



Lee Boulineau  
Toxicologist

**MATERIAL SAFETY DATA SHEET**

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT NAME: MK3 Pepper 10 Stream		DATE: August 14, 2008
PRODUCT NUMBER(S): 5839		
TRADE NAME: MK3 Pepper 10 Stream	 <b>DEFENSE TECHNOLOGY</b>	
GENERAL USE: Crowd control		
CHEMICAL FAMILY: Capsaicins solution		
PRODUCT DESCRIPTION: Creamy pungent liquid aerosol		
MANUFACTURED FOR: Safariland LLC	DATE PREPARED: August 14, 2008	SUPERSEDES: November 1, 2006
ADDRESS (NUMBER, STREET, P.O. BOX): 13386 International Parkway	TELEPHONE NUMBER FOR INFORMATION / Customer Service: 904-741-5400	
(CITY, STATE AND ZIP CODE): Jacksonville, FL 32218	COUNTRY: USA	CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBER
		 <b>ChemTel</b> 1-800-255-3924    01-313-248-0886 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	10-15	57-55-6	200-338-0	None	None
Specialty Denatured Alcohol (SDA) 40B*	20-30	64-17-5	200-576-6	(+F)	R11
Deionized Water	50-50	NR	NR	None	None

\*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. Flash Point is above 220° F (104°C).

**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 licensed 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	
	TLV/TWA (ppm)	TLV/STEL (ppm)	REL. D. (ppm)	REL. D. (ppm)	REL. D. (ppm)	REL. D. (ppm)	REL. D. (ppm)	
Chloroethane	NE		NE		NE		NE	
Propylene Glycol USP	NE		NE		NE		NE	
Specialty Denatured Alcohol (SDA) 40B*	1000	1000			1000		1000 1900	
Deionized Water	NE				NE		NR	

### PERSONAL PROTECTION

**RESPIRATORY PROTECTION:**

Wear positive pressure NIOSH or European 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

<b>APPEARANCE AND ODOR</b> Creamy, pungent liquid aerosol.	<b>VAPOR PRESSURE</b> NE
<b>VOC</b> NA Volatility Aerosol	<b>SPECIFIC GRAVITY (WATER = 1)</b> 0.955
<b>BOILING POINT / BOILING RANGE</b> >220°F	<b>SOLUBILITY IN WATER</b> Soluble
<b>FLASH POINT</b> >220°F	<b>VISCOSITY</b> NE
<b>FLAMMABLE LIMITS</b> LEL: NA UEL: NA	<b>VAPOR DENSITY (AIR = 1)</b> NE
<b>AUTOIGNITION TEMPERATURE</b> NA	<b>EVAPORATION RATE BUTYL ACETATE = 1)</b> NA

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<b>PRODUCT NAME:</b> MK3 Pepper 10 Stream <b>PRODUCT NUMBER(S):</b> 5839		<b>DATE:</b> August 14, 2008	
<b>SECTION 10: STABILITY AND REACTIVITY</b>			
<b>STABILITY</b> STABLE                      x	<b>CONDITIONS TO AVOID:</b> Avoid exposure to extreme heat. Pungent fumes may be emitted on exposure to elevated temperatures. Contents under pressure.		
<b>INCOMPATIBILITY (MATERIALS TO AVOID):</b> Unknown			
<b>HAZARDOUS DECOMPOSITION OR BYPRODUCTS:</b> Carbon dioxide, carbon monoxide, various hydrocarbons and small amounts of phosgene.			
<b>HAZARDOUS POLYMERIZATION:</b> Will not occur.		<b>CONDITIONS TO AVOID:</b> None related to polymerization.	
<b>SECTION 11: TOXICOLOGICAL INFORMATION</b>			
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)	NR
	200-578-6		
Deionized Water	NR	NR	NR
	NR		
<b>SECTION 12: ECOLOGICAL INFORMATION</b>			
No ecological information is presently available for this blended product. It is however known to be toxic.			
<b>SECTION 13: DISPOSAL CONSIDERATIONS</b>			
<b>WASTE DISPOSAL METHOD:</b> 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.			
<b>SECTION 14: TRANSPORT INFORMATION</b>			
<b>PROPER SHIPPING NAME:</b> ORM-D USA (Ground only), Aerosols, Non-Flammable UN 1950 (North American Air), Tear Gas Devices, UN 1950 (International).			
<b>DOT HAZARD CLASS / Pack Group:</b> ORM-D USA Ground Only.	<b>IATA HAZARD CLASS / Pack Group:</b> North American Aerosols, non-flammable, 2.2, 75Kg passenger, 150Kg Cargo. International: Aerosols Non-Flammable 2.2, Toxic 6.1 Passenger, FORBIDDEN, Cargo, 50Kg.		
<b>REFERENCE:</b> 49CFR	<b>IMDG HAZARD CLASS:</b> 2.2 (sub 6.1)		
<b>UN / NA IDENTIFICATION NUMBER:</b> ORM-D USA Ground Only. NA Air: UN1950 International: UN1950	<b>RID/ADR Dangerous Goods Code:</b> 2.2 (6.1 sub)		
<b>LABEL:</b> ORM-D (USA Ground Only). (NA Air) Non-Flammable Gas 2.2, (International) Toxic,	<b>UN TDG Class / Pack Group:</b> NA Air: 2.2, International: 6.1		
<b>HAZARD SYMBOLS:</b>	<b>Hazard Identification Number (HIN):</b> 26		
			
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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<b>SECTION 15 REGULATORY INFORMATION</b>			
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	
<b>SECTION 16 OTHER INFORMATION</b>			
<b>RISK PHRASES:</b>	<b>SYMBOL(S) REQUIRED FOR EU LABEL</b>	<b>SAFETY PHRASES:</b>	
R30/37/38: Irritating to eyes, respiratory system, and skin.	 (+T) Toxic   (+Xn) Harmful	S2: Keep out of the reach of children. S7: Keep container tightly closed. S16: Keep away from sources of ignition - no smoking. <span style="float: right;">S23.3:</span> Do not breathe spray. <span style="float: right;">S24/25:</span> Avoid contact with skin and eyes. S28: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. <span style="float: right;">S27/28:</span> After contact with skin, immediately take off all contaminated clothing and wash immediately with plenty of water and soap.	
<b>SECTION 16 OTHER INFORMATION</b>			
<b>Legend</b>			
N/A=Not Applicable	N/D=Not Determined	N/E = Not Established	N/R = Not Reported
<b>HMIS HAZARD RATINGS</b>	<b>HEALTH:</b>	2	0 = INSIGNIFICANT
	<b>FLAMMABILITY:</b>	1	1 = SLIGHT
	<b>PHYSICAL HAZARD:</b>	1	2 = MODERATE
	<b>PERSONAL PROTECTIVE EQUIPMENT:</b>	K	3 = HIGH
			4 = EXTREME
<b>REVISION SUMMARY:</b>			
Revised to GHS/EU protocols 6/14//2008 supersedes 11/01/06 issue. LB			
MSDS Prepared by: ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Int. +01 813-246-0673 Website: www.chemtelinc.com			
The information contained herein is believed to be accurate, but is not warranted to be true and calculations are based on information furnished by the manufacturer of the product and manufacturer of the components of the product. Users are advised to confirm in advance of use that information is current, applicable, and valid for their use. Vendor assumes no responsibility for injury, to verities of third persons, or damages caused by the use of this information. Reasonable safety procedures should be followed in the use of this information. Vendor assumes no responsibility for injury caused by abnormal use of this material, or for safety procedures not followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.			