SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: 1MT1311 Piston Actuator

1.2. Intended Use of the Product

Pyrotechnic-actuated device that produces linear motion.

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

Company

EaglePicher Technologies LLC
1215 W C St.
Joplin MO 64801
United States of America
+1 417-623-8000
Website: www.eaglepicher.com
email: inquiry@eaglepicher.com

1.4. Emergency Telephone Number

Emergency Number : For Chemical Emergency Call CHEMTREC day or night
Within USA and Canada: 1.800.424.9300
Outside USA and Canada: 1.703.527.3887 (collect calls accepted)

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

Classification of the Substance or Mixture (for exposure to internal components):

Acute toxicity (oral) Category 4	H302
Acute toxicity (inhalation:dust,mist) Category 4	H332
Carcinogenicity Category 1B	H350
Reproductive toxicity Category 1A	H360
Specific target organ toxicity (repeated exposure) Category 2	H373
Hazardous to the aquatic environment – Acute Hazard Category 1	H400
Hazardous to the aquatic environment – Chronic Hazard Category 1	H410

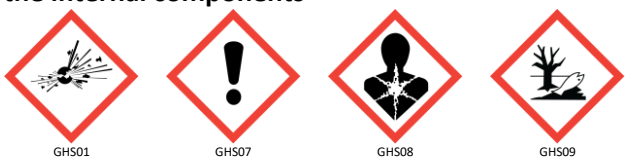
2.2. Label Elements

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)

Health hazards only apply to exposure to the internal components

Hazard Pictograms (GHS-US/CA) :



Signal Word (GHS-US/CA) : Danger

Hazard Statements (GHS-US/CA) : H204 - Fire or projection hazard.
H302+H332 - Harmful if swallowed or if inhaled.
H350 - May cause cancer.
H360 - May damage fertility or the unborn child.

Precautionary Statements (GHS-US/CA) :

H373 - May cause damage to organs through prolonged or repeated exposure.
H410 - Very toxic to aquatic life with long lasting effects.
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe 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.
P273 - Avoid release to the environment.
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P330 - Rinse mouth.
P391 - Collect spillage.
P405 - Store locked up.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P250 - Do not subject to grinding/shock/friction.
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.
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
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 / Normal lead styphnate / Lead styphnate, wetted / Lead(II) 2,4,6-trinitrobenzene-1,3-diolate / 2,4,6-Trinitroresorcinol lead / Lead 2,4,6-Trinitroresorcinoxide / 2,4,6-Trinitro-1,3-phenylenedioxylead(II)	(CAS-No.) 15245-44-0	30 – 60	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
Barium styphnate	Barium bis(2,4,6-trinitroresorcinolate) / 1,3-Benzenediol, 2,4,6-trinitro-, barium salt (2:1) / Resorcinol, 2,4,6-trinitro-, barium salt (2:1)	(CAS-No.) 20236-55-9	30 – 60	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332

Nitrocellulose	Cellulose nitrate / Cellulose, nitrate / Collodion / Guncotton / COLLODION / NITROCELLULOSE / Pyroxylin	(CAS-No.) 9004-70-0	1 – 5	Not classified.
Camphor	Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimethyl- / Bornan-2-one / Camphor, synthetic / Camphor (synthetic) / Synthetic camphor / 2-Bornanone / DL-Camphor / 1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one / dl-Camphor / DL-Bornan-2-one / CAMPHOR / camphor (synthetic) / 1,7,7-Trimethyl-bicyclo[2,2,1]heptanone-2	(CAS-No.) 76-22-2	0.1 – 1	Flam. Sol. 2, H228 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 STOT SE 2, H371 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

*The actual concentration of ingredient(s) is witheld as a trade secret in accordance with 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: Information is only applicable to product contents, and not to product as normally supplied. This information is applicable to damaged, leaking, or spilled product as contact with contents is possible under these conditions. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: For exposure to internal components: Encourage exposed person to cough, spit out, and blow nose to remove dust. Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.

Skin Contact: For exposure to internal components: Remove contaminated clothing. Drench affected area with water for at least 5 minutes. If exposed or concerned: Get medical advice/attention.

Eye Contact: For exposure to internal components: 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: For exposure to internal components: 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. For exposure to internal components: May cause cancer. May damage fertility. May damage the unborn child. Harmful if swallowed. Harmful if inhaled. May cause damage to organs (central nervous system) through prolonged or repeated exposure. Warning! Contains lead. Lead: Exposure can result in lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; encephalopathy; kidney disease; hypertension.

Inhalation: For exposure to internal components: Inhalation is likely to cause adverse health effects including but not limited to: irritation, difficulty breathing, and unconsciousness.

Skin Contact: For exposure to internal components: Skin contact with large amounts of dust may cause mechanical irritation.

Eye Contact: For exposure to internal components: Eye contact with dust may cause mechanical irritation.

Ingestion: For exposure to internal components: This material is harmful orally and can cause adverse health effects or death in significant amounts.

Chronic Symptoms: For exposure to internal components: May damage fertility or the unborn child. May cause damage to organs (central nervous system) through prolonged or repeated exposure.

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: Risk of explosion if heated under confinement. Risk of explosion by shock, friction, fire or other sources of ignition.

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: Barium oxides. Oxides of lead. Carbon oxides (CO, CO_2). Nitrogen oxides. Combustion produces irritating gases and vapors.

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: Evacuate danger area. Remove ignition sources. Keep away from heat, sparks, open flames, hot surfaces. – No smoking. Do not get in eyes, on skin, or on clothing. Do not breathe dust.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel. Evacuate danger area.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Eliminate ignition sources. Evacuate unnecessary personnel. 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. Collect spillage.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Remove ignition sources. 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. Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal. Use only non-sparking tools. Be careful to avoid shock, friction, and contact with grit. Collect product for recovery or disposal. For release to land, contain discharge by constructing dykes or applying inert absorbent; for release to water, utilize damming and/or water diversion to minimize the spread of contamination. Collect contaminated soil and water, and absorbent for proper disposal. Notify applicable government authority if release is reportable or could adversely affect the environment. 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: Avoid dust production.

Precautions for Safe Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from sources of ignition - No smoking. Do not subject to grinding, shock, friction. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Handle empty containers with care because they may still present a hazard. Use only outdoors or in a well-ventilated area. Keep shunt on device until ready to install.

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 in dry protected location.

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

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

7.3. Specific End Use(s)

Pyrotechnic - actuated device that produces linear motion.

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.

Camphor (76-22-2)		
USA ACGIH	ACGIH OEL TWA [ppm]	2 ppm (synthetic)
USA ACGIH	ACGIH OEL STEL [ppm]	3 ppm (synthetic)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen synthetic
USA OSHA	OSHA PEL (TWA) [1]	2 mg/m³
USA NIOSH	NIOSH REL (TWA)	2 mg/m³ (synthetic)
USA IDLH	IDLH	200 mg/m³ (synthetic)
Alberta	OEL STEL	19 mg/m³ (synthetic)
Alberta	OEL STEL	3 ppm (synthetic)
Alberta	OEL TWA	12 mg/m³ (synthetic)
Alberta	OEL TWA	2 ppm (synthetic)
British Columbia	OEL STEL	3 ppm
British Columbia	OEL TWA	2 ppm
Manitoba	OEL STEL	3 ppm (synthetic)
Manitoba	OEL TWA	2 ppm (synthetic)
New Brunswick	OEL STEL	3 ppm (synthetic)
New Brunswick	OEL TWA	2 ppm (synthetic)
Newfoundland & Labrador	OEL STEL	3 ppm (synthetic)
Newfoundland & Labrador	OEL TWA	2 ppm (synthetic)
Nova Scotia	OEL STEL	3 ppm (synthetic)
Nova Scotia	OEL TWA	2 ppm (synthetic)
Nunavut	OEL STEL	3 ppm (synthetic)
Nunavut	OEL TWA	2 ppm (synthetic)
Northwest Territories	OEL STEL	3 ppm (synthetic)
Northwest Territories	OEL TWA	2 ppm (synthetic)
Ontario	OEL STEL	3 ppm (synthetic)
Ontario	OEL TWA	2 ppm (synthetic)
Prince Edward Island	OEL STEL	3 ppm (synthetic)
Prince Edward Island	OEL TWA	2 ppm (synthetic)
Québec	VECD (OEL STEV)	19 mg/m³ (synthetic)
Québec	VECD (OEL STEV)	3 ppm (synthetic)
Québec	VEMP (OEL TWAEV)	12 mg/m³ (synthetic)
Québec	VEMP (OEL TWAEV)	2 ppm (synthetic)
Saskatchewan	OEL STEL	3 ppm
Saskatchewan	OEL TWA	2 ppm
Yukon	OEL STEL	18 mg/m³ (synthetic)
Yukon	OEL STEL	3 ppm (synthetic)
Yukon	OEL TWA	12 mg/m³ (synthetic)

Yukon	OEL TWA	2 ppm (synthetic)
Lead compounds, organic		
Ontario	OEL TWA	0.05 mg/m³ (designated substances regulation, except Tetraethyllead (Lead, elemental Lead, inorganic and organic compounds of Lead)

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. 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: Wear suitable protective clothing.

Hand Protection: Wear protection against mechanical hazards. For exposure to internal components wear appropriate chemical gloves.

Eye and Face Protection: Safety glasses or chemical goggles.

Skin and Body Protection: 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	:	No data available
Odor	:	No data available
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	:	No data available
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:

Risk of explosion if heated under confinement.

10.3. Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

10.4. Conditions to Avoid:

Avoid creating or spreading dust. 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: Potassium oxides. Carbon oxides (CO, CO_2). Nitrogen oxides. Barium oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity (Oral): Harmful if swallowed.

Acute Toxicity (Dermal): Not classified.

Acute Toxicity (Inhalation): Harmful if inhaled.

LD50 and LC50 Data:

1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)	
ATE US/CA (oral)	510.98 mg/kg body weight
ATE US/CA (dust, mist)	1.54 mg/l/4h

Skin Corrosion/Irritation: Not classified.

Eye Damage/Irritation: Not classified.

Respiratory or Skin Sensitization: Not classified.

Germ Cell Mutagenicity: Not classified.

Carcinogenicity: May cause cancer.

Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs through prolonged or repeated exposure.

Reproductive Toxicity: May damage fertility or the unborn child.

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

Aspiration Hazard: Not classified.

Symptoms/Injuries After Inhalation: For exposure to internal components: Inhalation is likely to cause adverse health effects including but not limited to: irritation, difficulty breathing, and unconsciousness.

Symptoms/Injuries After Skin Contact: For exposure to internal components: Skin contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Eye Contact: For exposure to internal components: Eye contact with dust may cause mechanical irritation.

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

Chronic Symptoms: For exposure to internal components: May damage fertility or the unborn child. May cause damage to organs (central nervous system) through prolonged or repeated exposure.

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 (Source: ECHA_API)
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

Nitrocellulose (9004-70-0)	
LD50 Oral Rat	5000 mg/kg

Camphor (76-22-2)	
LD50 Dermal Rat	> 2000 mg/kg (Source: ECHA_API)
ATE US/CA (oral)	500.00 mg/kg body weight
ATE US/CA (dust, mist)	1.50 mg/l/4h

Barium styphnate (20236-55-9)	
ATE US/CA (oral)	500.00 mg/kg body weight

ATE US/CA (dust, mist)	1.50 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.

Lead compounds, organic	
IARC Group	3

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Very toxic 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

Nitrocellulose (9004-70-0)	
ErC50 algae	579 mg/l

Camphor (76-22-2)	
LC50 Fish 1	33.25 mg/l (Exposure time: 96 h - Species: Danio rerio)
EC50 - Crustacea [1]	4.23 mg/l (Exposure time: 48 h - Species: Daphnia magna)
ErC50 algae	1.71 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata [static])
NOEC Chronic Algae	0.032 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata [static])

12.2. Persistence and Degradability

1MT1311 Piston Actuator	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

1MT1311 Piston Actuator	
Bioaccumulative Potential	Not established.

1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0)	
Partition coefficient n-octanol/water (Log Pow)	-2.19 at 20 °C / 68 °F)

Camphor (76-22-2)	
Partition coefficient n-octanol/water (Log Pow)	2.414 at 25 °C / 77 °F)

12.4. Mobility in Soil

No additional information available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Contact a licensed professional waste disposal service capable of handling waste explosives. Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations. Do not dispose of waste into sewer. Do not empty into drains.

Ecology - Waste Materials: Avoid release to the 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

APPROVAL No. EX2010030388

Proper Shipping Name : CARTRIDGES, POWER DEVICE
Hazard Class : 1.4S
Identification Number : UN0323
Label Codes : 1.4S

Marine Pollutant : Marine pollutant

14.2. In Accordance with IMDG

Proper Shipping Name : CARTRIDGES, POWER DEVICE
Hazard Class : 1.4S
Identification Number : UN0323
Label Codes : 1.4S

EmS-No. (Fire) : F-B
EmS-No. (Spillage) : S-X
Marine pollutant : Marine pollutant

14.3. In Accordance with IATA

Proper Shipping Name : CARTRIDGES, POWER DEVICE
Hazard Class : 1.4S
Identification Number : UN0323
Label Codes : 1.4S

ERG Code (IATA) : 3L

14.4. In Accordance with TDG

Proper Shipping Name : CARTRIDGES, POWER DEVICE
Hazard Class : 1.4S
Identification Number : UN0323
Label Codes : 1.4S

Packing Group : II
Marine Pollutant (TDG) : Marine pollutant

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

1MT1311 Piston Actuator	
SARA Section 311/312 Hazard Classes	Physical hazard - Explosive Health hazard - Carcinogenicity Health hazard - Specific target organ toxicity (single or repeated exposure) Health hazard - Reproductive toxicity 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

Nitrocellulose (9004-70-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

Camphor (76-22-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Lead compounds, organic (Not Applicable)	
Subject to reporting requirements of United States SARA Section 313	
SARA Section 313 - Emission Reporting	(not eligible for the de minimis exemption)

15.2. US State Regulations

State or local regulations

California Proposition 65

WARNING: This product can expose you to 1,3-Benzenediol, 2,4,6-trinitro-, lead salt, 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			

**Falls under Lead and Lead Compounds.*

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

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

Camphor (76-22-2)
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)

Nitrocellulose (9004-70-0)
Listed on the Canadian DSL (Domestic Substances List)

Camphor (76-22-2)
Listed on the Canadian DSL (Domestic Substances List)

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

Date of Preparation or Latest Revision : 07/01/2024

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:

Expl. 1.4	Explosive Category 1.4
H228	Flammable solid
H302	Harmful if swallowed
H332	Harmful if inhaled
H350	May cause cancer
H360	May damage fertility or the unborn child
H371	May cause damage to organs
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

Glossary of Data Source Abbreviations

ATSDR: Agency for Toxic Substances and Disease Registry (U.S. Department of Health and Human Services)
AU_WES: Australia WES
CHEMVIEW: ChemView (U.S. Environmental Protection Agency)
EC_RAR: European Commission Renewal Assessment Report
EC_SCOEL: European Commission Scientific Committee on Occupational Exposure Limits
ECETOC: European Centre for Ecotoxicology and Toxicology of Chemicals Reports
ECHA_API: European Chemicals Agency API
ECHA_RAC: ECHA Committee for Risk Assessment
EFSA: European Food Safety Authority
EPA: U.S. Environmental Protection Agency
EPA_AEGL: Acute Exposure Guideline Levels (U.S. Environmental Protection Agency)
EPA_FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act Reregistration Eligibility Decision (U.S. Environmental Protection Agency)
EPA_HPV: High Production Volume Chemicals (U.S. Environmental Protection Agency)
EPA_TRED: Risk Assessment for Tolerance Reassessment Eligibility Decision (U.S. Environmental Protection Agency)
EU_CLH: European Union Harmonised Classification and Labelling Proposal
EU_RAR: European Union Risk Assessment Report
FOOD_JOURN: Food Research Journal (1956)
IARC: The International Agency for Research on Cancer
IDLH: National Institute for Occupational Health and Safety Immediately Dangerous to Life or Health Value Profiles
IUCLID: International Uniform Chemical Information Database
JAPAN_GHS: Japan GHS Basis for Classification Data
JP_J-CHECK: Japan J-Check
KR_NIER: South Korea National Institute of Environmental Research Evaluations
NICNAS: Australia National Industrial Chemicals Notification and Assessment Scheme
NIOSH: National Institute for Occupational Health and Safety (U.S. Department of Health and Human Services)
NLM_CIP: National Library of Medicine ChemID plus database
NLM_HSDB: National Library of Medicine Hazardous Substance Data Bank
NLM_PUBMED: National Library of Medicine PubMed database
NTP: National Toxicology Program
NZ_CCID: New Zealand Chemical Classification and Information Database
OECD_EHSP: Environment, Health, and Safety Publication (Organisation for Economic Co-operation and Development)
OECD_SIDS: Screening Information Data Sets (Organisation for Economic Co-operation and Development)
WHO: World Health Organization

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