



# SAFETY DATA SHEET

Barricade Penetrator w/ CS Powder or Liquid

DOC NO: SDS067  
DATE: 11/20/2015  
REV: 000  
Prepared by: 80012

## 1. Identification:

**EMERGENCY TELEPHONE: CHEMTREC (800-474-9300)**

### Manufacturer:

**AMTEC Less-Lethal Systems (ALS)**

**Address: 4700 Providence Road, Perry FL 32347**

**Phone: (850) 223-4066**

### Part Numbers:

ALS4227LCS

Barricade Penetrator, CS Liquid

ALS4227PCS

Barricade Penetrator, CS Powder

## 2. Hazards Information:

*These munitions do not expose the user to the individual chemicals within the device.*

### **Warning!!**



Hazard Statements: H204, H303, H313, H317, H320, H333, H335

Precautionary Statements: P202, P210, P403+P233

### Other Hazards Not Contributing to the Classification:

Care should be taken in the cleaning of range facilities to minimize the exposure potential hazards. Persons engaged in these activities should wear protective clothing with an appropriate respirator.

### Accidental Injury From Firing munition:

Accidental Injury From Firing Cartridge: To avoid serious injury, use ammunition only in good condition and originally chambered for a particular caliber. Always keep the barrel free of any obstruction. If the gun fails to fire, a delayed firing may occur, or the gun may fire upon being opened. Keep gun muzzle pointed in a safe direction. Wait 30 seconds. Avoid exposure to breech. Carefully unload and practice safe muzzle control at all times.

## 3. Composition/Information on Ingredients:

Hazardous Components	OSHA PEL	ACGIH TLV	Approximate Percentage	CAS Number
Propellant Smokeless powder	NA	NA	0-10	NA
CS (tear gas)	0.4 mg/m <sup>3</sup>	0.05 ppm	0-40	2698-41-1
Inert packaging	NA	NA	0-50	NA

## 4. First Aid Measures:

### **Description of First Aid Measures**

#### General

Never give anything by mouth to an unconscious person.

If you feel unwell, seek medical attention

#### Inhalation

When symptoms occur: go into fresh air and ventilate suspected area.

If not breathing give CPR.

#### Skin Contact

Remove contaminated clothing.

Wash with plenty of soap and water.

If skin irritation or rash occurs: Seek medical attention

#### Ingestion

Rinse mouth.

Do NOT induce vomiting.

Seek medical attention.



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### **5. Fire Fighting Measures**

#### **Extinguishing Media**

Suitable Extinguishing Media

Fight fire with any extinguishing media and use normal precautions from a reasonable distance.

Unsuitable Extinguishing Media

Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### **Special Hazards Arising From the Substance or Mixture**

Fire Hazards

Flammable, burns at high temperatures.

Explosion Hazard

Explosive effects are largely confined to the package, and no projection of fragments of appreciable size or range is to be expected.

Do not expose to heat above 200 °C (392 °F) or ignition source

Reactivity

Hazardous reactions are unlikely to occur under normal circumstances.

#### **Firefighting**

Precautionary

Do not breathe fumes from fires or vapors from decomposition. Exercise caution when fighting any chemical fire. If product is confined, there is a greater risk for injury from projectiles.

Instructions

In case of fire: Evacuate area. Use water spray or fog for cooling exposed containers.

Protection

Do not enter fire area without proper protective equipment, including respiratory protection.

### **6. Accidental Release Measures**

#### **Emergency Procedures**

General Measures

Avoid all unnecessary exposure.

Evacuate personnel.

Restrict accesses to emergency personnel or Hazmat clean up personnel.

Use appropriate personal protection equipment (PPE) see section 8.

Emergency Procedures:

Eliminate ignition sources within area

Avoid release to the environment.

#### **Methods and Material for Containment and Cleaning Up**

For Containment

Dry sweeping can contain spilled product. Use only non-sparking tools.

Methods for Cleaning Up

Clear up spills immediately and dispose of waste safely.

Dispose of contents/container according to local, regional, national, and international regulations.

See section 13 Disposal Considerations

### **7. Handling and Storage**

#### **Precautions for Safe Handling**

Remove ammunition from service if any of the following conditions have occurred:

Corrosion, physical damage, exposure to oil or spray type lubricants.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety procedures.

Wash hands and other exposed areas with mild soap and water before eating, drinking, smoking, or going to bathroom and again when leaving work.

Contaminated work clothing should not be allowed out of the workplace. Wash or discard contaminated clothing before reuse.

#### **Conditions for Safe Storage, Including Any Incompatibilities**

Technical Measures

Store as defined in the Explosives Act of the Bureau of Alcohol, Tobacco and Firearms regulations contained in 27 CFR Part 555. Comply with applicable local regulations.



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## Storage Conditions

Store in a dry, cool, and well-ventilated area.  
Keep/Store away from heat sources, ignition sources, and incompatible materials.  
Keep container closed when not in use.

## Incompatible Materials

Strong acids, strong bases, strong oxidizers.

## Special Rules on Packaging

Keep in original container until use.

## **8. Exposure Controls / Personal Protection**

### **Appropriate Engineering Controls:**

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.  
Ensure adequate ventilation, especially in confined areas.  
Ensure all national/local codes and regulations are observed.

### **Personal Protective Equipment:**

#### Skin and Body

Chemically resistant materials and fabrics.

#### Hand Protection

Wear chemically resistant protective gloves.

#### Eye Protection

In case of projectile hazard: Safety glasses. Face shield.

#### Respiratory Protection

Use a NIOSH-approved full face respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

#### Environmental Exposure Controls

Follow all local, regional, national, and international regulations

#### Consumer Exposure Controls:

Do not eat, drink or smoke during use.

If noise levels exceed OSHA limits while firing this product, use hearing protection in accordance with OSHA's Hearing Conservation Standard, 29 CFR 1910.95.

## **9. Physical and Chemical Properties**

### Explosive properties

Fire or projection hazard

### Explosion Data

Sensitive to mechanical impact

Sensitivity to Static Discharge

## **10. Stability and Reactivity**

### Reactivity

Hazardous reactions are unlikely to occur under normal circumstances.

### Chemical Stability

Stable under recommended handling and storage conditions (see section 7). However, because of the design of ammunition and its components, partial detonation upon impact or intense heat may occur.

### Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

### Conditions to Avoid:

Extremely high or low temperatures. Heat, Sparks, and Open flame.

Incompatible Materials: Strong acids, Strong bases, Strong oxidizers.



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### **11. Toxicological Information**

#### **Inhalation:**

O-CHLOROBENZYLIDENE MALONONITRILE: 1-6.7 mg/m<sup>3</sup> has produced respiratory tract irritation and a burning sensation, cough, rhinorrhea, salivation, sneezing, epistaxis, headache, lethargy, dyspnea, constricted feeling in the chest, progressive respiratory depression, and loss of respiratory control. Additional symptoms may include nausea, vomiting, and dizziness.

Concentrations >10 mg/m<sup>3</sup> were intolerable for more than 30 seconds. Pulmonary edema complicated by pneumonia, heart failure, and hepatocellular damage were observed in a 43 year old male exposed to this compound. Exposure to 150-480 mg/m<sup>3</sup> produced pulmonary edema, liver necrosis, acute renal tubular necrosis, and some deaths in animals.

At 20,000 mg/minute/m<sup>3</sup>

mice metabolized o-chlorobenzylidene malononitrile to cyanide, but its extreme irritancy makes the reaction unlikely to occur in humans.

#### **Skin Contact:**

O-CHLOROBENZYLIDENE MALONONITRILE: May cause irritation with mild pain and local erythema. When moist or occluded, irritation may be severe with stinging, vesiculation, burns, and possibly ulceration. Sensitization dermatitis may occur in previously exposed individuals. In guinea pigs, cross-reactions with 1-chloroacetphenone have been reported.

#### **Eye Contact:**

O-CHLOROBENZYLIDENE MALONONITRILE: May cause burning pain, lacrimation, involuntary closing of the eyes due to blepharospasm, blurred vision, photophobia, and temporary blindness. Severe conjunctival injection and erythema of the eyelids may occur and last up to 1 hour after exposure.

Humans exposed to concentrations >5 mg/m<sup>3</sup> could not keep their eyes open for even a few seconds due to the intense irritation, but visual acuity returned to normal within a few minutes after exposure was terminated.

0.05-0.1 mL of a 10-50% solution applied directly to rabbit eyes caused immediate and severe irritation persisting for 30-60 minutes and erythema of the iris lasting up to 48 hours, but no permanent damage. Small particles caused greater irritation, but large particles caused increased recovery

#### **Ingestion:**

O-CHLOROBENZYLIDENE MALONONITRILE: Administration to animals produced pilo-erection, increased salivation, diarrhea, tremors, rapid shallow breathing, reduced locomotion, hemorrhagic erosion of the gastric mucosa, convulsions, collapse, and death.

### **12. Ecological Information**

Toxicity

Toxic to aquatic life

Bioaccumulative Potential

Not available

Mobility in Soil

Not available

### **13. Disposal Considerations**

#### **Waste Disposal Recommendations**

Destroy and dispose of in accordance with applicable local, state, provincial, territorial, federal and international regulations.

Comply with regulations as defined in the Explosives Act provisions of the Bureau of Alcohol, Tobacco and Firearms regulations contained in 27 CFR part 555 or local regulations.

### **14. Transport Information**

UN Number:

UN0301 Ammunition, tear producing

DOT Hazard class:

1.4G

Package Type:

UN1A2 Steel Drum

Package Dimensions:

12 in x 16 in (305 mm x 406 mm)



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### 15. Regulatory Information

NAME	Section 302 (EHS) TPQ	Section 304 EHS RQ	CERCLA RQ	Section 313	RCRA code	CAA 112®TQ
Propellant Smokeless powder	NA	NA	NA	NA	NA	NA
O-CHLOROBENZYLIDENE MALONONITRILE	NA	NA	NA	NA	NA	NA

### 16. Other Information

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#### Disclaimer

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