

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).

Date of Issue: 03/22/2023

Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture Product Name: FERRET[®] 12-GAUGE POWDER BARRICADE ROUND, INERT Product Code: 3093 (1011847)

1.2. Intended Use of the Product

Explosive Product

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
Hazardous to the aquatic environment - Acute Hazard Category 3	H402
Hazardous to the aquatic environment - Chronic Hazard Category 3	H412

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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)

Signal Word (GHS-US Only)

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GHS01 USA Only

Hazard Statements (GHS-US Only)	: Warning
Hazard Statements (GHS-US/CA)	: H204 - Fire or projection hazard.
	H402 - Harmful to aquatic life.
	H412 - Harmful to aquatic life with long lasting effects.
Precautionary Statements (GHS-	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition
US/CA)	sources. No smoking.
	P250 - Do not subject to grinding/shock/friction.
	P273 - Avoid release to the environment.
	P280 - Wear protective gloves, protective clothing, and eye protection.
	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.

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P401 - Store in accordance with local, regional, national, and international regulations. 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
Nitroglycerin	Glycerol trinitrate / Glyceryl nitrate / Glyceryl trinitrate / Nitroglycerol / 1,2,3-Propanetriol, trinitrate / Trinitroglycerin / Trinitroglycerol / Nitroglycerine / 1,2,3-Propanetriol, 1,2,3- trinitrate / Propane-1,2,3-triyl trinitrate / Nitroglycerin, desensitized / Propane-1,2,3-triol trinitrate / Glycerin nitrate / Glycerin trinitrate / Nitro glycerine / nitroglycerin	(CAS-No.) 55-63-0	30 – 60	Unst. Expl., H200 Acute Tox. 3 (Oral), H301 Acute Tox. 2 (Inhalation:dust,mist), H330 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Nitrocellulose	NITROCELLULOSE / COLLODION / Nitrocellulose, mixture, without pigment / Guncotton / Collodion / Cellulose, nitrate / Cellulose nitrate / Pyroxylin	(CAS-No.) 9004-70-0	10 - 30	Expl. 1.1, H201
Magnesium oxide (MgO)	Calcined magnesite / Magnesium oxide / MAGNESIUM OXIDE / Magnesia	(CAS-No.) 1309-48-4	10 - 30	Not classified
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	10 - 30	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	1 – 5	Self-heat. 2, H252 Comb. Dust
Rosin	Gum rosin / Rosin (A complex combination derived from wood, especially pine wood. Composed primarily of resin acids and modified resin aci ds such as dimers and decarboxylated resin acids. Includes rosin stabilized by catalytic disproportionation.) / Colophony / Colophonium / Rosin, gum / COLOPHONIUM / Rosin (pinus species) and rosin derivatives / ROSIN / Gum resin / Resin acids / rosin / Rosin (Pinus species)	(CAS-No.) 8050-09-7	1-5	Acute Tox. 4 (Inhalation:dust,mist), H332 Resp. Sens. 1, H334 Skin Sens. 1, H317 Aquatic Acute 2, H401 Aquatic Chronic 2, H411 Comb. Dust
Sulfur	Sulphur / Sulphur, molten / Elemental sulfur / Brimstone / SULFUR / Elemental sulphur / Sulfur, elemental / sulfur	(CAS-No.) 7704-34-9	1-5	Skin Irrit. 2, H315 Aquatic Acute 3, H402 Aquatic Chronic 3, H412 Comb. Dust
Iron	Iron, elemental / Direct reduced Iron / Iron, reduced / Elemental iron / IRON POWDER / iron	(CAS-No.) 7439-89-6	1-5	Comb. Dust
Copper	Copper, metallic / Pigment Metal 2 / Copper metal / Cl 77400 / Copper, elemental / Cl. Pigment Metal 2 / Cl. 77400 / Granulated copper / copper	(CAS-No.) 7440-50-8	0.1 - 1.0	Comb. Dust
Diphenylamine	Aniline, N-phenyl- / Benzenamine, N-phenyl- / Benzene, (phenylamino)- / Benzene, anilino- / N,N-Diphenylamine / N- Phenylaniline / N-Phenylbenzenamine	(CAS-No.) 122-39-4	0.1 - 1.0	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:dust,mist), H331 Eye Irrit. 2A, H319 Carc. 2, H351 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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Urea, N,N'-diethyl- N,N'-diphenyl-	Ethyl centralite / Carbanilide, N,N'-diethyl- / 1,3-Diethyl-1,3- diphenyl urea / N,N'-Diethyl-N,N'-diphenylurea / 1,3- Diethyldiphenylurea / sym-Diethyldiphenylurea / Diethyldiphenylurea / N,N'-Diethylcarbanilide / 1,3-Diethyl-1,3- diphenylurea / N,N'-diethylcarbanilide	(CAS-No.) 85-98-3	0.1 - 1.0	Acute Tox. 4 (Oral), H302 Aquatic Acute 3, H402 Aquatic Chronic 3, H412 Comb. Dust
Zinc	C.I. Pigment Black 16 / C.I. Pigment Metal 6 / Zinc (metallic) / Pigment Black 16 / Zinc powder - zinc dust (stabilised) / Zinc powder - zinc dust (pyrophoric) / ZINC / zinc	(CAS-No.) 7440-66-6	0.1 - 1.0	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-trinitroresorcinoxide / Lead styphnate / Lead trinitroresorcinate / Tricinate / 2,4,6- Trinitro-1,3-phenylenedioxylead(II) / Lead 2,4,6- Trinitroresorcinoxide / Lead styphnate, wetted / Normal lead styphnate / Propylene / Lead(II) 2,4,6-trinitrobenzene-1,3-diolate	(CAS-No.) 15245-44-0	<0.1	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) SOR/2015-17 and 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: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 5 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

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

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Energetic effects (blast effects, heat, noise, and shrapnel) from functioning of the product can cause serious physical injuries.

Inhalation: Prolonged exposure may cause irritation.

Skin Contact: Prolonged exposure may cause skin irritation. After ammunition has been fired, dust, vapors, and/or fumes may cause irritation. Projectiles from fired ammunition can cause puncture wounds. After ammunition has been fired, dust, vapors, and/or fumes may cause irritation.

Eye Contact: May cause slight irritation to eyes. After ammunition has been fired, dust, vapors, and/or fumes may cause irritation. **Ingestion:** Ingestion is unlikely due to product form. Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

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: Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, or dry chemical.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: This product is not flammable, but contains a substance that is a flammable solid and will burn at high temperatures. Heating may cause an explosion.

Explosion Hazard: Heating may cause a fire or explosion. Risk of explosion if heated under confinement.

Reactivity: Hazardous reactions will not occur under normal conditions. Contains an oxidizing material which may accelerate fire.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

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Firefighting Instructions: Flood fire area with water from a distance. Move containers from the fire area if you can do it without risk. Do not move cargo or vehicle if cargo has been exposed to heat. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. Stay away from ends of tanks due to exploding potential when tanks are involved in a fire.

For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. DO NOT fight fire when fire reaches explosives.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. **Hazardous Combustion Products**: Oxides of carbon, nitrogen, and sulfur are evolved in fire.

Other Information: No additional information available.

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: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing dust.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Non-emergency personnel should evacuate the area of the spill and only enter after emergency personnel have declared the area safe to enter.

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Eliminate ignition sources first, then ventilate the 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.

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. **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.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: If mishandled, energetic effects (blast effects, heat, noise, and shrapnel) from functioning of the product can cause serious physical injuries.

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing dust.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a locked gate / secure area. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

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

7.3. Specific End Use(s)

Explosive Product

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.

USA OSHA OSHA	VA	0.2 mg/m³ (fume) 0.1 mg/m³ (fume) 1 mg/m³ (dust and mist) 1 mg/m³ (dust and mist) 0.1 mg/m³ (fume) 100 mg/m³ (dust, fume and mist) 0.2 mg/m³ (fume) 1 mg/m³ (dust and mist) 0.1 mg/m³ (dust and mist)	
USA OSHAOSHAUSA NIOSHNIOSHUSA IDLHIDLHAlbertaOEL TVBritish ColumbiaOEL TV	PEL (TWA) [1] REL (TWA) VA VA	0.1 mg/m³ (fume) 1 mg/m³ (dust and mist) 1 mg/m³ (dust and mist) 0.1 mg/m³ (fume) 100 mg/m³ (dust, fume and mist) 0.2 mg/m³ (fume) 1 mg/m³ (dust and mist) 1 mg/m³ (dust and mist) 1 mg/m³ (dust and mist) 1 mg/m³ (dust and mist)	
USA NIOSH NIOSH USA IDLH IDLH Alberta OEL TV British Columbia OEL TV	REL (TWA)	1 mg/m³ (dust and mist) 1 mg/m³ (dust and mist) 0.1 mg/m³ (fume) 100 mg/m³ (dust, fume and mist) 0.2 mg/m³ (fume) 1 mg/m³ (dust and mist) 1 mg/m³ (dust and mist)	
USA IDLH IDLH Alberta OEL TV British Columbia OEL TV	VA	1 mg/m³ (dust and mist) 0.1 mg/m³ (fume) 100 mg/m³ (dust, fume and mist) 0.2 mg/m³ (fume) 1 mg/m³ (dust and mist) 1 mg/m³ (dust and mist)	
USA IDLH IDLH Alberta OEL TV British Columbia OEL TV	VA	0.1 mg/m³ (fume)100 mg/m³ (dust, fume and mist)0.2 mg/m³ (fume)1 mg/m³ (dust and mist)1 mg/m³ (dust and mist)	
Alberta OEL TV British Columbia OEL TV	VA	100 mg/m³ (dust, fume and mist)0.2 mg/m³ (fume)1 mg/m³ (dust and mist)1 mg/m³ (dust and mist)	
Alberta OEL TV British Columbia OEL TV	VA	0.2 mg/m ³ (fume) 1 mg/m ³ (dust and mist) 1 mg/m ³ (dust and mist)	
		1 mg/m³ (dust and mist)1 mg/m³ (dust and mist)	
		1 mg/m ³ (dust and mist)	
Manitoba OEL TV	MA		
Manitoba OEL TV	VA	0.2 mg/m ³ (fume)	
	* / 1	0.2 mg/m ³ (fume)	
New Brunswick OEL TV	VA	0.2 mg/m ³ (fume)	
		1 mg/m ³ (dust and mist)	
Newfoundland & Labrador OEL TV	VA	0.2 mg/m ³ (fume)	
Nova Scotia OEL TV	VA	0.2 mg/m ³ (fume)	
Nunavut OEL ST	EL	3 mg/m ³ (dust and mist)	
		0.6 mg/m ³ (fume)	
Nunavut OEL TV	VA	0.2 mg/m ³ (fume)	
		1 mg/m ³ (dust and mist)	
Northwest Territories OEL ST	EL	3 mg/m ³ (dust and mist)	
		0.6 mg/m³ (fume)	
Northwest Territories OEL TV	VA	0.2 mg/m ³ (fume)	
		1 mg/m ³ (dust and mist)	
Ontario OEL TV	VA	0.2 mg/m ³ (fume)	
		1 mg/m ³ (dust and mist)	
Prince Edward Island OEL TV	VA	0.2 mg/m ³ (fume)	
Québec VEMP	(OEL TWA)	0.2 mg/m ³ (fume)	
		1 mg/m ³ (dust and mist)	
Saskatchewan OEL ST	EL	0.6 mg/m ³ (fume)	
		3 mg/m ³ (dust and mist)	
Saskatchewan OEL TV	VA	0.2 mg/m ³ (fume)	
		1 mg/m ³ (dust and mist)	
Yukon OEL ST	EL	0.2 mg/m³ (fume)	
		2 mg/m ³ (dust and mist)	
Yukon OEL TV	VA	0.2 mg/m ³ (fume)	
		1 mg/m ³ (dust and mist)	
Sulfur (7704-34-9)			
Alberta OEL TV	VA	10 mg/m ³	
Charcoal (16291-96-6)			
Ontario OEL TV	VA	10 mg/m ³ (except activated)	
Magnesium oxide (MgO) (1309-48-4)		
	, OEL TWA	10 mg/m ³ (inhalable particulate matter)	
	chemical category	Not Classifiable as a Human Carcinogen	
	PEL (TWA) [1]	15 mg/m ³ (fume, total particulate)	
USA IDLH IDLH		750 mg/m ³ (fume)	
Alberta OEL TV	VA	10 mg/m ³ (fume)	
British Columbia OEL ST		10 mg/m ³ (respirable dust and fume)	
British Columbia OEL TV		10 mg/m ³ (fume, inhalable)	
		3 mg/m ³ (respirable dust and fume)	
Manitoba OEL TV	VA	10 mg/m ³ (inhalable particulate matter)	
New Brunswick OEL TV	VA	10 mg/m ³ (fume)	

		cording to the Hazardous Products Regulation (February 11, 2015).	
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	OELTWA	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/m³ (fume)	
Yukon	OEL TWA	10 mg/m³ (fume)	
Nitroglycerin (55-63-0)			
USA ACGIH	ACGIH OEL TWA [ppm]	0.05 ppm	
USA ACGIH	ACGIH chemical category	Skin - potential significant contribution to overall exposure	
		by the cutaneous route	
USA OSHA	OSHA PEL (Ceiling)	2 mg/m ³	
USA OSHA	OSHA PEL C [ppm]	0.2 ppm	
USA OSHA	Limit value category (OSHA)	prevent or reduce skin absorption	
USA NIOSH	NIOSH REL (STEL)	0.1 mg/m ³	
USA IDLH	IDLH	75 mg/m ³	
Alberta	OEL TWA	0.5 mg/m ³	
Alberta	OEL TWA [ppm]	0.05 ppm	
British Columbia	OEL TWA [ppm]	0.05 ppm	
Manitoba	OEL TWA [ppm]	0.05 ppm	
New Brunswick	OEL TWA	0.46 mg/m ³	
New Brunswick	OEL TWA [ppm]	0.05 ppm	
Newfoundland & Labrador	OEL TWA [ppm]	0.05 ppm	
Nova Scotia	OEL TWA [ppm]	0.05 ppm	
Nunavut	OEL STEL [ppm]	0.15 ppm	
Nunavut	OEL TWA [ppm]	0.05 ppm	
Northwest Territories	OEL STEL [ppm]	0.15 ppm	
Northwest Territories	OEL TWA [ppm]	0.05 ppm	
Ontario	OEL TWA [ppm]	0.05 ppm	
Prince Edward Island	OEL TWA [ppm]	0.05 ppm	
Québec	VEMP (OEL TWA) [ppm]	0.05 ppm	
Saskatchewan	OEL STEL [ppm]	0.15 ppm	
Saskatchewan	OEL STEL [ppm]	0.05 ppm	
Yukon	OEL TWA [ppm] OEL Ceiling [ppm]	0.05 ppm 0.2 ppm (Ethylene glycol dinitrate and/or nitroglycerin	
TUKUII		(Ethylene glycol dinitrate and/or nitroglycerin)	
Yukon	OEL STEL	2 mg/m ³	
Yukon	OEL STEL OEL STEL [ppm]	0.2 ppm	
Yukon		2 mg/m ³	
	OEL TWA		
Yukon	OEL TWA [ppm]	0.2 ppm	
Rosin (8050-09-7)			
USA ACGIH	ACGIH OEL TWA	0.001 mg/m ³ (inhalable particulate matter)	
USA ACGIH	ACGIH chemical category	dermal sensitizer	
Manitoba	OEL TWA	0.001 mg/m ³ (inhalable particulate matter)	
Newfoundland & Labrador	OEL TWA	0.001 mg/m ³ (inhalable particulate matter)	
Nova Scotia	OEL TWA	0.001 mg/m ³ (inhalable particulate matter)	

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Prince Edward Island	OEL TWA	0.001 mg/m ³ (inhalable particulate matter)		
Diphenylamine (122-39-4)				
USA ACGIH	ACGIH OEL TWA	10 mg/m ³		
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen		
USA NIOSH	NIOSH REL (TWA)	10 mg/m ³		
Alberta	OEL TWA	10 mg/m ³		
British Columbia	OEL TWA	10 mg/m ³		
Manitoba	OEL TWA	10 mg/m ³		
New Brunswick	OEL TWA	10 mg/m ³		
Newfoundland & Labrador	OEL TWA	10 mg/m ³		
Nova Scotia	OEL TWA	10 mg/m ³		
Nunavut	OEL STEL	20 mg/m ³		
Nunavut	OEL TWA	10 mg/m ³		
Northwest Territories	OEL STEL	20 mg/m ³		
Northwest Territories	OEL TWA	10 mg/m ³		
Ontario	OEL TWA	10 mg/m ³		
Prince Edward Island	OEL TWA	10 mg/m ³		
Québec	VEMP (OEL TWA)	10 mg/m ³		
Saskatchewan	OEL STEL	20 mg/m ³		
Saskatchewan	OEL TWA	10 mg/m ³		
Yukon	OEL STEL	20 mg/m ³		
Yukon	OEL TWA	10 mg/m ³		

8.2. Exposure Controls

Appropriate Engineering Controls: Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. **Personal Protective Equipment:** Gloves. Protective clothing. Protective goggles.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: When needed, wear protective gloves to protect against thermal and/or mechanical hazards.

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

Skin and Body Protection: During deployment: . Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

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
Appearance	: Solid metal container containing solid contents
Odor	: No data available
Odor Threshold	: No data available
рН	: 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

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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	:	No data available
Partition Coefficient: N-Octanol/Water	:	No data available
Viscosity	:	No data available
Explosive Properties	:	Class 1.4 - Explosives (with no significant blast hazard) 49 CFR 173.50
SECTION 10: STABILITY AND REACTIVITY		

Reactivity: 10.1.

Hazardous reactions will not occur under normal conditions. Contains an oxidizing material which may accelerate fire.

10.2. **Chemical Stability:**

Stable under recommended handling and storage conditions (see section 7).

10.3. **Possibility of Hazardous Reactions:**

Hazardous polymerization will not occur. Heating may cause a fire or explosion.

10.4. **Conditions to Avoid:**

Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5. **Incompatible Materials:**

Strong acids, strong bases, strong oxidizers.

10.6. **Hazardous Decomposition Products:**

Oxides of carbon, nitrogen, and sulfur are evolved in fire.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product 11.1.

Likely routes of exposure: Eye contact. Dermal.

Acute Toxicity (Oral): Not classified

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data:

No additional information available

Skin Corrosion/Irritation: Not classified

Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified.

Specific Target Organ Toxicity (Repeated Exposure): Not classified.

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation. After ammunition has been fired, dust, vapors, and/or fumes may cause irritation. Projectiles from fired ammunition can cause puncture wounds. After ammunition has been fired, dust, vapors, and/or fumes may cause irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes. After ammunition has been fired, dust, vapors, and/or fumes may cause irritation.

Symptoms/Injuries After Ingestion: Ingestion is unlikely due to product form. Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Iron (7439-89-6)		
LD50 Oral Rat	98.6 g/kg	
Copper (7440-50-8)		
LC50 Inhalation Rat	> 5.11 mg/l/4h	
03/22/2023	EN (English LIS)	8/14

Zinc (7440-66-6)		
LD50 Oral Rat	> 2000 mg/kg	
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	
ATE US/CA (oral)	500.00 mg/kg body weight	
ATE US/CA (dust, mist)	1.50 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	
Nitroglycerin (55-63-0)		
LD50 Oral Rat	100 mg/kg	
LD50 Dermal Rat	> 9560 mg/kg	
ATE US/CA (oral)	5.00 mg/kg body weight	
ATE US/CA (dermal)	5.00 mg/kg body weight	
ATE US/CA (dust, mist)	0.05 mg/l/4h	
Nitrocellulose (9004-70-0)		
LD50 Oral Rat	5000 mg/kg	
Rosin (8050-09-7)		
LD50 Oral Rat	7600 mg/kg	
LD50 Dermal Rabbit	> 2500 mg/kg	
LC50 Inhalation Rat	2.3 mg/l/4h	
Diphenylamine (122-39-4)		
LD50 Oral Rat	1120 mg/kg	
LD50 Dermal Rabbit	> 2000 mg/kg	
ATE US/CA (oral)	100.00 mg/kg body weight	
ATE US/CA (dermal)	300.00 mg/kg body weight	
ATE US/CA (dust, mist)	0.50 mg/l/4h	
Urea, N,N'-diethyl-N,N'-diphenyl- (85-98-3)		
LD50 Oral Rat	780.9 mg/kg	
LD50 Dermal Rat	> 2000 mg/kg	
LC50 Inhalation Rat	> 198 mg/l (Exposure time: 8 h)	
ATE US/CA (oral)	500.00 mg/kg body weight	
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.	
Diphenylamine (122-39-4)		
IARC Group	2B	
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.	

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SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Not classified.

Ecology - General: Not classified.			
Zinc (7440-66-6)			
EC50 - Crustacea [1]	0.169 mg/l		
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 (E	xposure time: 96 h - Species: Brachydanio rerio [static])	
EC50 - Crustacea [1]	736 mg/l (E	xposure time: 48 h - Species: Daphnia magna)	
LC50 Fish 2	14 mg/l (Ex	posure time: 96 h - Species: Lepomis macrochirus [static])	
Nitroglycerin (55-63-0)			
LC50 Fish 1	0.87 – 3.25	mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])	
EC50 - Crustacea [1]		I (Exposure time: 48 h - Species: Daphnia magna)	
LC50 Fish 2		mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])	
EC50 - Crustacea [2]		l (Exposure time: 48 h - Species: Daphnia magna [Static])	
ErC50 algae	0.4 mg/l		
NOEC Chronic Fish	0.03 mg/l		
Nitrocellulose (9004-70-0)			
ErC50 algae	579 mg/l		
Rosin (8050-09-7)			
EC50 - Crustacea [1]	3.8 – 5.4 mg	g/l (Exposure time: 48 h - Species: Daphnia magna)	
Diphenylamine (122-39-4)			
LC50 Fish 1	3.47 - 4.14	mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])	
EC50 - Crustacea [1]		mg/l (Exposure time: 48 h - Species: Daphnia magna)	
ErC50 algae	0.36 mg/l (Exposure time: 72 h - Species: Green algae)		
NOEC Chronic Algae	0.0273 mg/		
12.2. Persistence and Degradabilit	v		
FERRET [®] 12-GAUGE POWDER BARRICAD		ERT	
Persistence and Degradability	,,	Not established.	
Copper (7440-50-8)			
Persistence and Degradability		Not readily biodegradable.	
12.3. Bioaccumulative Potential			
FERRET [®] 12-GAUGE POWDER BARRICAD		FRT	
Bioaccumulative Potential		Bioaccumulation of metals cannot be excluded.	
1,3-Benzenediol, 2,4,6-trinitro-, lead salt	(15245-44-0		
		-2.19 (at 20 °C)	
Charcoal (16291-96-6)	8.007		
Partition coefficient n-octanol/water (Lo			
•	<u>grow</u>		
Rosin (8050-09-7) Partition coefficient n-octanol/water (Log Pow)		>1.9 - <=7.7 (at pH 2)	
Diphenylamine (122-39-4)	51000	21.3 S=7.7 (at pit 2)	
BCF Fish 1		51 – 253	
Partition coefficient n-octanol/water (Log Pow)			
12.4. Mobility in Soil FERRET® 12-GAUGE POWDER BARRICADE ROUND, INERT			
FERREI® 12-GAUGE POWDER BARRICAD	E KOUND, IN		
ECOIORY - SOII		No data available.	

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12.5. Other Adverse Effects

Other Adverse Effects: None known.

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Treatment Methods: Incineration is the preferred method for disposal of waste product. . Can be landfilled, when in compliance with local regulations.

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

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

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

Ecology - Waste Materials: Avoid release to the environment.

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, PRACTICE	
Hazard Class	: 1.4G	
Identification Number	: UN0362	VE
Label Codes	: 1.4G	
14.2. In Accordance with	IMDG	
Proper Shipping Name	: AMMUNITION, PRACTICE	
Hazard Class	: 1.4G	
Identification Number	: UN0362	
Label Codes	: 1.4G	
EmS-No. (Fire)	: F-B	
EmS-No. (Spillage)	: S-X	
14.3. In Accordance with	ΙΑΤΑ	
Proper Shipping Name	: AMMUNITION, PRACTICE	
Hazard Class	: 1.4G	
Identification Number	: UN0362	
Label Codes	: 1.4G	
ERG Code (IATA)	: 1L	
14.4. In Accordance with	TDG	
Proper Shipping Name	: AMMUNITION, PRACTICE	
Hazard Class	: 1.4G	
Identification Number	: UN0362	•
Label Codes	: 1.4G	/
Packing Group	: 11	
SECTION 15: REGULATORY I	INFORMATION	
		_

15.1. US Federal Regulations		
Iron (7439-89-6)		
Listed on the United States TSCA (Toxic Substances Con	trol Act) inventory - Status: Active	
Copper (7440-50-8)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active		
Subject to reporting requirements of United States SARA Section 313		
CERCLA RQ	5000 lb no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 μ m	
SARA Section 313 - Emission Reporting	1%	

Zinc (7440-66-6)	Ninday, March 20, 2012 / Kules	And Regulations And According TO	The mazaruous mounties regulation (Fe	ωιατή 11, 2013].	
Listed on the United States TSCA	(Toxic Substances Co	ntrol Act) inventory. Sta	tus: Active		
	•				
Subject to reporting requirements of United States SARA Section 313 CERCLA RQ			454 kg no reporting of releases of this hazardous substance is required if the diameter of the pieces		
			of the solid metal released	is >100 μm	
SARA Section 313 - Emission Rep		<u> </u>	1 % (dust or fume only)		
1,3-Benzenediol, 2,4,6-trinitro-,			1 A		
Listed on the United States TSCA	(Toxic Substances Col	ntrol Act) Inventory - Sta	tus: Active		
Potassium nitrate (7757-79-1)	(Taula Cultatana a Ca	ntural Arth investments of the	1 A		
Listed on the United States TSCA	(Toxic Substances Col	ntrol Act) Inventory - Sta	tus: Active		
Sulfur (7704-34-9)	(Tavia Cubatanasa Ca	ntual (at) inventors (Cta	ture. A etime		
Listed on the United States TSCA	(TOXIC Substances Col	ntrol Act) Inventory - Sta			
Charcoal (16291-96-6)	(Tavia Substances Ca	ntral Act) inventory Sta			
Listed on the United States TSCA	· · · · · · · · · · · · · · · · · · ·	Introl Act) Inventory - Sta	lus. Active		
Magnesium oxide (MgO) (1309- Listed on the United States TSCA		ntral Act) invantary Sta	tuc: Activo		
		Introl Act) Inventory - Sta	lus. Active		
Nitroglycerin (55-63-0) Listed on the United States TSCA	(Toxic Substances Co	ntral Act) invantary Sta	tuc: Activo		
Subject to reporting requirement			ius. Active		
CERCLA RQ			10 lb		
SARA Section 313 - Emission Rep	oorting		1%		
Nitrocellulose (9004-70-0)	•				
Listed on the United States TSCA	(Toxic Substances Co	ntrol Act) inventory - Sta	tus: Active		
EPA TSCA Regulatory Flag		XU - XU - indicates a substance exempt from			
		reporting under the Chemical Data Reporting Rule,			
			(40 CFR 711).		
Rosin (8050-09-7)					
Listed on the United States TSCA	(Toxic Substances Co	ntrol Act) inventory - Sta	tus: Active		
Diphenylamine (122-39-4)					
Listed on the United States TSCA			tus: Active		
Subject to reporting requirements of United States SARA Section 313			4.07		
SARA Section 313 - Emission Reporting 1 %					
Urea, N,N'-diethyl-N,N'-dipheny					
Listed on the United States TSCA	(Toxic Substances Co	ntrol Act) inventory - Sta	tus: Active		
5.2. US State Regulations					
California Proposition 65	ann avnasa vau ta 1.2	Donzonadial 246 trini	tra laad calt which is know	in to the State of	
California to cause cance			tro-, lead salt, which is know	In to the State of	
Chemical Name (CAS No.)	Carcinogenicity	Developmental	Female Reproductive	Male Reproductive	
chemical Name (CAS NO.)	carcinogenicity	Toxicity	Toxicity	Toxicity	
1,3-Benzenediol, 2,4,6-trinitro-	Х	i okielty	i onicity	· Onion y	
, lead salt (15245-44-0)					
Copper (7440-50-8)					
U.S New Jersey - Right to Know	/ Hazardous Substance	e List			
U.S Pennsylvania - RTK (Right t					
U.S Pennsylvania - RTK (Right t U.S Massachusetts - Right To K U.S Pennsylvania - RTK (Right t	now 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
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
Nitroglycerin (55-63-0)
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
Nitrocellulose (9004-70-0)
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
Diphenylamine (122-39-4)
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
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List
15.3. Canadian Regulations
Iron (7439-89-6)
Listed on the Canadian DSL (Domestic Substances List)
Copper (7440-50-8)
Listed on the Canadian DSL (Domestic Substances List)
Zinc (7440-66-6)
Listed on the Canadian DSL (Domestic Substances List)
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)

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Magnesium oxide (MgO) (1309-48-4)
Listed on the Canadian DSL (Domestic Substances List)
Nitroglycerin (55-63-0)
Listed on the Canadian DSL (Domestic Substances List)
Nitrocellulose (9004-70-0)
Listed on the Canadian DSL (Domestic Substances List)
Rosin (8050-09-7)
Listed on the Canadian DSL (Domestic Substances List)
Diphenylamine (122-39-4)
Listed on the Canadian DSL (Domestic Substances List)
Urea, N,N'-diethyl-N,N'-diphenyl- (85-98-3)
Listed on the Canadian DSL (Domestic Substances List)
SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION
Date of Preparation or Latest : 03/22/2023
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:

H200	Unstable explosive
H201	Explosive; mass explosion hazard
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
H311	Toxic in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled
H332	Harmful if inhaled
H334	May cause an allergy or asthma symptoms or breathing difficulties if inhaled
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
H401	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)