes may be emitted on exposure to elevated temperatures. Contents under pressure.
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INCOMPATIBILITY (MATERIALS TO AVOID):
Unknown

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:
Carbon dioxide, carbon monoxide, various hydrocarbons and small amounts of phosgene.

HAZARDOUS POLYMERIZATION: Will not occur.	CONDITIONS TO AVOID: None related to polymerization.
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SECTION 11 - TOXICOLOGICAL INFORMATION

Hazardous Components	CAS # EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
Capsaicinoids	404-86-4	Oral, mouse: 47.2 mg/kg	NE
	206-969-8		
Propylene Glycol USP	57-55-6	Oral, mouse: 20.3 g/kg	NR
	200-338-0		
Specialty Denatured Alcohol (SDA) 40B*	64-17-5	Oral, mouse: 3450 mg/kg (MOST LIKELY LOWER THAN THIS FIGURE)	NR
	200-578-6		
Deionized Water	NR	NR	NR
	NR		
FD&C #10 Food Coloring	NR	NR	NR
	NR		


SECTION 12 - ECOLOGICAL INFORMATION

No ecological information is presently available for this blended product. It is however known to be toxic.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:
 Dispose as hazardous waste in a properly permitted facility. Respiratory protection must be worn when disposing of this product. Dispose in accordance with all applicable Local, State and Federal regulations.

SECTION 14 - TRANSPORT INFORMATION

<p>PROPER SHIPPING NAME: ORM-D USA (Ground only), Aerosols, Non-Flammable UN 1950 (North American Air), Tear Gas Devices, UN1693 (International).</p> <p>DOT HAZARD CLASS / Pack Group: ORM-D (North America) .</p> <p>REFERENCE: 49CFR</p> <p>UN / NA IDENTIFICATION NUMBER: ORM-D (North America), UN1950 International.</p> <p>LABEL: ORM-D (USA Ground Only).(NA Air) Non-Flammable Gas 2.2, (International) Toxic, 6.1</p> <p>HAZARD SYMBOLS:</p> <div style="text-align: center;">  </div>	<p>IATA HAZARD CLASS / Pack Group: ORM-D (USA AIR), UN1950/2.2, 75Kg Passenger, 150Kg Cargo (International).</p> <p>IMDG HAZARD CLASS: 2.2 (sub 6.1)</p> <p>RID/ADR Dangerous Goods Code: 2.2 (6.1 sub)</p> <p>UN TDG Class / Pack Group: NA Air: 2.2, International: 6.1</p> <p>Hazard Identification Number (HIN): 26</p>
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Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.




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SECTION 15 - REGULATORY INFORMATION

TSCA (USA - Toxic Substance Control Act): **All ingredients listed.**
 SARA TITLE III (USA - Superfund Amendments and Reauthorization Act):
 Acute Health: **Yes** Chronic Health: **Yes**
 Fire: **No** Sudden Release of Pressure: **Yes**
 Reactive: **No**

313 REPORTABLE INGREDIENTS: **None**
 CERCLA (USA - Comprehensive Response Compensation and Liability Act): **None listed**
 California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: **None listed**
 CCPR (Canadian Controlled Products Regulations): **Listed**
 CIDL (Canadian Ingredient Disclosure List): **Listed**
 CDSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List): t Listed on NDSL
 EINECS (European Inventory of Existing Commercial Chemical Substances): **Referenced.**

WGK Water Quality Index: NE			
RISK PHRASES: R11: Highly Flammable. R36/37/38: Irritating to eyes, respiratory system, and skin.	SYMBOL(S)	DR EU LABEL	SAFETY PHRASES: S2: Keep out of the reach of children. S7: Keep container tightly closed. S16: Keep away from sources of ignition - no smoking. S23.3: Do not breathe spray. S24/25: Avoid contact with skin and eyes. S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S27/28: After contact with skin , immediately take off all contaminated clothing and wash immediately with plenty of water and soap.
	(+F) Flammable		
			
	(+t) Toxic		
			
	(+Xn) Harmful		

SECTION 16 - OTHER INFORMATION

Legend

N/A = Not Applicable	N/D = Not Determined	N/E = Not Established	N/R = Not Reported
HMIS HAZARD RATINGS	HEALTH: FLAMMABILITY: PHYSICAL HAZARD: PERSONAL PROTECTIVE EQUIPMENT:	2 1 1 K	0 = INSIGNIFICANT 1 = SLIGHT 2 = MODERATE 3 = HIGH 4 = EXTREME

REVISION SUMMARY:
 Revised to GHS/EU protocols 7/28/2008 supersedes 11/01/06 issue. LB

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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.