

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:

Trade Name/Synonyms	Product Number(s)	Net Explosive Weight (g, Maximum)
Cartridge, Fire Extinguisher		0.362
Cartridge, Fire Extinguisher		0.362

This is a manufactured article.

Recommended Use/Restrictions on Use: Use per manufacturer's design and intended use only.

Manufacturer CAGE Code: 54181

Pacific Scientific Energetic Materials Company
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Chandler, Arizona 85226-5111

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2. HAZARDS IDENTIFICATION

Only qualified personnel experienced in the management of explosives should handle or use.

Statements		
Physical Hazards	Health Hazards	Environmental Hazards
H204 - Fire or Projection Hazard	No health hazards are present when product is used as intended.	No environmental precautions are required when product is used as intended.

Signal Word:

Warning

Hazard Class:

Explosive (Category 1.4)



Precautionary Statements

General

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P210 - Keep away from heat/sparks/open flames/hot surfaces. No Smoking.

P250 - Do not subject to shock, impact, friction, electrostatic discharge, high pressure or high temperature

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Safety Data Sheet

P283 - Wear fire/flammable resistant/retardant clothing
P243 - Take precautionary measures against static discharge.
Emergency Response
P370 - In case of fire: Evacuate area; Do not attempt to fight fires.
P372 - Explosion risk in case of fire except if explosives are 1.4 AMUNITION AND COMPONENTS THEREOF.
P374 - Fight fire with normal precautions from a reasonable distance if explosives are 1.4 AMMUNITION AND COMPONENTS THEREOF.
P375 - Fight Fire Remotely due to risk of explosion
P380 - Evacuate area.
Storage
P401 - Store in accordance with federal, state and local regulations concerning storage and handling of explosives.
Disposal
P501 - Dispose of contents/container in accordance with local/regional/national/international regulation concerning disposal of explosives.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	EC Number	% of Article weight
2,2',4,4',6,6'-Hexanitrostilbene (HNS)	20062-22-0	243-494-5	≤1
Potassium Perchlorate	7778-74-7	231-912-9	≤1
Zirconium	7440-67-7	NE	≤1
tetraammine - <i>cis</i> - <i>bis</i> (5-nitro-2H-tetraazolato-N2) - cobaltIIIperchlorate (BNCP)	178959-25-6	NE	≤1
Stainless Steel	Mixture	NE	≤ 99

***Exact percentage is withheld as a trade secret in accordance with 29 CFR 1910.1200(i). No chemical is present in an amount greater than cut-off values per 29 CFR 1910.1200 (Appendix A). Product is sealed article preventing exposure to chemical mixture(s).

4. FIRST AID MEASURES

EYES: Not a hazard in normal industrial use. Seek medical attention if needed.

SKIN: Not a hazard in normal industrial use. Seek medical attention if needed.

INHALATION: Not a hazard in normal industrial use. Seek medical attention if needed.

INGESTION: Not a hazard in normal industrial use. Seek medical attention if needed.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Water

HAZARDOUS COMBUSTION PRODUCTS: Fragmentation, heat, and trace amounts of nitrogen and carbon oxides may be emitted during ignition.

6. ACCIDENTAL RELEASE MEASURES

If product seal ruptures, barricade area, eliminate ignition sources. Wet remaining material with water, soap/water solution or equivalent desensitizing solution. Keep spilled material wet to minimize ignition potential. Dispose of material and contaminated media as hazardous waste.

7. HANDLING AND STORAGE

HANDLING: Use and handling should be limited to experienced personnel qualified to manage explosives in accordance with applicable safety guidelines and regulations.

STORAGE: Store only in approved storage facilities. Keep product cool and dry in storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS: No regulatory limits apply; sealed article.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

EYE PROTECTION: Industrial safety glasses meeting ANSI Z87.1 standard or equivalent.

GLOVES: Not required when handling sealed units.

CLOTHING: High cotton-content clothing (>65%), as well as conductive shoes or leg stat(s), wrist stat(s) and a static-dissipative coat are recommended to avoid static electricity build-up.

RESPIRATORY PROTECTION: Not required when handling sealed units.

VENTILATION: Not required when handling sealed units.

OTHER PROTECTION: None indicated.

ENGINEERING CONTROLS: Grounding or other controls are recommended to reduce static electricity build-up.

EXPOSURE GUIDELINES: Measurable exposure is not likely for this product in handling of sealed units.

9. PHYSICAL AND CHEMICAL PROPERTIES

a) APPEARANCE:	Metallic Ordnance Hardware
b) ODOR:	Odorless
c) ODOR THRESHOLD:	Not Applicable
d) pH @ 25°C:	Not Applicable
e) MELTING/FREEZING POINT:	Not Applicable
f) BOILING POINT:	Not Applicable
g) FLASH POINT:	Not Applicable

h) EVAPORATION RATE:	Not Applicable
i) FLAMMABILITY:	Not Applicable
j) FLAMMABILITY/EXPLOSIVE LIMIT:	Not Applicable
k) VAPOR PRESSURE:	Not Applicable
l) VAPOR DENSITY:	Not Applicable
m) RELATIVE DENSITY:	Greater than 1
n) SOLUBILITY IN H₂O:	Insoluble
o) PARTITION COEFFICIENT:	Not Applicable
p) AUTO-IGNITION TEMPERATURE:	400°F (205°C) [BNCP]
q) VISCOSITY:	Not Applicable

10. STABILITY AND REACTIVITY

- a) **REACTIVITY:** Stable when used and handled as designed.
- b) **CHEMICAL STABILITY:** This explosive product is stable under normal conditions.
- c) **POSSIBILITY OF HAZARDOUS REACTIONS:** Minimal when handled in accordance with manufacturer's instruction.
- d) **CONDITIONS TO AVOID:** Shock, impact, friction, electrostatic discharge, high pressure, high temperature, and/or open flame.
- e) **INCOMPATIBLE MATERIALS:** The product is sealed preventing exposure to the hazardous ingredients inside.
- f) **HAZARDOUS DECOMPOSITION PRODUCTS:** Fragmentation, heat, and trace amounts of nitrogen and carbon oxides may be emitted during ignition.

11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS / TOXICOLOGY: Not applicable to product in present form.

12. ECOLOGICAL INFORMATION

Not applicable to product in present form.

13. DISPOSAL CONSIDERATIONS

FEDERAL WASTE CODES (product as manufactured):

D003 - reactive characteristic

WASTE DISPOSAL METHOD: Waste disposal should be in accordance with existing federal, state and local environmental laws.

14. TRANSPORT INFORMATION

This product is defined by the U.S. Department of Transportation (49 CFR 172.101).
Shipping classification is in accordance with section 173.56.

Part Number	Proper Shipping Name	UN No.	Hazard Class.	EX-Number
	Articles, explosive, n.o.s. (BNCP)	UN0471	1.4E	SP8451
	Articles, explosive, n.o.s. (BNCP)	UN0471	1.4E	SP8451

Packaging: Package in accordance with the Competent Authority for the United States DOT Classification of Explosives approval.

15. REGULATORY INFORMATION

OSHA: Regulated under 29 CFR 1910.1200

TSCA: As a sealed device, TSCA listing is not required.

CERCLA RQ: 100 lbs. (45.4 kg) [D003 reactivity]

SARA - SECTION 302 TPQ: Not an Extremely Hazardous Substance.

- **SECTION 304 RQ:** See CERCLA RQ.

- **SECTION 313:** Not reportable

CALIFORNIA PROPOSITION 65: The product and its hazardous components are not on the list.

16. OTHER INFORMATION

NFPA RATINGS (Sealed product rating):

Health: 1 Flammability: 1 Instability: 4

REVISION HISTORY

Initial issue: 5/27/1999

Rev: 8/25/2014

PREPARED BY: PSEMC Environmental, Health & Safety Dept.

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