

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: MUZZLE BLAST 37 MM ROUND, CS

Product Code: 1142 (1012247)

1.2. Intended Use of the Product

Crowd control device

1.3. Name, Address, and Telephone of the Responsible Party

Company

Defense Technology, LLC

1855 South Loop

Casper, WY 82601

United States

Tel +1 (307) 235-2136

customercare.wy@defense-technology.com

1.4. Emergency Telephone Number

Emergency Number : VelocityEHS

(800)255-3924 (North America)

+1 (813)248-0585 (International)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US/CA Classification

The explosive classification below only applies to US 29 CFR 1910.1200 (HCS/HazCom 2012). The explosive classification is excluded from Canada Hazardous Products Regulations (HPR, SOR/2015-17), it is regulated under the Canada Explosives Act (R.S.C., 1985, c. E-17)

Explosive Category 1.4	H204
Acute toxicity (oral) Category 4	H302
Acute toxicity (inhalation:dust,mist) Category 3	H331
Skin corrosion/irritation Category 2	H315
Serious eye damage/eye irritation Category 2	H319
Respiratory sensitization, Category 1	H334
Skin sensitization, Category 1	H317
Specific target organ toxicity — Single exposure, Category 3,	H335
Respiratory tract irritation	
Hazardous to the aquatic environment - Acute Hazard Category 3	H402
Hazardous to the aquatic environment - Chronic Hazard Category 3	H412

2.2. Label Elements

GHS-US/CA Labeling

Any labeling elements (pictograms, signal word, hazard, and precautionary statements) related to explosive classifications apply to the OSHA Hazard Communication Standard (HCS, 29 CFR 1910.1200) only and are excluded from Canada's Hazardous Products Regulations (HPR, SOR/2015-17)

Hazard Pictograms (GHS-US/CA)



Signal Word (GHS-US/CA)

: Danger

Hazard Statements (GHS-US/CA)

: H204 - Fire or projection hazard.

H302 - Harmful if swallowed.

H315 - Causes skin irritation.

MUZZLE BLAST 37 MM ROUND, CS

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

- H317 - May cause an allergic skin reaction.
- H319 - Causes serious eye irritation.
- H331 - Toxic if inhaled.
- H334 - May cause an allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 - May cause respiratory irritation.
- H402 - Harmful to aquatic life.
- H412 - Harmful to aquatic life with long lasting effects.

- Precautionary Statements (GHS-US/CA) :** *P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.*
P250 - Do not subject to grinding/shock/friction.
P261 - Avoid breathing vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, and eye protection.
P284 - In case of inadequate ventilation, wear respiratory protection.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P302+P352 - If on skin: Wash with plenty of soap and water.
P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P304+P341 - If inhaled: If breathing is difficult, 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.
P311 - Call a poison center or doctor.
P321 - Specific treatment (see section 4 on this SDS).
P330 - Rinse mouth.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P342+P311 - If experiencing respiratory symptoms: Call a poison center or doctor.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P380 - In case of fire: Evacuate area.
P372 - Explosion risk in case of fire.
P373 - DO NOT fight fire when fire reaches explosives.
P374 - Fight fire with normal precautions from a reasonable distance.
P401 - Store in accordance with local, regional, national, and international regulations.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US/CA)

No additional information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Synonyms	Product Identifier	% *	GHS Ingredient Classification
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MUZZLE BLAST 37 MM ROUND, CS

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Magnesium oxide (MgO)	Calcined magnesite / Magnesium oxide / MAGNESIUM OXIDE / Magnesia	(CAS-No.) 1309-48-4	60-80	Not classified
o-Chlorobenzylidene malononitrile	[(2-Chlorophenyl)methylene]malononitrile / Malononitrile, o-chlorobenzylidene- / Propanedinitrile, [(2-chlorophenyl)methylene]- / (o-Chlorobenzylidene)malononitrile / 2-Chlorobenzylidenemalononitrile / Propanedinitrile, 2-[(2-chlorophenyl)methylene]- / CS / o-Chlorobenzal malononitrile / ortho-Chlorobenzylidene malononitrile / ((2-Chlorophenyl)methylene) propanedinitrile / 2-Chlorobenzal malononitrile / ortho-Chlorobenzylidenemalononitrile / o-chlorobenzylidenemalononitrile / o-Chlorobenzylidenemalononitrile	(CAS-No.) 2698-41-1	30-60	Acute Tox. 3 (Oral), H301 Acute Tox. 1 (Inhalation), H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335 Comb. Dust
Potassium nitrate	Nitric acid potassium salt / Nitric acid, potassium salt / Nitric acid potassium salt (1:1) / POTASSIUM NITRATE / potassium nitrate	(CAS-No.) 7757-79-1	5-10	Ox. Sol. 3, H272
Charcoal	Charcoal (An amorphous form of carbon produced by partially burning or oxidizing wood or other organic matter.)	(CAS-No.) 16291-96-6	0.5-1	Self-heat. 2, H252 Comb. Dust
Sulfur	Sulphur / Sulphur, molten / Elemental sulfur / Brimstone / SULFUR / Elemental sulphur / Sulfur, elemental / sulfur	(CAS-No.) 7704-34-9	0.5-1	Skin Irrit. 2, H315 Aquatic Acute 3, H402 Aquatic Chronic 3, H412 Comb. Dust
1,3-Benzenediol, 2,4,6-trinitro-, lead salt	1,3-Benzenediol, 2,4,6-trinitro-, lead(2+) salt (1:1) / Lead 2,4,6-trinitro-m-phenylene dioxide / Lead 2,4,6-trinitroresorcin oxide / Lead styphnate / Lead trinitroresorcinate / Tricinate / 2,4,6-Trinitro-1,3-phenylenedioxylead(II) / Lead 2,4,6-Trinitroresorcin oxide / Lead styphnate, wetted / Normal lead styphnate / Propylene / Lead(II) 2,4,6-trinitrobenzene-1,3-diolate	(CAS-No.) 15245-44-0	<0.01	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Carc. 1B, H350 Repr. 1A, H360 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

The actual concentration of ingredient(s) is withheld as a trade secret in accordance with the Hazardous Products Regulations (HPR) 29 CFR 1910.1200. Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%). Full text of H-statements: see section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

General: First aid personnel should wear appropriate protective equipment during any rescue. Rescuers must don respiratory protection before approaching exposed persons. . Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: First, take proper precautions to ensure your own safety before attempting rescue (e.g. wear appropriate respiratory protective equipment, use the buddy system), then remove the exposed person to fresh air. Keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Immediately call a poison center or doctor/physician.

Skin Contact: Remove contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. Wash affected area with soap and water for at least 15 minutes. Obtain medical attention if irritation/rash develops or persists. Immediately drench affected area with water for at least 15 minutes.

Eye Contact: Immediately rinse with water for at least 15 minutes. Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Skin sensitization. Causes skin irritation. Causes serious eye irritation. Harmful if swallowed. Toxic if inhaled. Energetic effects (blast effects, heat, noise, and shrapnel) from functioning of the product can cause serious physical injuries.

MUZZLE BLAST 37 MM ROUND, CS

Safety Data Sheet

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Inhalation: Inhalation of this material can cause serious health effects in small amounts, leading to unconsciousness and death. Exposure may produce cough, mucous secretions, shortness of breath, chest tightness or other symptoms indicative of an allergic/sensitization reaction. Irritation of the respiratory tract and the other mucous membranes.

Skin Contact: May cause an allergic skin reaction. Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts.

Chronic Symptoms: May cause sensitization by inhalation and skin contact.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: DO NOT FIGHT FIRES INVOLVING EXPLOSIVES. Water may be applied through fixed extinguishing system (sprinklers) as long as people need not be present for the system to operate.

Unsuitable Extinguishing Media: DO NOT fight fires involving explosives.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Explosive, could cause fire and secondary explosions.

Explosion Hazard: Explosives, Division 1.4 - Explosives (with no significant blast hazard).

Reactivity: Fire or projection hazard.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. This product is an explosive with a fire or projection hazard. DO NOT FIGHT FIRES INVOLVING EXPLOSIVE MATERIALS.

Firefighting Instructions: DO NOT ATTEMPT TO FIGHT FIRE. Immediately evacuate all personnel from the area to a safe distance. Guard against re-entry. Thermal decomposition can lead to release of irritating gases and vapors.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Metallic oxides. Oxides and compounds of carbon, nitrogen, sulfur, and chlorine.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Wear appropriate personal protective equipment. Do not breathe dust generated during deployment. Keep away from heat, sparks, open flames, hot surfaces. – No smoking. Do not get in eyes, on skin, or on clothing. Evacuate danger area.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Wear protective clothing and respiratory protection if dust or fumes are present.

Emergency Procedures: Evacuate unnecessary personnel. Evacuate danger area.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection. Wear protective clothing and respiratory protection if dust or fumes are present.

Emergency Procedures: Eliminate ignition sources. Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. Absorb and contain with inert material. Place contents in suitable container for disposal. As an immediate precautionary measure, isolate spill or leak area in all directions. Ventilate area.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Mechanically recover the product. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

MUZZLE BLAST 37 MM ROUND, CS

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: CS Agent released during deployment is toxic by inhalation and a severe irritant to skin, eyes, and respiratory system.

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Keep away from sources of ignition - No smoking. Avoid contact with eyes, skin and clothing. Handle empty containers with care because they may still present a hazard. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area. Do not breathe dust.

Hygiene Measures: This product is an explosive and should only be used under the supervision of trained and licensed personnel. Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment.

Storage Conditions: Store locked up/in a secure area. Store in accordance with local regulations on explosives.

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

Special Rules on Packaging: Keep only in the original container.

7.3. Specific End Use(s)

Crowd control device

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

Sulfur (7704-34-9)		
Alberta	OEL TWA	10 mg/m ³
Charcoal (16291-96-6)		
Ontario	OEL TWA	10 mg/m ³ (except activated)
Magnesium oxide (MgO) (1309-48-4)		
USA ACGIH	ACGIH OEL TWA	10 mg/m ³ (inhalable particulate matter)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (TWA) [1]	15 mg/m ³ (fume, total particulate)
USA IDLH	IDLH	750 mg/m ³ (fume)
Alberta	OEL TWA	10 mg/m ³ (fume)
British Columbia	OEL STEL	10 mg/m ³ (respirable dust and fume)
British Columbia	OEL TWA	10 mg/m ³ (fume, inhalable) 3 mg/m ³ (respirable dust and fume)
Manitoba	OEL TWA	10 mg/m ³ (inhalable particulate matter)
New Brunswick	OEL TWA	10 mg/m ³ (fume)
Newfoundland & Labrador	OEL TWA	10 mg/m ³ (inhalable particulate matter)
Nova Scotia	OEL TWA	10 mg/m ³ (inhalable particulate matter)
Nunavut	OEL STEL	20 mg/m ³ (inhalable fraction)
Nunavut	OEL TWA	10 mg/m ³ (inhalable fraction)
Northwest Territories	OEL STEL	20 mg/m ³ (inhalable fraction)
Northwest Territories	OEL TWA	10 mg/m ³ (inhalable fraction)
Ontario	OEL TWA	10 mg/m ³ (inhalable particulate matter)
Prince Edward Island	OEL TWA	10 mg/m ³ (inhalable particulate matter)
Québec	VEMP (OEL TWA)	10 mg/m ³ (inhalable dust)
Saskatchewan	OEL STEL	20 mg/m ³ (inhalable fraction)
Saskatchewan	OEL TWA	10 mg/m ³ (inhalable fraction)
Yukon	OEL STEL	10 mg/m ³ (fume)

MUZZLE BLAST 37 MM ROUND, CS

Safety Data Sheet

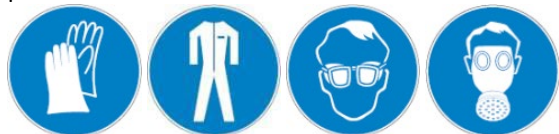
According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Yukon	OEL TWA	10 mg/m ³ (fume)
o-Chlorobenzylidene malononitrile (2698-41-1)		
USA ACGIH	ACGIH OEL Ceiling [ppm]	0.05 ppm (inhalable fraction and vapor)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route
USA OSHA	OSHA PEL (TWA) [1]	0.4 mg/m ³
USA OSHA	OSHA PEL (TWA) [2]	0.05 ppm
USA NIOSH	NIOSH REL (Ceiling)	0.4 mg/m ³
USA NIOSH	NIOSH REL C [ppm]	0.05 ppm
USA IDLH	IDLH	2 mg/m ³
Alberta	OEL C	0.4 mg/m ³
Alberta	OEL Ceiling [ppm]	0.05 ppm
British Columbia	OEL Ceiling [ppm]	0.05 ppm
Manitoba	OEL Ceiling [ppm]	0.05 ppm (inhalable fraction and vapor)
New Brunswick	OEL C	0.39 mg/m ³
New Brunswick	OEL Ceiling [ppm]	0.05 ppm
Newfoundland & Labrador	OEL Ceiling [ppm]	0.05 ppm (inhalable fraction and vapor)
Nova Scotia	OEL Ceiling [ppm]	0.05 ppm (inhalable fraction and vapor)
Nunavut	OEL Ceiling [ppm]	0.05 ppm
Northwest Territories	OEL Ceiling [ppm]	0.05 ppm
Ontario	OEL Ceiling [ppm]	0.05 ppm
Prince Edward Island	OEL Ceiling [ppm]	0.05 ppm (inhalable fraction and vapor)
Québec	Plafond (OEL Ceiling) [ppm]	0.05 ppm
Saskatchewan	OEL Ceiling [ppm]	0.05 ppm
Yukon	OEL STEL	0.4 mg/m ³
Yukon	OEL STEL [ppm]	0.05 ppm
Yukon	OEL TWA	0.4 mg/m ³
Yukon	OEL TWA [ppm]	0.05 ppm

8.2. Exposure Controls

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 regulations are observed. Proper grounding procedures to avoid static electricity should be followed. Product to be handled in a closed system and under strictly controlled conditions. Use explosion-proof equipment. Gas detectors should be used when toxic gases may be released.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles or glasses. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Chemically resistant materials and fabrics. Wear fire/ flame resistant/retardant clothing.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles or safety glasses with side shields.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

Thermal Hazard Protection: If material is hot, wear thermally resistant protective gloves.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Solid

MUZZLE BLAST 37 MM ROUND, CS

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Appearance	: Solid metal container containing liquid and solid contents. Colour according to product specification.
Odor	: Odorless pre-deployment. Pungent/Stinging odour during/after deployment.
Odor Threshold	: No data available
pH	: No data available
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: No data available
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Lower Flammable Limit	: No data available
Upper Flammable Limit	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20°C	: No data available
Relative Density	: No data available
Specific Gravity	: No data available
Solubility	: partly soluble.
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available
Explosive Properties	: Explosives, Division 1.4 - Explosives (with no significant blast hazard)

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

Fire or projection hazard.

10.2. Chemical Stability:

Extreme risk of explosion by shock, friction, fire or other sources of ignition.

10.3. Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

10.4. Conditions to Avoid:

Keep away from open flames, hot surfaces and sources of ignition. Incompatible materials.

10.5. Incompatible Materials:

Strong acids, strong bases, strong oxidizers.

10.6. Hazardous Decomposition Products:

Thermal decomposition may produce: Metallic oxides. Oxides and compounds of carbon, nitrogen, sulfur, and chlorine.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Likely routes of exposure: Dermal, Eye Contact, Inhalation, Oral.

Acute Toxicity (Oral): Harmful if swallowed.

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Toxic if inhaled.

LD50 and LC50 Data:

MUZZLE BLAST 37 MM ROUND, CS	
ATE US/CA (oral)	527.22 mg/kg body weight
ATE US/CA (dust, mist)	<2.0 mg/l/4h

Skin Corrosion/Irritation: Causes skin irritation.

Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: May cause an allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

MUZZLE BLAST 37 MM ROUND, CS

Safety Data Sheet

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Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Inhalation of this material can cause serious health effects in small amounts, leading to unconsciousness and death. Exposure may produce cough, mucous secretions, shortness of breath, chest tightness or other symptoms indicative of an allergic/sensitization reaction. Irritation of the respiratory tract and the other mucous membranes.

Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction. Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts.

Chronic Symptoms: May cause sensitization by inhalation and skin contact.

Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met. Harmful if swallowed. Toxic if inhaled.

Other information: Health effects are due to either exposure to products generated during deployment or to energetic physical effects.

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)	
LD50 Dermal Rat	> 2000 mg/kg
LC50 Inhalation Rat	> 5.05 mg/l/4h
Potassium nitrate (7757-79-1)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rat	> 5000 mg/kg
LC50 Inhalation Rat	> 0.527 mg/l/4h (No deaths)
Sulfur (7704-34-9)	
LD50 Oral Rat	> 3000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat	> 9.23 mg/l/4h
Charcoal (16291-96-6)	
LC50 Inhalation Rat	> 4.97 mg/l/4h
Magnesium oxide (MgO) (1309-48-4)	
LD50 Oral Rat	3870 mg/kg
o-Chlorobenzylidene malononitrile (2698-41-1)	
LD50 Oral Rat	178 mg/kg
ATE US/CA (dust, mist)	0.01 mg/l/4h
1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)	
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Harmful to aquatic life with long lasting effects.

1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)	
EC50 - Crustacea [1]	7 mg/l
Potassium nitrate (7757-79-1)	
EC50 - Crustacea [1]	490 mg/l
Sulfur (7704-34-9)	
LC50 Fish 1	866 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
EC50 - Crustacea [1]	736 mg/l (Exposure time: 48 h - Species: Daphnia magna)

MUZZLE BLAST 37 MM ROUND, CS

Safety Data Sheet

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LC50 Fish 2	14 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
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12.2. Persistence and Degradability

MUZZLE BLAST 37 MM ROUND, CS	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

MUZZLE BLAST 37 MM ROUND, CS	
Bioaccumulative Potential	Bioaccumulation of metals cannot be excluded.
1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)	
Partition coefficient n-octanol/water (Log Pow)	-2.19 (at 20 °C)
Charcoal (16291-96-6)	
Partition coefficient n-octanol/water (Log Pow)	(0.3 - <=3.48 - at 25 °C (at pH 6.97)

12.4. Mobility in Soil

MUZZLE BLAST 37 MM ROUND, CS	
Ecology - Soil	No data available.

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Treatment Methods: Explosives should be destroyed by open burning or by burning in an approved incinerator. Explosives should not be burned in containers.

Sewage Disposal Recommendations: Do not dispose of waste into sewer.

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: Avoid unnecessary release into environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT

Proper Shipping Name : AMMUNITION, TEAR-PRODUCING
Hazard Class : 1.4G
Identification Number : UN0301
Label Codes : 1.4G, 8, 6.1



14.2. In Accordance with IMDG

Proper Shipping Name : AMMUNITION, TEAR-PRODUCING
Hazard Class : 1.4G (6.1, 8)
Identification Number : UN0301
Label Codes : 1.4G, 6.1, 8
EmS-No. (Fire) : F-B
EmS-No. (Spillage) : S-Z



14.3. In Accordance with IATA

Cargo Aircraft Only
Proper Shipping Name : AMMUNITION, TEAR-PRODUCING
Hazard Class : 1.4G (6.1, 8)
Identification Number : UN0301
Label Codes : 1.4G, 6.1, 8
ERG Code (IATA) : 1CP



14.4. In Accordance with TDG

Proper Shipping Name : AMMUNITION, TEAR-PRODUCING

MUZZLE BLAST 37 MM ROUND, CS

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Hazard Class : 1.4G
Identification Number : UN0301
Label Codes : 1.4G, 6.1, 8
Packing Group : II



SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

MUZZLE BLAST 37 MM ROUND, CS	
SARA Section 311/312 Hazard Classes	Physical hazard - Explosive Health hazard - Specific target organ toxicity (single or repeated exposure) Health hazard - Respiratory or skin sensitization Health hazard - Skin corrosion or Irritation Health hazard - Serious eye damage or eye irritation Health hazard - Acute toxicity (any route of exposure)
1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
Potassium nitrate (7757-79-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
Sulfur (7704-34-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
Charcoal (16291-96-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
Magnesium oxide (MgO) (1309-48-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
o-Chlorobenzylidene malononitrile (2698-41-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	

15.2. US State Regulations

California Proposition 65



WARNING: This product can expose you to Mitomycin-C, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)	X			
Copper (7440-50-8)				
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List				
Zinc (7440-66-6)				
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List				
1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)				
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Massachusetts - Right To Know List				
Barium nitrate (10022-31-8)				
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List				

MUZZLE BLAST 37 MM ROUND, CS

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

Potassium nitrate (7757-79-1)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Massachusetts - Right To Know List

Sulfur (7704-34-9)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Massachusetts - Right To Know List

Magnesium oxide (MgO) (1309-48-4)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Massachusetts - Right To Know List

o-Chlorobenzylidene malononitrile (2698-41-1)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Massachusetts - Right To Know List

15.3. Canadian Regulations

1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)

Listed on the Canadian DSL (Domestic Substances List)

Potassium nitrate (7757-79-1)

Listed on the Canadian DSL (Domestic Substances List)

Sulfur (7704-34-9)

Listed on the Canadian DSL (Domestic Substances List)

Charcoal (16291-96-6)

Listed on the Canadian DSL (Domestic Substances List)

Magnesium oxide (MgO) (1309-48-4)

Listed on the Canadian DSL (Domestic Substances List)

o-Chlorobenzylidene malononitrile (2698-41-1)

Listed on the Canadian NDSL (Non-Domestic Substances List)

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 01/30/2023

Revision

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

GHS Full Text Phrases:

H204	Fire or projection hazard
H252	Self-heating in large quantities; may catch fire
H272	May intensify fire; oxidizer
H301	Toxic if swallowed
H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled

MUZZLE BLAST 37 MM ROUND, CS

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

H332	Harmful if inhaled
H334	May cause an allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H350	May cause cancer
H351	Suspected of causing cancer
H360	May damage fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NA GHS SDS 2015 (Can, US)