# United Tactical Systems, LLC

Safety Data Sheet (SDS)

Date Printed: 05/22/2015
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## Section 1 – Identification of the substance or mixture and of the supplier

| | |
|---|---|
| Product Name: | PEPPERBALL CS/PAVA™ (Shelf Life 3 |
| Product Use: | Years) Incapacitant Projectile Fill |
| Manufacturer's Name: | United Tactical Systems, LLC |
| Street Address: | 28101 Ballard Dr., Unit F |
| City, State, Zip code: | Lake Forest, IL 60045 USA |
| 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

## Section 3 – Composition / Information on ingredients

Active Component 1: 1.25% +/-0.02% by Weight o-Chlorobenzalmalononitrile CAS#2698-41-1
Formula: $CLC_6H_4CHC(CN)_2$
Synonyms: CS
Active Component 2: 1.25% +/-0.02% by Weight PAVA CAS#404-86-4 / 2444-46-4
Formula: $C_{17}H_{27}NO_3$
Synonyms: Capsaicin, synthetic capsaicin, capsaicin II, capsaicinoid, red pepper extract, nonivamide
Inert Ingredients: A proprietary combination of inert carriers and dispersion agents.

## 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 in unlikely and not considered a potential route of exposure, individuals should be treated as having 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. Preexisting skin disorders may be aggravated by exposure to this material. Treat patient as if acute non-specific upper airway reaction.

## Section 5 – Firefighting Measures

**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 ($NO_X$)

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for fire-fighting if necessary.

**5.4 Further information**
No data available

## Section 6 – Accidental Release Measures

Steps to be taken in case material is accidently 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 o-Chlorobenzalmalononitrile 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.

## Section 7 – Handling and Storage

**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

## Section 8 – Exposure Controls / Personal Protection

**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.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: Dermatril®

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: Dermatril®

**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.

## Section 9 – Physical and Chemical Properties

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

| | | |
|---|---|---|
| a) | Appearance | Form: powder |
| b) | Odor | stinging |
| c) | Odor Threshold | no data available |
| d) | pH | no data available |
| e) | Melting point/freezing point | Melting point/range: 57°C (135°F) |
| f) | Initial boiling point/range | no data available |

| | | |
|---|---|---|
| g) | Flash point | 190°C (374°F) – closed cup |
| 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 | ca. 1.10 g/cm$^3$ at 25°C (77°F) |
| 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 |

## Section 10 – Stability and Reactivity

**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

## Section 11 – Toxicological Information

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral – rat – 5,110 mg/kg
Inhalation: no data available
LD50 Dermal – rabbit - > 10,000 mg/kg
LD50 Intraperitoneal – rat – 90 mg/kg

**Skin corrosion/irritation**
Skin – rabbit
Result: irritating

**Serious eye damage/eye irritation**
Eyes – rabbit
Result: Moderate eye irritation

**Respiratory or skin sensitization**
**Germ cell mutagenicity**
Ames test
S. typhimurium
Result: Not mutagenic in Ames Test.

Result: negative
Micronucleus test

**Carcinogenicity**
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

**Specific target organ toxicity – single exposure**
Inhalation – May cause respiratory irritation.

**Specific target organ toxicity – repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: Not available

Cough, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach – Irregularities – Based on Human Evidence

## Section 12 – Ecological Information

**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

## Section 13 – Disposable Considerations

**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.

## Section 14 – Transport Information

**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)

## Section 15 – Regulatory Information

**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.

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

**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 |

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