

# Control Devices and Techniques

## 307.1 PURPOSE AND SCOPE

This policy provides guidelines for the use and maintenance of control devices that are described in this policy.

## 307.2 POLICY

In order to control subjects who are violent or who demonstrate the intent to be violent, the Livermore Police Department authorizes officers to use control devices in accordance with the guidelines in this policy and the Use of Force Policy.

## 307.3 ISSUING, CARRYING AND USING CONTROL DEVICES

Control devices described in this policy may be carried and used by members of this department only if the device has been issued by the Department or approved by the Chief of Police or the authorized designee.

Only officers who have successfully completed department-approved training in the use of any control device are authorized to carry and use the device.

Control devices may be used when a decision has been made to control, restrain or arrest a subject who is violent or who demonstrates the intent to be violent, and the use of the device appears reasonable under the circumstances. When feasible, a verbal warning and opportunity to comply shall precede the use of these devices.

When using control devices, officers should carefully consider potential impact areas in order to minimize injuries and unintentional targets.

## 307.4 RESPONSIBILITIES

### 307.4.1 WATCHCOMMANDER RESPONSIBILITIES

The Watch Commander may authorize the use of a control device by selected personnel or members of specialized units who have successfully completed the required training.

### 307.4.2 RANGEMASTER RESPONSIBILITIES

The Rangemaster shall control the inventory and issuance of all control devices and shall ensure that all damaged, inoperative, outdated or expended control devices or munitions are properly disposed of, repaired or replaced.

Every control device will be periodically inspected by the Rangemaster or the designated instructor for a particular control device. The inspection shall be documented.

### 307.4.3 USER RESPONSIBILITIES

All normal maintenance, charging or cleaning shall remain the responsibility of personnel using the various devices.

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Any damaged, inoperative, outdated or expended control devices or munitions, along with documentation explaining the cause of the damage, shall be returned to the Rangemaster for disposition. Damage to City property forms shall also be prepared and forwarded through the chain of command, when appropriate, explaining the cause of damage.

### **307.5 BATON/IMPACT WEAPON GUIDELINES**

This force option is considered to be non-deadly. They are tools that an officer could use against a violent or potentially violent subject for his/her own protection or the protection of others. They could also be used, when it would otherwise be reasonable to do so under the totality of the circumstances, to effect an arrest, prevent escape, or to overcome resistance. Injuries from impact weapons are more probable than with lower force options because of the blunt force trauma effect.

The need to immediately control a suspect must be weighed against the risk of causing serious injury. The head, neck, throat, spine, heart, kidneys and groin shall not be intentionally targeted except when the officer reasonably believes the suspect poses an imminent threat of serious bodily injury or death to the officer or others.

The following impact weapons are authorized for use by the Livermore police Department:

- (a) Department Issued Batons
  - (a) When carrying a baton, uniformed personnel shall carry the baton in its authorized holder on the equipment belt or vest. Plainclothes and non-field personnel may carry the baton as authorized and in accordance with the needs of their assignment or at the direction of their supervisor.
- (b) Flashlight
  - (a) The flashlight should be used as an alternative emergency impact weapon only. An Officer may use the flashlight to fend off an attack in circumstances where he/she is attacked without warning. The Officer should attempt to use other more effective impact weapons as soon as practical in these situations.

### **307.6 TEAR GAS GUIDELINES**

Tear gas may be used for crowd control, crowd dispersal or against barricaded suspects based on the circumstances. Only the Watch Commander or Incident Commander may authorize the delivery and use of tear gas, and only after evaluating all conditions known at the time and determining that such force reasonably appears justified and necessary.

When practicable, fire personnel should be alerted or summoned to the scene prior to the deployment of tear gas to control any fires and to assist in providing medical aid or gas evacuation if needed.

[See attachment: First Aid and Decontamination Material Sheets.pdf](#)

### **307.7 OLEORESIN CAPSICUM (OC) GUIDELINES**

As with other control devices, oleoresin capsicum (OC) spray and pepper projectiles may be considered for use to bring under control an individual or groups of individuals who are engaging in,

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or are about to engage in violent behavior. Pepper projectiles and OC spray should not, however, be used against individuals or groups who merely fail to disperse or do not reasonably appear to present a risk to the safety of officers or the public.

#### **307.7.1 OC SPRAY**

Uniformed personnel carrying OC spray shall carry the device in its holster on the equipment belt or vest. Plainclothes and non-field personnel may carry OC spray as authorized, in accordance with the needs of their assignment or at the direction of their supervisor.

#### **307.7.2 PEPPER PROJECTILE SYSTEMS**

Pepper projectiles are plastic spheres that are filled with a derivative of OC powder. Because the compressed gas launcher delivers the projectiles with enough force to burst the projectiles on impact and release the OC powder, the potential exists for the projectiles to inflict injury if they strike the head, neck, spine or groin. Therefore, personnel using a pepper projectile system shall not intentionally target those areas, except when the officer reasonably believes the suspect poses an imminent threat of serious bodily injury or death to the officer or others.

Officers encountering a situation that warrants the use of a pepper projectile system shall notify a supervisor as soon as practicable. A supervisor shall respond to all pepper projectile system incidents where the suspect has been hit or exposed to the chemical agent. The supervisor shall ensure that all notifications and reports are completed as required by the Use of Force Policy.

Each application of a pepper projectile system shall be documented.. Unintentional discharges shall be promptly reported to a supervisor. Only non-incident use of a pepper projectile system, such as training and product demonstrations, is exempt from the reporting requirement.

#### **307.7.3 TREATMENT FOR OC SPRAY EXPOSURE**

Persons who have been sprayed with or otherwise affected by the use of OC should be promptly provided with clean water to cleanse the affected areas. Those persons who complain of further severe effects shall be examined by appropriate medical personnel. Officers should ensure their patrol vehicles are equipped with the proper decontamination equipment to include a spray bottle and a sealed container of water.

#### **307.8 POST-APPLICATION NOTICE**

Whenever tear gas, pava powder or OC has been introduced into a residence, building interior, vehicle or other enclosed area, officers should provide the owners or available occupants with notice of the possible presence of residue that could result in irritation or injury if the area is not properly cleaned. Such notice should include advisement that clean up will be at the owner's expense. Information regarding the method of notice and the individuals notified should be included in related reports. The owner or responsible party for the residence or commercial building should be supplied the appropriate Material Safety Data Sheet (MSDS) for the chemical agent used in order to aid with the decontamination and clean-up. Refer to attached MSDS.

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### **307.9 KINETIC ENERGY PROJECTILE GUIDELINES**

This department is committed to reducing the potential for violent confrontations. Kinetic energy projectiles, when used properly, are less likely to result in death or serious physical injury and can be used in an attempt to de-escalate a potentially deadly situation.

#### **307.9.1 DEPLOYMENT AND USE**

Only department-approved kinetic energy munitions shall be carried and deployed. Approved munitions may be used to achieve a legitimate law enforcement purpose when such munitions present a reasonable force option as outlined by law and department policy.

Officers are not required or compelled to use approved munitions in lieu of other reasonable tactics if the involved officer determines that deployment of these munitions cannot be done safely. The safety of hostages, innocent persons and officers takes priority over the safety of subjects engaged in criminal or suicidal behavior.

Circumstances appropriate for deployment include, but are not limited to, situations in which:

- (a) The suspect is armed with a weapon and the tactical circumstances allow for the safe application of approved munitions.
- (b) The suspect has made credible threats to harm him/herself or others.
- (c) The suspect is engaged in riotous behavior or is throwing rocks, bottles or other dangerous projectiles at people and/or officers.
- (d) There is probable cause to believe that the suspect has already committed a crime of violence and is refusing to comply with lawful orders.

#### **307.9.2 DEPLOYMENT CONSIDERATIONS**

Before discharging projectiles, the officer should consider such factors as:

- (a) Distance and angle to target.
- (b) Type of munitions employed.
- (c) Type and thickness of subject's clothing.
- (d) The subject's proximity to others.
- (e) The location of the subject.
- (f) Whether the subject's actions dictate the need for an immediate response and the use of control devices appears appropriate.

A verbal warning of the intended use of the device shall precede its application, unless it would otherwise endanger the safety of officers or when it is not practicable due to the circumstances. The purpose of the warning is to give the individual a reasonable opportunity to voluntarily comply and to warn other officers and individuals that the device is being deployed.

Officers should keep in mind the manufacturer's recommendations and their training regarding effective distances and target areas. However, officers are not restricted solely to use according to

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manufacturer recommendations. Each situation must be evaluated on the totality of circumstances at the time of deployment.

The need to immediately incapacitate the subject must be weighed against the risk of causing serious injury or death. The head and neck shall not be intentionally targeted, except when the officer reasonably believes the suspect poses an imminent threat of serious bodily injury or death to the officer or others.

### **307.9.3 SAFETY PROCEDURES**

Shotguns specifically designated for use with kinetic energy projectiles will be specially marked in a manner that makes them readily identifiable as such.

Officers will inspect the shotgun or 40MM launcher and projectiles at the beginning of each shift to ensure that the launcher is in proper working order and the projectiles are of the approved type and appear to be free from defects. When deploying the kinetic energy projectile shotgun or 40mm launcher, the officer shall visually inspect the kinetic energy projectiles to ensure that conventional ammunition is not being loaded into the shotgun.

40mm launchers and kinetic energy projectile shotguns shall be checked out to individual officers at the beginning of their shift by a supervisor or range staff member. A supervisor or range staff member shall check the launcher in at the conclusion of each shift. K-9 officers may be individually assigned a less lethal launcher on a permanent basis and this launcher does not need to be checked in or out daily as described above.

When it is not deployed, the launcher will be loaded to cruiser ready and properly and securely stored in the vehicle. For the kinetic energy projectile shotgun, cruiser ready is defined as 4 kinetic energy projectiles loaded in the magazine, the bolt closed on an empty chamber, and the launcher on safe. At the conclusion of their shift, the officer will unload all projectiles from the launcher and store them in the side saddle. For the 40mm launcher, cruiser ready is defined as the launcher closed on an empty chamber and the weapon on safe (if so equipped).

Absent compelling circumstances, officers who must transition from conventional ammunition to kinetic energy projectiles will employ the two-person rule for loading. The two-person rule is a safety measure in which a second officer watches the unloading and loading process to ensure that the weapon is completely emptied of conventional ammunition.

### **307.10 TRAINING FOR CONTROL DEVICES**

The Training Sergeant shall ensure that all personnel who are authorized to carry a control device have been properly trained and certified to carry the specific control device and are retrained or recertified as necessary.

- (a) Proficiency training shall be monitored and documented by a certified, control-device weapons or tactics instructor.
- (b) All training and proficiency for control devices will be documented in the officer's training file.

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- (c) Officers who fail to demonstrate proficiency with the control device or knowledge of this agency's Use of Force Policy will be provided remedial training. If an officer cannot demonstrate proficiency with a control device or knowledge of this agency's Use of Force Policy after remedial training, the officer will be restricted from carrying the control device and may be subject to discipline.

#### **307.11 REPORTING USE OF CONTROL DEVICES AND TECHNIQUES**

Any application of a control device or technique listed in this policy shall be documented in the related incident report and reported pursuant to the Use of Force Policy.

#### **307.12 YEARLY POLICY REVIEW**

This policy was reviewed by Lieutenant Boberg.

## **Attachments**

## **First Aid and Decontamination Material Sheets.pdf**





## OC PEPPER SPRAY



MODEL: 56825 SKU: 1030655

## FIRST DEFENSE® 1.3% MK-2 STREAM OC AEROSOL

The MK-2 is an ideal size for patrol officers to wear on a duty belt and will deliver 7-10 short bursts of OC at an effective range of 10-12 ft. This 1.3% 140 OC aerosol product utilizes a stream delivery



Non-flammable / Electronic Discharge Weapon (EDW) safe

## FIND A DEALER

FEATURES

FIRST AID & DECONTAMINATION

STORAGE & DISPOSAL

MODEL 933B006

## FIRST AID FOR OC

### I. GENERAL:

Remove affected person from the contaminated area to an open space, facing the wind.

Keep subject calm and restrict activity.

Most subjects will be well on their way to total recovery 45 minutes after first aid begins.

II. EYES: Intense burning sensation, temporary inflammation of the tissues around the eyes, causing involuntary closure.

Wash eyes out with large amounts of cool water.

DO NOT allow the subject to rub their eyes or face. If the need arises to use a paper towel, use a blotting motion and discard after one use.

Find out if subject is wearing contact lenses. If so, allow them to remove the lenses or call EMS to remove them. DO NOT attempt to remove unless medically trained to do so. Contacts may become contaminated and may need to be discarded.

Keep eyes open facing wind.

Tearing helps clear the eyes.

Keep exposed subjects out of direct sun light during the decontamination process. The brighter and hotter the direct sunlight is, the more it enhances the burning sensation.

III. NOSE: Irritation, burning sensation, nasal discharge.

Breathe normally.



individuals.

DO NOT apply creams, salves, oils, lotions or burn cream as they will only trap the OC on the skin.

Flush the skin with large amounts of cool water and expose the subject to fresh air.

Further relief may be gained by showering with cool water using mild soap and shampooing hair.

Wash thoroughly, rinsing often to manage any contaminated water on your body.

Contact Defense Technology® with any questions regarding these procedures

## **AREA DECONTAMINATION FOR OC**

STEP 1: Ventilate the building to remove airborne OC. Open all doors and windows that weather permits. This should be accomplished as soon as possible. If fans can be placed to increase ventilation, this will help.

STEP 2: Surfaces can be decontaminated by washing with water or a damp cloth. Wet clean where possible, using commercially available detergents like Dawn or Simple Green.

STEP 3: Clothing and other fabrics can be cleaned in their usual manner (either by machine washing or dry cleaning).

NOTE: Rubber gloves and a gauze face mask should be used by personnel during the clean-up stage to prevent the possibility of residual contamination. OC is a better indoor deployment option than CN or CS, as positive clean up and re-occupation of the structure can usually take place within one to two hours. Minimal clean-up costs need be imposed on the deploying agency.

## **RESOURCES**

SDS

Product Warranty

Sell Sheet

Technical Specifications

# Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: December 11, 2018

Revision: December 11, 2018

## 1 Identification

### Product identifier

- Trade name: First Defense® .2 Percent MK-2 Stream OC Aerosol  
First Defense® .2 Percent MK-3 Stream OC Aerosol  
First Defense® .2 Percent MK-4 Stream OC Aerosol  
First Defense® .2 Percent MK-6 Stream OC Aerosol  
First Defense® .2 Percent MK-9 Stream OC Aerosol

### Product code:

MK-2: 56125 (1030651)  
 MK-3: 5039 (1011715)  
 MK-4: 5049 (1011719)  
 MK-6: 5069 (1011722)  
 MK-9: 5099 (1011726)

### Recommended use and restriction on use

- Recommended use: Crowd Control Device
- Restrictions on use: Contact manufacturer/supplier

### Details of the supplier of the Safety Data Sheet

#### Manufacturer/Supplier:

Safariland, LLC  
 13386 International Parkway  
 Jacksonville, FL 32218 USA  
 Customer Care (800) 347-1200

#### Emergency telephone number:

ChemTel Inc.  
 (800)255-3924 (North America)  
 +1 (813)248-0585 (International)



## 2 Hazard(s) identification

### Classification of the substance or mixture

Press. Gas H280 Contains gas under pressure; may explode if heated.  
 Skin Irrit. 2 H315 Causes skin irritation.  
 Eye Irrit. 2A H319 Causes serious eye irritation.  
 STOT SE 3 H335 May cause respiratory irritation.

### Additional information:

There are no other hazards not otherwise classified that have been identified.  
 0 % of the mixture consists of component(s) of unknown toxicity.

### Label elements

#### GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

#### Hazard pictograms:



GHS04 GHS07

#### Signal word: Warning

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 First Defense® .2 Percent MK-9 Stream OC Aerosol

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• **Hazard statements:**

H280 Contains gas under pressure; may explode if heated.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

• **Precautionary statements:**

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P302+P352 If on skin: Wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a poison center/doctor if you feel unwell.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P337+P313 If eye irritation persists: Get medical advice/attention.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

## 3 Composition/information on ingredients

• **Chemical characterization: Mixtures**

• **Components:**

64-17-5	Ethanol ⚠ Flam. Liq. 2, H225 ⚠ Eye Irrit. 2A, H319	20-40%
8023-77-6	Oleoresin Capsicum ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	10%
57-55-6	Propylene glycol	5-10%
7727-37-9	nitrogen ⚠ Press. Gas, H280 Simple Asphyxiant	0-20%
811-97-2	Norflurane ⚠ Press. Gas, H280 Simple Asphyxiant	0-20%
29118-24-9	(1E)-1,3,3,3-Tetrafluoro-1-propene Simple Asphyxiant	0-20%

• **Additional information:**

Propellant will be 1234-ze, norflurane, nitrogen or mixture of these propellants.

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

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### 4 First-aid measures

- **Description of first aid measures**
- **General information:** Take affected persons out into the fresh air.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
 Immediately wash with water and soap and rinse thoroughly.  
 If skin irritation continues, consult a doctor.
- **After eye contact:**  
 Remove contact lenses if worn.  
 Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**  
 Unlikely route of exposure.  
 Rinse out mouth and then drink plenty of water.  
 Do not induce vomiting; immediately call for medical help.
- **Most important symptoms and effects, both acute and delayed:**  
 Coughing  
 Gastric or intestinal disorders when ingested.  
 Irritating to eyes, respiratory system and skin.
- **Danger:** No relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**  
 If necessary oxygen respiration treatment.  
 If medical advice is needed, have product container or label at hand.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** None.
- **Special hazards arising from the substance or mixture**  
 Danger of receptacles bursting because of high vapor pressure if heated.
- **Advice for firefighters**
- **Protective equipment:**  
 Wear self-contained respiratory protective device.  
 Wear fully protective suit.
- **Additional information:** Use large quantities of foam as it is partially destroyed by the product.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
 For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.  
 For large spills, wear protective clothing.  
 Ensure adequate ventilation.

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- **Environmental precautions** No special measures required.
- **Methods and material for containment and cleaning up**  
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
 Dispose contaminated material as waste according to item 13.  
 Send for recovery or disposal in suitable receptacles.
- **Reference to other sections**  
 See Section 7 for information on safe handling.  
 See Section 8 for information on personal protection equipment.  
 See Section 13 for disposal information.

### 7 Handling and storage

- **Handling**
- **Precautions for safe handling:**  
 Use only in well ventilated areas.  
 Avoid splashes or spray in enclosed areas.  
 Keep out of reach of children.
- **Information about protection against explosions and fires:**  
 Pressurized container: May burst if heated.
- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:**  
 Observe official regulations on storing packagings with pressurized containers.  
 Store in a cool location.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**  
 Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
- **Specific end use(s)** No relevant information available.

### 8 Exposure controls/personal protection

#### · Control parameters

#### · Components with limit values that require monitoring at the workplace:

##### 64-17-5 Ethanol

PEL (USA)	Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm
REL (USA)	Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm
TLV (USA)	Short-term value: 1880 mg/m <sup>3</sup> , 1000 ppm
EL (Canada)	Short-term value: 1000 ppm
EV (Canada)	Long-term value: 1,900 mg/m <sup>3</sup> , 1,000 ppm
LMPE (Mexico)	Long-term value: 1000 ppm
A3	

##### 7727-37-9 Nitrogen

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TLV (USA)	withdrawn TLV, see App. F; simple asphyxiant
EL (Canada)	Simple asphyxiant
LMPE (Mexico)	Asfixiante simple
<b>57-55-6 Propylene glycol</b>	
WEEL (USA)	Long-term value: 10 mg/m <sup>3</sup>
EV (Canada)	Long-term value: 155* 10** mg/m <sup>3</sup> , 50* ppm *vapour and aerosol; **aerosol only

- **Exposure controls**
- **Engineering measures** Provide adequate ventilation.
- **General protective and hygienic measures:**  
 The usual precautionary measures for handling chemicals should be followed.  
 Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing.  
 Wash hands before breaks and at the end of work.  
 Do not inhale gases / fumes / aerosols.  
 Avoid contact with the eyes and skin.
- **Engineering controls:** No relevant information available.
- **Breathing equipment:** Use suitable respiratory protective device when high concentrations are present.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **Eye protection:**



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- **Body protection:** Protective work clothing
- **Limitation and supervision of exposure into the environment**  
 No relevant information available.

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **Appearance:**

**Form:**

Aerosol

**Color:**

According to product specification

- **Odor:**

Pungent

- **Odor threshold:**

Not determined.

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· pH-value:	Not determined.
· Melting point/Melting range:	Not determined.
· Boiling point/Boiling range:	> 104 °C (>219.2 °F)
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
· Auto-ignition temperature:	371 °C (699.8 °F)
· Decomposition temperature:	Not determined.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits	
Lower:	3.5 Vol %
Upper:	15.0 Vol %
· Oxidizing properties:	Non-oxidizing.
· Vapor pressure at 20 °C (68 °F):	59 hPa (44.3 mm Hg)
· Density:	Not determined.
· Relative density:	Not determined.
· Vapor density:	Not determined.
· Evaporation rate:	Not determined.
· Solubility in / Miscibility with Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Other information	No relevant information available.

### 10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:**  
 Danger of receptacles bursting because of high vapor pressure if heated.
- **Possibility of hazardous reactions**  
 Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid** No relevant information available.
- **Incompatible materials** No relevant information available.
- **Hazardous decomposition products** Possible in traces.

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### 11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

**8023-77-6 Oleoresin Capsicum**

Oral	LD50	3000 mg/kg (rat)
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Dermal	LD50	>2500 mg/kg (mouse)
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· **Primary irritant effect:**

· **On the skin:** Irritant to skin and mucous membranes.

· **On the eye:** Irritating effect.

· **Sensitization:** No sensitizing effects known.

· **Subacute to chronic toxicity:** No relevant information available.

· **IARC (International Agency for Research on Cancer):**

64-17-5	Ethanol	1
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· **NTP (National Toxicology Program):**

None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

· **Probable route(s) of exposure:**

Inhalation.

Eye contact.

Skin contact.

· **Acute effects (acute toxicity, irritation and corrosivity):** Irritating to eyes, respiratory system and skin.

· **Repeated dose toxicity:** No relevant information available.

· **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

· **Carcinogenicity:** Based on available data, the classification criteria are not met.

· **Reproductive toxicity:** Based on available data, the classification criteria are not met.

· **STOT-single exposure:** Based on available data, the classification criteria are not met.

· **STOT-repeated exposure:** Based on available data, the classification criteria are not met.

· **Aspiration hazard:** Based on available data, the classification criteria are not met.

### 12 Ecological information

· **Toxicity**

· **Aquatic toxicity** No relevant information available.

· **Persistence and degradability** No relevant information available.

· **Bioaccumulative potential:** No relevant information available.

· **Mobility in soil:** No relevant information available.

· **Additional ecological information**

· **General notes:**

(Cont'd. on page 8)

# Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: December 11, 2018

Revision: December 11, 2018

**Trade name:** First Defense® .2 Percent MK-2 Stream OC Aerosol  
 First Defense® .2 Percent MK-3 Stream OC Aerosol  
 First Defense® .2 Percent MK-3 Stream OC Aerosol  
 First Defense® .2 Percent MK-6 Stream OC Aerosol  
 First Defense® .2 Percent MK-9 Stream OC Aerosol

(Cont'd. of page 7)

Negative ecological effects are, according to the current state of knowledge, not expected.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

· **Uncleaned packagings**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

· **UN-Number**

· **DOT, ADR/RID/ADN, IMDG, IATA**

UN1950

· **UN proper shipping name**

· **DOT**

Aerosols, non-flammable

· **ADR/RID/ADN**

1950 AEROSOLS

· **IMDG**

AEROSOLS

· **IATA**

AEROSOLS, non-flammable

· **Transport hazard class(es)**

· **DOT**



· **Class**

2.2

· **Label**

2.2

· **ADR/RID/ADN**



(Cont'd. on page 9)

**Safety Data Sheet**


acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: December 11, 2018

Revision: December 11, 2018

**Trade name:** First Defense® .2 Percent MK-2 Stream OC Aerosol  
 First Defense® .2 Percent MK-3 Stream OC Aerosol  
 First Defense® .2 Percent MK-3 Stream OC Aerosol  
 First Defense® .2 Percent MK-6 Stream OC Aerosol  
 First Defense® .2 Percent MK-9 Stream OC Aerosol

(Cont'd. of page 8)

· Class	2.2 5A
· Label	2.2
· IMDG, IATA	
	
· Class	2.2
· Label	2.2
· Packing group	
· DOT, ADR/RID/ADN, IMDG, IATA	II
· Environmental hazards	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Danger code (Kemler):	20
· EMS Number:	F-D,S-U
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
· Quantity limitations	On passenger aircraft/rail: 75 kg On cargo aircraft only: 150 kg

**15 Regulatory information**

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- SARA

## · Section 302 (extremely hazardous substances):

None of the ingredients are listed.

## · Section 355 (extremely hazardous substances):

None of the ingredients are listed.

## · Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

## · TSCA (Toxic Substances Control Act)

All ingredients are listed.

(Cont'd. on page 10)

## Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: December 11, 2018

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**Trade name:** First Defense® .2 Percent MK-2 Stream OC Aerosol  
 First Defense® .2 Percent MK-3 Stream OC Aerosol  
 First Defense® .2 Percent MK-3 Stream OC Aerosol  
 First Defense® .2 Percent MK-6 Stream OC Aerosol  
 First Defense® .2 Percent MK-9 Stream OC Aerosol

(Cont'd. of page 9)

- **Proposition 65 (California)**

- **Chemicals known to cause cancer:**

Ethanol - listing refers specifically to alcoholic beverage consumption and is not applicable for product.

64-17-5	Ethanol
---------	---------

- **Chemicals known to cause developmental toxicity for females:**

None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity for males:**

None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity:**

Ethanol - listing refers specifically to alcoholic beverage consumption and is not applicable for product.

64-17-5	Ethanol
---------	---------

- **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

- **IARC (International Agency for Research on Cancer):**

64-17-5	Ethanol	1
---------	---------	---

- **Canadian Domestic Substances List (DSL) (Substances not listed.):**

All ingredients listed on DSL or NDSL.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio-accumulable, Toxic

vPvB: very Persistent and very Bioaccumulative

OSHA: Occupational Safety & Health Administration

Press. Gas: Gases under pressure – Compressed gas

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

- **Sources**

SDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

(Cont'd. on page 11)

## Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: December 11, 2018

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**Trade name:** First Defense® .2 Percent MK-2 Stream OC Aerosol  
First Defense® .2 Percent MK-3 Stream OC Aerosol  
First Defense® .2 Percent MK-3 Stream OC Aerosol  
First Defense® .2 Percent MK-6 Stream OC Aerosol  
First Defense® .2 Percent MK-9 Stream OC Aerosol

(Cont'd. of page 10)

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573  
Website: [www.chemtelinc.com](http://www.chemtelinc.com)

# MATERIAL SAFETY DATA SHEET

Page 1 of 5

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION					
<b>PRODUCT NAME:</b> First Defense <sup>®</sup> , OC, Stream .2%					
<b>PRODUCT NUMBER(S):</b> 5039, 5049, 5069, 5099, 5439, 5449, 56125, 56185 <b>DATE:</b> January 16, 2012					
<b>TRADE NAME:</b> OC, Stream .2% <b>GENERAL USE:</b> Crowd control, Duty and Patrol <b>CHEMICAL FAMILY:</b> Capsaicins solution <b>PRODUCT DESCRIPTION:</b> Pungent, Irritating Liquid			Non-Confidential Version for use in the US except NJ and PA <div style="text-align: center;">  <b>DEFENSE TECHNOLOGY<sup>®</sup></b> </div>		
<b>MANUFACTURED FOR:</b> <b>Safariland, LLC</b>			<b>DATE PREPARED:</b> January 16, 2012 <b>SUPERSEDES:</b> All Previous Editions		
<b>ADDRESS (NUMBER, STREET, P.O. BOX)</b> 13386 International Parkway			<b>TELEPHONE NUMBER FOR INFORMATION / Customer Care</b> 800-347-1200		
<b>(CITY, STATE AND ZIP CODE)</b> Jacksonville, FL 32218		<b>COUNTRY</b> USA		<b>CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBER</b> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;"> <b>1-800-255-3924</b>                      North America Toll Free                 </div> <div style="text-align: center;"> <b>01-813-248-0585</b>                      International                 </div> </div>	
SECTION 2 - HAZARDOUS INGREDIENTS					
Hazardous Components	% (by Weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 15)
Oleoresin Capsicum	10% (a)	8023-77-6	206-969-8 (b)	None	None
Specialty Denatured Alcohol (SDA) 40B (c)	NR	64-17-5(d)	200-578-6(d)	F	R11
(a) - Equivalent to .2% major capsaicinoid (MC) content. (b) - EINECS Number references Capsaicin (c) - Contains trace amounts of t-Butyl alcohol and Bitrex (denatonium benzoate) (d) - CAS and EINECS Numbers reference Ethanol / Ethyl Alcohol					
Notes: Hazard symbols and risk phrases based on maximum listed concentration of each hazardous ingredient. <b>WARNING: This product contains Ethanol, a chemical known to the state of California to cause developmental reproductive toxicity.</b>					
SECTION 3 - HAZARDS IDENTIFICATION					
<b>EMERGENCY OVERVIEW</b> Product in container poses no exposure risk. Product Contents cause TEMPORARY acute eye, skin, digestive and respiratory system irritation under direct exposures; Indirect exposure may cause temporary, slight irritation to eyes. Containers may rupture and release irritating contents under fire conditions. <b>Product is shipped unpressurized - end user must pressurize the device prior to deployment.</b>					
<b>POTENTIAL HEALTH EFFECTS</b>					
<b>ACUTE EXPOSURE EFFECTS</b>					
<b>INHALATION:</b> Temporary burning sensation and irritation upon direct exposure, with cough and wheezing; some chest tightness may occur. Effects will be slight or non-existent from indirect exposure.					
<b>SKIN:</b> Temporarily irritating to skin through direct exposure; inflammation of mucosal surfaces seen with prolonged contact. Repeated contact may cause dermatitis. Effects will be slight or non-existent from indirect exposure.					
<b>EYES:</b> Temporary burning sensation and irritation, with pain, redness, and tearing from direct exposure. Indirect exposure produces slight symptoms. Repeated or prolonged direct exposure may product chemical conjunctivitis.					
<b>INGESTION:</b> Ingestion of large quantities may cause temporary inflammation of mouth and throat, nausea, vomiting, and/or diarrhea. Small amounts will produce an unpleasant taste only; this effect is also temporary.					
<b>CHRONIC EXPOSURE EFFECTS</b> Chronic dermal exposure may result in rash. Chronic eye exposure could result in conjunctival or corneal damage.					
<b>CARCINOGENICITY:</b>					
NTP? <b>No</b> CALIFORNIA, Prop.65? <b>No</b>		IARC MONOGRAPHS? <b>No</b>		OSHA REGULATED? <b>No</b> ESIS? <b>No</b>	

# MATERIAL SAFETY DATA SHEET

Page 2 of 5

PRODUCT NAME: First Defense<sup>®</sup>, OC, Stream .2%  
PRODUCT NUMBER(S): 5039, 5049, 5069, 5099, 5439, 5449, 56125, 56185 DATE: January 16, 2012

## 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:

Remove contaminated clothing, rinse with cool water, then wash with cool water & soap.

### INGESTION:

**DO NOT INDUCE VOMITING!!** Rinse mouth with plenty of water. If conscious, give water, then seek medical attention.

## SECTION 5 - FIRE FIGHTING MEASURES

### GENERAL HAZARDS:

Combustible Solution- Flash Point estimated at >200°F (>94°C). Auto-Ignition temperature is 363°C (685°F) for ethanol. Explosive limits are 3.3-19.0% for ethanol as a pure substance; unknown for this product. Product is not sensitive to mechanical impact or static discharge.

### EXTINGUISHING MEDIA:

Use dry chemical, CO<sub>2</sub>, or water spray. Wear self-contained breathing apparatus. All media forms are suitable.

### 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, CO<sub>2</sub>, 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, water vapor, and other organic compounds in small quantities

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Soak up material with absorbent towel or material such as cat litter or sawdust and place into properly marked hazardous waste container for disposal at a licensed facility. Container should be kept sealed to prevent accidental exposure to irritating fumes. Small quantities of product may be safely washed into sewers or bodies of water.

## 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 120°F / 49°C. Do not puncture, crush, or incinerate containers. Empty containers may contain irritating, flammable residues; use caution in disposal of product and containers. Do not eat, drink, or use tobacco while handling product.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Hazardous Components	CAS #	ACGIH Exposure Limits	OSHA Exposure Limits
Oleoresin Capsicum	8023-77-6	Not Established	Not Established
Specialty Denatured Alcohol (SDA) 40B	64-17-5	1000 ppm TWA	1000 ppm / 1900 mg/m <sup>3</sup> TWA



# MATERIAL SAFETY DATA SHEET

Page 3 of 5

<b>PRODUCT NAME:</b>	First Defense®, OC, Stream .2%		
<b>PRODUCT NUMBER(S):</b>	5039, 5049, 5069, 5099, 5439, 5449, 56125, 56185	<b>DATE:</b>	January 16, 2012

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)

### PERSONAL PROTECTION

#### RESPIRATORY PROTECTION:

Wear positive pressure NIOSH or European EN149 vapor respirators when deploying product in large quantities.

#### PROTECTIVE GLOVES:

Use solvent or chemical resistant rubber gloves when deploying product in quantity.

#### EYE PROTECTION:

Use safety glasses with side shields or chemical-resistant goggles.

#### OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Wear clothing to prevent contact with skin; Tyvek suits or chemical aprons may be required in some situations.

#### WORK / HYGIENIC PRACTICES:

Avoid absorption of product on clothing. If absorbed in clothing, remove and wash clothes at once. Do not eat, drink, or use tobacco while handling product; wash hands thoroughly after handling product.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR	VAPOR PRESSURE
Pungent, Irritating Liquid	Not Established
pH	SPECIFIC GRAVITY (WATER = 1)
Not determined	Not Determined
MELTING / FREEZING POINT	SOLUBILITY IN WATER
<32°F Estimated	Miscible
BOILING POINT	SOLUBILITY IN ORGANIC SOLVENTS
>220°F Estimated	Variable - solution favors polar protic and polar aprotic solvents
FLASH POINT	VISCOSITY
>200°F / 94°C	Not Determined
FLAMMABLE LIMITS	VAPOR DENSITY (AIR = 1)
LEL: None      UEL: None	Not Determined
AUTOIGNITION TEMPERATURE	EVAPORATION RATE (WATER = 1)
Not Determined for Product	Not Determined

#### VOLATILE ORGANIC COMPOUND (VOC) INFORMATION

Not applicable.

#### NOTES:

## SECTION 10 - STABILITY AND REACTIVITY

STABILITY	CONDITIONS TO AVOID:
Stable under normal conditions	Extreme heat, Incompatible materials
INCOMPATIBILITY (MATERIALS TO AVOID):	
Water-Reactive materials, Strong oxidizers, Mineral Acids (Sulfuric, Nitric, Perchloric, etc.)	
HAZARDOUS DECOMPOSITION OR BYPRODUCTS:	
Carbon dioxide, carbon monoxide, various hydrocarbons and small amounts of phosgene.	
HAZARDOUS POLYMERIZATION:	CONDITIONS TO AVOID:
Will not occur.	None related to polymerization.

# MATERIAL SAFETY DATA SHEET

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<b>PRODUCT NAME:</b>	First Defense <sup>®</sup> , OC, Stream .2%		
<b>PRODUCT NUMBER(S):</b>	5039, 5049, 5069, 5099, 5439, 5449, 56125, 56185	<b>DATE:</b>	January 16, 2012

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Complete Product

<b>Oral LD<sub>50</sub></b>	Not known - temporarily irritating to mouth and esophageal passages from direct exposure.
<b>Dermal LD<sub>50</sub></b>	Temporarily irritating to skin form direct exposure.
<b>Inhalation LC<sub>50</sub></b>	Vapors generated from use are temporarily irritating, mainly under direct exposure.
<b>Irritation</b>	Direct exposure to product causes temporary irritation to respiratory tract, skin and eyes.

### Product Components

Hazardous Components	CAS #	LD50 of Ingredient (Oral, Rat - unless otherwise specified)	LC50 of Ingredient (Inhalation, Rat - unless otherwise specified)
Oleoresin Capsicum	8023-77-6	47.2 mg/kg (as capsaicin)	Not Established
Specialty Denatured Alcohol (SDA) 40B	7758-97-6	3450 (oral, mouse, as ethanol)	Not Established

## SECTION 12 - ECOLOGICAL INFORMATION

No ecological information is presently available for this blended product.

## SECTION 13 - DISPOSAL CONSIDERATIONS

### WASTE DISPOSAL METHOD:

Dispose in accordance with all applicable Local, State and Federal regulations. Waste product may be discarded in to sewers after dilution with water, or may be sent to licensed facility for incineration.

## SECTION 14 - TRANSPORT INFORMATION

**PROPER SHIPPING NAME:** ORM-D (USA) Aerosols, Non-Flammable UN 1950 (Intl),

**DOT HAZARD CLASS / Pack Group:**

**ORM-D USA Ground Only.**

**REFERENCE:** 49CFR

**UN / NA IDENTIFICATION NUMBER:** ORM-D USA  
**Ground Only. NA Air: UN1950 International: UN 1950**

**LABEL:** ORM-D (USA Ground Only), Non-Flammable Gas 2.2 (Intl)

**HAZARD SYMBOLS:**



**IATA HAZARD CLASS / Pack Group:** Aerosols, non-flammable, 2.2, 75Kg passenger, 150Kg Cargo.

**IMDG HAZARD CLASS:** 2.2

**RID/ADR Dangerous Goods Code:** 2.2

**UN TDG Class / Pack Group:** NA Air: 2.2

**Hazard Identification Number (HIN):** 20

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.

## 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:** No

**Fire:** No

**Sudden Release of Pressure:** Yes

**Reactive:** No

# MATERIAL SAFETY DATA SHEET

Page 5 of 5

<b>PRODUCT NAME:</b>	First Defense®, OC, Stream .2%	<b>DATE:</b>	January 16, 2012
<b>PRODUCT NUMBER(S):</b>	5039, 5049, 5069, 5099, 5439, 5449, 56125, 56185		

## SECTION 15 - REGULATORY INFORMATION (Continued)

**313 REPORTABLE INGREDIENTS:** None

CERCLA (USA - Comprehensive Response Compensation and Liability Act): No RQ listed for product.

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: Ethanol is listed as in alcoholic beverages; Not applicable to product.

CPR (Canadian Controlled Products Regulations): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

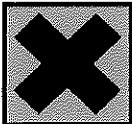
WHMIS Classifications: D2B - Material Causing other Toxic Effects.

CIDL (Canadian Ingredient Disclosure List): Components are listed in Section 3 to meet the CIDL requirements.

CDSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List): Listed on DSL and/or NDSL.

EINECS (European Inventory of Existing Commercial Chemical Substances): Referenced.

WGK Water Quality Index: NE

RISK PHRASES:	SYMBOL(S) REQUIRED FOR EU LABEL	SAFETY PHRASES:
R36/37/38: Irritating to eyes, respiratory system, and skin.	 Xi - Irritant	S2: Keep out of the reach of children. 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.

## SECTION 16 - OTHER INFORMATION

### Legend

N/A=Not Applicable      N/D=Not Determined      N/E = Not Established      N/R = Not Reported

<b>HMIS HAZARD RATINGS</b>  0 = INSIGNIFICANT, 1 = SLIGHT 2 = MODERATE, 3 = HIGH 4 = EXTREME	<b>HEALTH:</b> <b>FLAMMABILITY:</b> <b>PHYSICAL HAZARD:</b> <b>PERSONAL PROTECTIVE EQUIPMENT:</b>	2 1 1 H	
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**REVISION SUMMARY:** Revised 16 January 2012 for US requirements outside NJ/PA. LB

**MSDS Prepared by:**  
 ChemTel Inc.  
 1305 North Florida Avenue  
 Tampa, Florida USA 33602-2902  
 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573  
 Website: www.chemtelinc.com



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.

# United Tactical Systems, LLC

Safety Data Sheet (SDS)

Date Printed: 03/23/2015  
Date Updated: 10/26/2016

## Section 1 – Identification of the substance or mixture and of the supplier

Product Name:	PAVA Projectile
Part Number:	48600
MSDS Reference:	FN303-5
Product Use:	Incapacitant Projectile Fill. Inert ingredients with (PAVA, capsaicin II, nonivamide). Manufactured exclusively for FN Herstal S.A.
Manufacturer's Name:	United Tactical Systems, LLC
Street Address:	28101 Ballard Drive, Unit F
City, State, Zip code:	Lake Forest, IL 60045
Emergency Phone Number:	(800) 424 9300 (847) 367-8960
FAX Number:	(847) 367-8980

## Section 2 – Hazards Identification

### 2.1 Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

Skin sensitization (category 1), H317

Specific target organ toxicity – single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statement mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s)

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

H319

Causes serious eye irritation.

H335

May cause respiratory irritation.

Precautionary statement(s)

P261

Avoid breathing dust/fume/gas/mist/vapors/spray.

P264

Wash skin thoroughly after handling.

P271

Use only outdoors or in a well-ventilated area.

P272

Contaminated work clothing should not be allowed out of the workplace.

P280	Wear protective gloves / eye protection / face protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	Specific treatment (see supplemental first aid instructions on this label).
P333 + P313	If skin irritation or rash occurs: Get medical advice / attention.
P337 + P313	If eye irritation persists: Get medical advice / attention.
P362	Take off contaminated clothing and wash before reuse.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal plant.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

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### Section 3 – Composition / Information on ingredients

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Active Components:	Capsaicin	CAS # 404-86-4 / 2444-46-4
Formula	$C_{17}H_{27}NO_3$	
Synonyms:	Capsaicin II, capsaicinoid, red pepper extract, PAVA, nonivamide	
Certified level:	0.5% +/- 0.02% w/w capsaicin II	
Inert Ingredients:	9.5 % w/w inert carriers and dispersion agents (proprietary combination)	

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### Section 4 – First Aid Measures

---

#### INHALATION:

If breathing is difficult, administer oxygen. Symptoms may include: coughing, sneezing, burning eyes and skin, nausea and possibly vomiting. If high concentrations are inhaled, immediately remove subject to fresh air. Keep person calm. If not breathing, begin artificial respiration. If breathing difficulty persists, seek medical attention.

#### SKIN CONTACT:

In case of contact, wash skin with soap and water to prevent further exposure. Flush skin with copious amounts of cool water to minimize irritant effect. Wash contaminated clothing before reuse. Do not apply salves or dressing to affected areas.

#### EYE CONTACT:

Remove contact lenses and flush eyes with copious quantities of cool water. Move patient to fresh air as soon as possible.

#### INGESTION:

Although ingestion is unlikely and not considered a potential route of exposure, individuals should be treated as having an acute non-specific airway reaction by an appropriate specialist. Do not induce vomiting.

Delayed Effects: Rubefacient effects usually subside within 30 minutes. Cool water or cool circulating air will minimize discomfort.

Advice to Physician/Special Consideration: Inhalation may aggravate or initiate asthmatic episodes. Pre-existing skin disorders may be aggravated by exposure to this material. Treat patient as if acute non-specific upper airway reaction.

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## Section 5 – Firefighting Measures

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- 5.1 Extinguishing Media**  
**Suitable extinguishing media**  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide
- 5.2 Special hazards arising from the substance or mixture**  
Carbon oxides, nitrogen oxides (NO<sub>x</sub>)
- 5.3 Advice for firefighters**  
Wear self-contained breathing apparatus for fire-fighting if necessary.
- 5.4 Further information**  
No data available

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## Section 6 – Accidental Release Measures

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Steps to be taken in case material is accidentally released:  
Respiratory protection: NIOSHA approved respirator  
Ventilation: Mechanical ventilation to keep exposure below recommended limits  
Protective Gloves: Rubber, PVA, or neoprene  
Eye Protection: Safety goggles or face shield  
Skin Protection: Use appropriate barrier clothing

Methods for Cleaning Up:  
Protective Equipment: Wear goggles and use NIOSH/MSHA approved respirator or self-contained breathing apparatus (SCBA) and full protective clothing to protect from incapacitating effects of capsaicin exposure.

Procedure to be followed in Case of Leak or Spill:  
Evacuate area, sweep up material, place in bag and hold for waste disposal. Care should be taken to avoid causing dust to become airborne. Ventilate area and wash spill site with water after material pickup is complete.

Waste Disposal Measures: Not considered a hazardous waste as referenced in 40 CFR 261.24 or 261.3.

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## Section 7 – Handling and Storage

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- 7.1 Precautions for safe handling**  
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.  
Provide appropriate exhaust ventilation at places where dust is formed.  
For precautions see section 2.2.
- 7.2 Conditions for safe storage, including any incompatibilities**  
Keep container tightly closed in a dry and well-ventilated place.  
Recommended storage temperature: 2 – 8 °C  
Keep in a dry place.
- 7.3 Specific end uses(s)**  
Apart from the uses mentioned in section 1, no other specific uses are stipulated

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## Section 8 – Exposure Controls / Personal Protection

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### 8.1 Control parameters

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values

### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

##### Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

##### Skin Protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

##### Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory Protection

For nuisance exposures, use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection, use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

##### Control of environmental exposure

Do not let product enter drains.

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## Section 9 – Physical and Chemical Properties

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### 9.1 Information on basic physical and chemical properties

a) Appearance	Form: finely ground dense powder
b) Odor	pungent, irritating
c) Odor Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	no data available
f) Initial boiling point/range	no data available
g) Flash point	no data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapor pressure	no data available
l) Vapor density	no data available
m) Relative density	no data available
n) Water solubility	insoluble

o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties	no data available
t) Oxidizing properties	no data available

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## Section 10 – Stability and Reactivity

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- 10.1 Reactivity**  
no data available
- 10.2 Chemical stability**  
Stable under recommended storage conditions.
- 10.3 Possibility of hazardous reactions**  
no data available
- 10.4 Conditions to avoid**  
no data available
- 10.5 Incompatible materials**  
Strong oxidizing agents
- 10.6 Hazardous decomposition products**  
Other decomposition products - no data available  
In the event of fire: see section 5

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## Section 11 – Toxicological Information

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- Overexposure Acute: Cause irritation of eyes and skin. Swallowing can cause Gastronomical irritation. Inhalation can cause coughing, sneezing, nausea, headache or vomiting.
- Overexposure Choronic: The toxicological properties of this product have not been fully investigated. Repeated exposure may present additional hazards.



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## Section 12 – Ecological Information

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### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

No data available

### 12.3 Bio-accumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

No data available

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## Section 13 – Disposable Considerations

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### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### Contaminated packaging

Dispose of as unused product.

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## Section 14 – Transport Information

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### DOT (US)

UN number: 3335

Class: 9

Proper shipping name: Aviation regulated solid, n.o.s. (Nonivamide)

Marine pollutant: No

Poison Inhalation Hazard: No

### IMDG

Not dangerous goods

### IATA

UN number: 3335

Class 9

Packing group: III

Proper shipping name: Aviation regulated solid, n.o.s. (Nonivamide)

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## Section 15 – Regulatory Information

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### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act

### Pennsylvania Right To Know Components

Nonivamide CAS-No. 2444-46-4

### New Jersey Right To Know Components

Nonivamide CAS-No. 2444-46-4

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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## Section 16 – Other information including information on preparation and revision of the SDS

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### Full text of H-Statements referred to under sections 2 and 3.

Eye Irrit.	Eye irritation
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization

### HMIS Rating

Health Hazard:	2
Chronic Health Hazard:	*
Flammability:	0
Physical Hazard:	0

### NFPA Rating

Health Hazard:	2
Fire Hazard:	0
Reactivity Hazard:	0

**Disclaimer:**

***This information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the manufacturer be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if manufacturer has been advised of such damages.***

**FN303 PROJECTILES**  
**PAVA - POWDER - PROJECTILE**

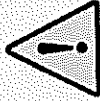
PART NUMBER: 48048600

QTY: 150

MSDS Reference: FN-303-5



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CAUTION FRAGILE

**FN303 PROJECTILES**  
**PAVA - POWDER - PROJECTILE**

PART NUMBER: 48048600

QTY: 150

MSDS Reference: FN-303-5



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