



Baker, Yul <yul.baker@dot.gov>

Fwd: Request for Interpretation

1 message

INFOCNTR (PHMSA) <infocntr.infocntr@dot.gov>

Wed, Sep 2, 2026 at 3:32 PM

To: "Baker, Yul (PHMSA)" <yul.baker@dot.gov>

Cc: Hazmat Interps <hazmatinterps@dot.gov>

Good afternoon,

Please see the following request for a letter of interpretation. Let us know if you need anything else.

Best,

Aminah

----- Forwarded message -----

From: **Vanessa Lumia** <vanessa.lumia@aircanada.ca>

Date: Wed, Sep 2, 2026 at 1:55 PM

Subject: Request for Interpretation

To: phmsa.hm-infocenter@dot.gov <phmsa.hm-infocenter@dot.gov>

Hello,

Requested by Air Canada

[740 boul. de la Cote Vertu O.](#)

Dorval, QC, H4S 1Y9

On behalf of Air Canada, we would like to request a letter of interpretation regarding the classification of an explosive part from Pacific Scientific 48000306-1 when part of a higher assembly for an EPAS cutter PN 2-501070-8.

As per EX2014010248, when the squib 48000306-1 is part of a higher assembly for an EPAS cutter PN 2-501070-8, the classification is not regulated as Class 1 Hazardous Material.

The squib from Ametek, PN M48000306-1, can be used in the place the Pacific Scientific 48000306-1 for the higher part assembly from Pacific Scientific PN 2-501070-8. When using the Ametek squib in the higher assembly, is the "not regulated" classification still applicable? Essentially we are requesting an interpretation to see if the EX2014010248 is only applicable when using the Pacific Scientific squib PN 48000306-1 in the higher part assembly PN 2-501070-8.

Please let me know if you require additional information.

Thank you for your assistance on this matter.

Regards,

**AIR CANADA****Vanessa Lumia**

Dangerous Goods Compliance

Marchandises dangereuse

T 514 422-2691

vanessa.lumia@aircanada.ca

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2 attachments



48000306-1 B787 EPAS Cutter MSDS 2021-03-04.pdf
411K



EX2014010248 - NOT CLASSIFIED AS HAZMAT BY DOT.PDF
797K



U.S. Department
of Transportation

Pipeline and Hazardous
Materials Safety Administration

The US Department of Transportation
Competent Authority for the United States

East Building, PHH – 32
1200 New Jersey Avenue, Southeast
Washington, D.C. 20590

CLASSIFICATION OF EXPLOSIVES

Based upon a request by Pacific Scientific, 7073 West Willis Drive, Box 5002, Chandler, AZ 85226, United States the following items are classed in accordance with Section 173.56, Title 49, Code of Federal Regulations (49 CFR). A copy of your application, all supporting documentation and a copy of this approval must be retained and made available to DOT upon request.

U.N. PROPER SHIPPING NAME AND NUMBER:

Not regulated as a Class 1 Hazardous Material

U.N. CLASSIFICATION CODE: Not Class 1

REFERENCE NUMBER

EX2014010248

PRODUCT DESIGNATION/PART NUMBER

Gas Bottle Actuator (P/N's: 2-502220-1, 2-502880-1, L6668785), Tube Cutter Assembly (P/N's: 2-503080-1, 2237673, 2276495), Pneumatic Accumulator Burst Disk Cutter (P/N's: 2-501070, 2-501070-2, 2-501070-3, 2-501070-4, 2-501070-5, 2-501070-6, 2-501070-7, 2-501070-8, 2-501070-9, 2-501070-10, 104981), Burst Disk Cutter (P/N's: 2-501680-1, 2-502680-1, 2-502870-1, 2-502870-2), Piston Actuator (P/N: 2-502370-1)

NOTES: None

DATED: 07/16/2014

For Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety



Material Safety Data Sheet

Cutter, Burst Disk-EPAS

Emergency Power Assist System

PACIFIC SCIENTIFIC COMPANY MPN 48000306-1
Pacific Scientific Energetic Materials Co. 2-501070-8 Based

MSDS Number/Specifying Letter: 00005 B8 HTL

Shipping Reference Number: US DOT Competent Authority: EX2014010248

SECTION I. IDENTIFICATION

Recycler's/Manufacturer's Name PACIFIC SCIENTIFIC / HTL
[MEGGITT SAFETY SYSTEMS, INC.]
Address 1785 Voyager Ave
Simi Valley, California 93063
Emergency Phone Number 1 (805) 584 4100
Issued - - -

SECTION II. INFORMATION ON COMPONENTS/INGREDIENTS

NET EXPLOSIVE WEIGHT (NEW) : 10 – 12 mg

HAZARDOUS INGREDIENTS

The following table contains the hazardous materials that are below the required reporting levels per OSHA, 29 CFT 1900.1200 (<1% or <0.1 %, if carcinogenic) :

COMPONENT NAME	CAS NUMBER	COMPONENT NAME	CAS NUMBER
ZIRCONIUM [Zr] (metal powder)	7440-67-7	boron nitride [BN]	10043-11-5
Potassium perchlorate [KP]	7778-74-7	difluoroethene-hexafluoro-	25190-89-0
Graphite [C] (amorphous powder)	7782-42-5	propene-tetrafluoroethene terpolymer	

SECTION III. HAZARDS IDENTIFICATION

Emergency Overview

WARNING: Explosive Product! Do not attempt to manually fight fires. Product may be sensitive to shock, impact, friction, electrostatic discharge, high pressure or high temperature. Product may ignite and explode if exposed to any of these conditions, releasing toxic fumes, heat, shock waves, and container fragments.

POTENTIAL HEALTH EFFECTS (ACUTE AND CHRONIC)

EYES: The product is sealed preventing exposure to the hazardous ingredients inside. If product seal ruptures exposing hazardous ingredients inside, discard product avoiding contact with the eyes. Exposure to ignition products may cause eye irritation.

SKIN: The Product is sealed preventing exposure to the hazardous ingredients inside. If product seal ruptures, discard product avoiding contact with the skin. Poses little or no immediate hazard. Exposure to ignition products may cause skin irritation.

INHALATION: The Product is sealed preventing exposure to the hazardous ingredients inside. Exposure to ignition products may cause respiratory irritation. Ignition products will contain zirconium compounds and other trace reaction products, including potassium chloride dust. Boron nitride may also be ejected, when possible.

INGESTION: Not a hazard in normal industrial use. If product seal ruptures, discard product using proper protection. Some ingredients are highly poisonous by ingestion.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing pulmonary diseases such as emphysema, asthma, etc. may be aggravated by overexposure to ignition products.

CARCINOGENICITY (CANCER) LISTING STATUS

OSHA, IARC, NTP, NIOSH and ACGIH: Neither the product nor it's hazardous Components are listed.

REFER TO SECTION 11, TOXICOLOGICAL INFORMATION, FOR ADDITIONAL DATA.

SECTION IV. FIRST AID MEASURES

EYES: If exposed to container fragmentation, bandage eyes and transport. If exposed to ignition products, remove contact lenses immediately, flush with water for at least 15 minutes, occasionally lifting upper and lower eyelids. Seek medical attention if needed.

SKIN: Wash off any residue with soap and warm water. Seek medical attention if irritation develops.

INHALATION: Remove to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, administer oxygen. Seek immediate medical attention.

INGESTION: Seek immediate medical attention.

NOTE TO PHYSICIAN: Supportive care. Product ignition produces small quantities of zirconium compounds and other trace reaction products, including potassium chloride dust. Boron nitride may also be ejected, when possible.

Treatment based on judgement of the physician in response to reactions of the patient.

SECTION V. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flash Point:	Not Applicable
Method Used:	Not Applicable
Lower Flammable Limit:	Self-Oxidizing
Upper Flammable Limit:	Self-Oxidizing
Autoignition Temperature:	>500 degrees F (>260 degrees C)

FIRE AND EXPLOSION HAZARD: WARNING – Explosive Product! Product may be sensitive to shock, impact, friction, electrostatic discharge, high pressure or high temperature. Must not be confined if burning. Product may deflagrate or detonate if exposed releasing toxic fumes, heat, shock waves, and container fragments.

EXTINGUISHING MEDIA: Permanently-installed, automatic water sprinkler/deluge system is recommended.

FIRE FIGHTING INSTRUCTIONS: Do not attempt to manually fight fires. In case of fire, personnel should immediately evacuate the area, using as much protective cover as possible and activate deluge and alarm system.

HAZARDOUS COMBUSTION PRODUCTS: Extreme heat and toxic gases containing zirconium compounds and other trace reaction products, including potassium chloride dust may be emitted during ignition. Boron nitride may also be ejected, when possible.

SECTION VI. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: If product seal ruptures, barricade area, eliminate ignition sources, use a soft bristle brush and a conductive rubber pan or rubber shovel to clean-up spills. Use conductive containers and ground all containers when transferring the spilled material. Refer to Section 9 for the proper desensitizing agent to wet and desensitize the spilled material.

LARGE SPILL

SOIL SPILL: Remove all contaminated soil to dispose of as hazardous waste.

AIR RELEASE: Not applicable

WATER SPILL: Flush with copious amounts of water. Collect water to dispose of as hazardous waste.

OCCUPATIONAL SPILL: If product seal ruptures, barricade area and eliminate ignition sources. Refer to SMALL SPILL above.

SECTION VII. HANDLING AND STORAGE

HANDLING: Handling and use of explosives and related dangerous materials must be limited to personnel who are specifically authorized and trained in this area. Refer to the Department of Defense Contactors Safety Manual number DOD 4145.26M, including sources listed within, and any other appropriate information for detailed instructions regarding proper handling, storage, use and disposal of explosives and related dangerous material.

STORAGE: Store in approved storage magazines only. Storage and handling must conform to appropriate quantity/distance requirements, barricading, grounding and personnel material limits. Keep product cool and dry in storage.

SECTION VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

EYE PROTECTION: Industrial safety glasses or goggles must be worn when handling any type of explosive product.

SKIN PROTECTION

GLOVES: Impervious, static-dissipative gloves are recommended if product seal ruptures.

CLOTHING: High cotton-content clothing and underclothing, as well as conductive shoes or legstat(s), wristat(s) and a static-dissipative coat, are recommended to avoid static electricity build-up.

EMERGENCY WASH FACILITY: Eye washing capability is required.

RESPIRATORY PROTECTION: Appropriate a NIOSH-approved respiratory protection is recommended if exposed to particulate mater, and, for protection against toxic gaseous ignition products, but should not be necessary with normal handling.

OTHER PROTECTION: None indicated.

ENGINEERING CONTROLS: Effective shielding is recommended for personnel when handling these devices. Humidity control (i.e. higher relative humidity, >60% as recommended by DOD) reduces or prevents static electricity build-up. Explosion-proof equipment is required when operating with exposed explosive materials.

VENTILATION

LOCAL: Not required

SPECIAL: Explosion-proof electrical is required, where applicable

MECHANICAL: General-coverage, moderate-flow, is recommended for particulate and ignition product removal.

EXPOSURE GUIDELINES: Measurable exposure is not likely for this product in normal handling.

SECTION IX. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	metallic ordnance hardware
ODOR:	odorless
PHYSICAL STATE:	solid
ph@25 degrees C:	not determined
VAPOR PRESSURE:	not applicable, sealed product
VAPOR DENSITY:	not applicable, sealed product
BOILING POINT:	not applicable
MELTING POINT:	not applicable
SOLUBILITY IN H2O:	negligible
SPECIFIC GRAVITY (H2O=1):	greater than 1
BULK DENSITY:	greater than 1, identical to specific gravity
CHEMICAL FAMILY:	not applicable
MOLECULAR WEIGHT:	not applicable
MOLECULAR FORMULA:	not applicable
VISCOSITY:	not applicable
EVAPRATION RATE:	not applicable, sealed product
DECOMPOSITION TEMP:	>500 degrees F (260 degrees C) by auto-ignition
DESENSITIZING AGENT:	<u>CAUTION:</u> The product may only be desensitized if large volumes of water or mineral oil come in contact with the explosive components inside. Sealed units should be shunted and disposed of in accordance with Section 13.
VOC CONTENT:	none

SECTION X. STABILITY AND REACTIVITY

CHEMICAL STABILITY: This explosive product is stable if handled properly. Avoid conditions listed below.

CONDITIONS TO AVOID: Shock, impact, friction, electrostatic discharge, high pressure, high temperature, open flame, or chemical or physical contamination.

INCOMPATIBILITY WITH OTHER MATERIALS: The product is sealed preventing exposure to the hazardous ingredients inside. If the seal ruptures remove all other hazardous material.

HAZARDOUS DECOMPOSITION PRODUCTS: Extreme heat and toxic gases containing zirconium compounds and other trace reaction products, including, potassium chloride dust may be emitted during ignition. Boron nitride may also be ejected, when possible.

The product may not release any of the above products or sufficient heat to be of note at all, dependent on design and quantity of explosive material.

SECTION XI. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS/TOXICOLOGY: The product is sealed preventing exposure to the hazardous ingredients inside. If the seal ruptures, remove all other hazardous materials. The small quantities of hazardous components involved in each device is unlikely to cause any chronic health effects or even notable acute effects, if released.

SECTION XII. ECOLOGICAL INFORMATION The product is sealed preventing exposure to the hazardous ingredients inside. If the seal ruptures, the small amount of hazardous ingredients inside should have no ecological impact.

SECTION XIII. DISPOSAL CONSIDERATIONS

RCRA HAZARDOUS WASTE CODES (product as manufactured):

D003 – reactive characteristic

WASTE DISPOSAL METHOD: Explosive or related dangerous material should be destroyed by open burning/open detonation in an approved incinerator, or by another approved method such as chemical treatment/destruction. Contaminated property must not be buried.

REGULATIONS GOVERNING TREATMENT, STORAGE AND DISPOSAL OF HAZARDOUS WASTE IS SUBJECT TO CHANGE AND REINTERPRETATION. SINCE THE OWNER OF THE WASTE IS RESPONSIBLE FOR PROPER DISPOSAL, CHECK WITH FEDERAL, STATE AND LOCAL ENVIRONMENTAL AGENCIES IF IN DOUBT OF THE REQUIREMENTS OF APPLICABLE LAWS, RULES AND REGULATIONS, TREATMENT, STORAGE AND DISPOSAL MUST BE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS.

SECTION XIV. TRANSPORT INFORMATION

See EX2014010248 for classification information.

SECTION XV. REGULATORY INFORMATION**U.S. REGULATIONS****FEDERAL**

OSHA: Regulated under 29 CFR 1910.1200

TSCA: All hazardous components should be reported on the inventory.

CERCLA RQ: 100 lbs. (45.4 kg) D0003 reactivity) only when article is compromised.

SARA – SECTION 302 TPQ: Not an Extremely Hazardous Substance

- **SECTION 304 RQ:** Not applicable.
- **SECTION 313:** Not reportable

STATES

CALIFORNIA PROPOSITION 65: The product and its hazardous components contain materials known to the state of California to cause cancer, birth defects, or reproductive harm.

NEW JERSEY RIGHT-TO-KNOW: The product (as EXPLOISVES C) is on the Right-to-Know Hazardous Substance List (rev. 3/93), which consists of both the Workplace Hazardous Substance List and the Environmental Hazardous Substance List.

BUREAU OF ALCOHOL, TOBACCO, FIREARMS, AND EXPLOSIVES (BATFE/ “ATF”): Exempt per 27CFR§555.32, Exemption NN-NNNN.

INTERNATIONAL REGULATIONS

To be determined

SECTION XVI. OTHER INFORMATION**HMIS RATINGS (Sealed product rating)**

HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 4
PERSONAL PROTECTION: A+X

CERCLA or NFPA RATINGS (SCALE 0-4) not yet determined

REVISION HISTORY

Revision 1: 04 March 2021

Initial Issue: 09 March 2011 (N.K. format)

(previous issues SDI Aerospace & PSEMC West LLC issue may have been generated, converted using PSEMC 00005 B8)

PREPARED BY: Meggitt Safety Systems, Inc. Technical Publications

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