

(FOD Economie - SPF Economie)

De: [REDACTED] <[REDACTED]@Challenge-Group.com>
Envoyé: lundi, 8 janvier 2024 09:12
À: Shmb &Explo (FOD Economie - SPF Economie)
Cc: [REDACTED]
Objet: TR: APPROVAL HAZARDOUS / BOOKING REQUEST - 700-7411-9216 JFK TO TLV - GOI/MOD - COLLECT - CAO
Pièces jointes: 20240105142300318.pdf
Catégories: [REDACTED]

Bonjour à tous,

Je vous prie de trouver, en PJ, des documents concernant une demande d'autorisation de transport d'explosifs.

AWB 700-74119216.

Merci de bien vouloir nous accorder cette autorisation.

Bàv,



[REDACTED]
Customer Service Agent

Phone

Mobile

Email [REDACTED]@Challenge-Group.com



**Challenge
Airlines** 

4 Oren Street, Building A, High Port
P.O.B 1901 Shoham 6085102 Israel

www.challenge-group.com

Challenge Group 
Challenge Accepted



MEET US AT AIR CARGO INDIA!

FEB 14-16, 2024

JIO WORLD CONVENTION CENTRE, MUMBAI – BOOTH 21

I N D I R E C T A I R C A R R I E R C E R T I F I C A T E

INTERGLOBAL FORWARDING SERVICE INC
1A COLONY ROAD
JERSEY CITY NJ 07305
22-2443386
TELEPHONE NUMBER : 2018588560
TSA APPROVAL NUMBER: EA9402060

Airline: C.A.L. CARGO AIR LINES LTD

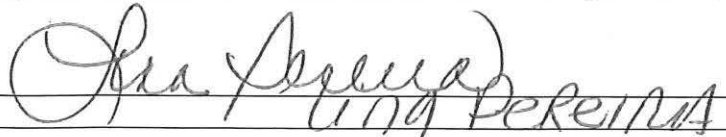
| | | | |
|----------------|----------------|----------------|----------------|
| Air Waybill | : 700-74119216 | Our Reference: | 01NJAE24669717 |
| Scheduled Flt: | 0552 | Departure | : 12 JAN 24 |
| Origin | : JFK | Destination | : TLV |
| Pieces | : 3 | Gross Wt | : 1931.3 K |

Total Number and name of each unknown shipper represented is 0

Items being offered for transportation less than 16ounces 0

"INTERGLOBAL FORWARDING SERVICE INC
is in compliance with its TSA-approved security program and
all applicable security directives. Our number assigned by
TSA is EA9402060. All cargo tendered in conjunction with
this certification was either 1) accepted from a known
shipper or an unknown shipper in accordance with TSA
requirements specified in the Indirect Air Carrier Standard
Security Program or 2) accepted under transfer from another
aircraft operator, foreign air carrier, or IAC operating
under a TSA-approved or accepted security program. The
individual whose name appears below certifies that he or she
is an employee or authorized representative of
INTERGLOBAL FORWARDING SERVICE INC
and understands that any fraudulent or false statement made
in connection with this certification may subject this
individual and INTERGLOBAL FORWARDING SERVICE INC
to both (1) civil penalties under 49 CFR 1540.103(b) and (2)
fines and/or imprisonment of not more than 5 years under
18 USC 1001."

Signature of IAC Rep.
Print name of IAC Rep.


Lina Pereira

Date 1/5/24

Accepting Airline: C.A.L. CARGO AIR LINES LTD
Airline representative's Signature and ID number: _____

700 | JFK | 7411 9216

700-74119216

| | | | | | | | |
|---|--------------|---|------------|--|-------------------|---|---------|
| Shipper's Name and Address INTERGLOBAL FORWARDING SERVICES INC 1A COLONY ROAD JERSEY CITY NJ 07305 22-2443386 | | Shipper's Account Number <div style="background-color: #cccccc; height: 20px; width: 100%;"></div> | | Not Negotiable CAL CARGO AILINES LTD Air Waybill C/O LUFTHANSA BUILDING 261 JFK INTL AIRPORT JAMAICA NY Issued by TEL. NO.: Copies 1, 2 and 3 of this Air Waybill are originals and have the same validity | | | |
| Consignee's Name and Address GOVERNMENT OF ISRAEL, M. MISRAD HABITACHON HAKIRYA KAPLAN ST, TEL AVIV, ISRAEL 500100581 | | Consignee's Account Number <div style="background-color: #cccccc; height: 20px; width: 100%;"></div> | | It is agreed that the goods described herein are accepted in apparent good order and condition (except as noted) for carriage SUBJECT TO THE CONDITIONS OF THE CONTRACT ON THE REVERSE HEREOF. ALL GOODS MAY BE CARRIED BY ANY OTHER MEANS INCLUDING ROAD HEREON BY THE SHIPPER, AND SHIPPER AGREES THAT THE SHIPMENT MAY BE CARRIED VIA INTERMEDIATE STOPPING PLACES WHICH THE CARRIER DEEMS APPROPRIATE. THE SHIPPER'S ATTENTION IS DRAWN TO THE NOTICE CONCERNING CARRIER'S LIMITATION OF LIABILITY. Shipper may increase such limitation of liability by declaring a higher value for carriage and paying supplemental charge if required. | | | |
| Issuing Carrier's Agent Name and City INTERGLOBAL FORWARDING SERVICES, INC 1A COLONY ROAD JERSEY CITY, NJ 07305 | | Accounting Information FILE# 01NJAE24669717 FLT # 0552 SHP REF 195660 | | DATE 12 JAN 24 BILL IFS001 | | | |
| Agent's IATA Code 0119839012/ | | Account No. <div style="background-color: #cccccc; height: 20px; width: 100%;"></div> | | | | | |
| Airport of Departure (Addr. of First Carrier) and Requested Routing J.F. KENNEDY AIRPORT | | | | Prepared by LINA | | | |
| To TIV | | By First Carrier C.A.L. CARGO AIR LIN | | Currency USD | | Declared Value for Carriage NVD | |
| Airport of Destination REN CURTIS AIRPORT | | Requested Flight/Date 0552/12 | | Amount of Insurance XXX | | Declared Value for Customs NVD | |
| Handling Information DANGEROUS GOODS AS PER ASSOCIATED SHIPPER'S DECLARATION CARGO AIRCRAFT ONLY LOT # E002896 DEST: LL HAWB# 172141 PO# 4441131971 OVERPACK USED P.O. BOX 7022, TEL AVIV, ISRAEL DIMS: 3@48X40X60 These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Ultimate destination ISRAEL | | | | | | | |
| Diversion contrary to U.S. law prohibited <div style="float: right;">SCI</div> | | | | | | | |
| No. of Pieces RCP | Gross Weight | Kg Lb | Rate Class | Commodity Item No. | Chargeable Weight | Rate Charge | Total |
| 3 | 1931.3 | K | | | 1931.5 | 2.86 | 5524.09 |
| UN0303 AMMUNITION SMOKE CLASS 1.4G, P/I: 130 EX-9711093 OVERPACK USED CARGO AIRCRAFT ONLY HS#9306.90 | | | | | | | |
| AES X2024010534B957 | | | | | | | |
| 3 | 1931.3 | | | | | | 5524.09 |
| Prepaid | | Weight Charge | | Collect | | Other Charges | |
| | | | | 5524.09 | | FUEL SURCHARGE (C) 3650.54 FAA SECURITY (C) 347.67 DANGEROUS GOODS (C) 80.00 MANUAL HAWB INP (C) 10.00 | |
| Valuation Charge | | | | | | | |
| Tax | | | | | | | |
| Total Other Charges Due Agent | | | | | | | |
| Total Other Charges Due Carrier | | | | 4088.21 | | | |
| Total Prepaid | | | | Total Collect | | 9612.30 | |
| Currency Conversion Rates | | | | CC Charges in Dest. Currency | | | |
| For Carriers Use only at Destination | | Charges at Destination | | Total Collect Charges | | | |

ORIGINAL (FOR SHIPPER)

700-74119216

Pgm: AM0001
Date: 1/05/24

CONSOLIDATION MANIFEST
G&B PACKING COMPANY, INC.

Page: 1
Time: 14:06:08

| | |
|--------------|--|
| Reference | 195660 |
| MAWB | 700-74119216 |
| Flight# | 0552 ETD: 1/12/24 00:00 ETA: 1/13/24 00:00 |
| Consigned To | GOVERNMENT OF ISRAEL, M.O.D. |
| Carrier | MISRAD HABITACHON HAKIRYA KAPLAN ST, TEL AVIV, ISRAEL |
| File# | C.A.L. CARGO AIR LINES LTD 01NJAE24669717 |
| Origin/Dest | JFK TLV |

| |
|------------------------------------|
| INTERGLOBAL FORWARDING SERVICE INC |
| 1A COLONY ROAD |
| JERSEY CITY NJ 07305 |
| 22-2443386 |
| Tel: 2018588560 |
| Fax: 2013391762 |

| ORG | DES | Forwarders Waybill | File # | Pieces | Kilos | Cbm | Commodity Description |
|-----------------------------------|-----|-----------------------|----------------|--------|---------|-------|--|
| JFK | TLV | 172141 | 01NJAE24669716 | 3 PCS | 1931.3 | 5.663 | UN0303 AMMUNITION SMOKE CLASS 1.4G, P/I:130 EX-9711093 OVERPACK USED CARGO AIRCRAFT ONLY HS#9306.90 AES X20240105343957 |
| NO. OF HOUSE BILLS 1 GRAND TOTAL: | | | | 3 | 1931.38 | 5.663 | |

700 JFK 7411 9216

HAWB: 172141

| | | | | | |
|---|-----------------------------|---|--------|---|-----------------------------------|
| Shipper's Name and Address GOVERNMENT OF ISRAEL MOD 800 SECOND AVENUE NEW YORK, NY 10017 530111477 | | Shipper's Account Number | | Not Negotiable INTERGLOBAL FORWARDING SVCS., INC. Air Waybill 1A COLONY ROAD JERSEY CITY NJ 07305 | |
| Consignee's Name and Address GOVERNMENT OF ISRAEL MOD MISRAD HABITACHON HAKIRYA KAPLAN ST, TEL AVIV, ISRAEL 500100581 | | Consignee's Account Number | | Issued by TEL. NO.: 2013391600 | |
| Issuing Carrier's Agent Name and City INTERGLOBAL FORWARDING SERVICES, INC 1A COLONY ROAD JERSEY CITY, NJ 07305 | | Accounting Information FILE# 01NJAE24669716 FLT # 0552 SHP REF 172141 | | DATE 12 JAN 24 BILL GOINYC | |
| Agent's IATA Code 0119839012/ | | Account No. | | Copies 1, 2 and 3 of this Air Waybill are originals and have the same validity | |
| Airport of Departure (Addr. of First Carrier) and Requested Routing J.F. KENNEDY AIRPORT | | Reference Number PREPARED BY LINA | | Optional Shipping Information | |
| To | By First Carrier | To | By | To | By |
| TIV | INTERGLOBAL FORWARDI | | | | |
| Airport of Destination REN CURTIS AIRPORT | | Requested Flight/Date 0552/12 | | Currency USD | Amount of Insurance XXX |
| Handling Information DANGEROUS GOODS AS PER ASSOCIATED SHIPPER'S DECLARATION CARGO AIRCRAFT ONLY LOT # E002896 DEST: LL HAWB#172141 PO#4441131971 OVERPACK USED P.O. BOX 7022, TEL AVIV, ISRAEL | | Declared Value for Carriage NVD | | Declared Value for Customs [REDACTED] | |
| These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Ultimate destination ISRAEL | | Diversions contrary to U.S. law prohibited | | SCI | |
| No. of Pieces PCP | Gross Weight | Kg | Rate | Total | |
| 3 | 1931.3 | K | 1931.5 | UN0303 AMMUNITION SMOKE CLASS 1.4G, P/I:130 EX-9711093 OVERPACK USED CARGO AIRCRAFT ONLY HS#9306.90 | |
| AES X20240105348957 | | | | | |
| 3 | 1931.3 | | | | |
| Prepaid | | Weight Charge | | Collect | |
| | | Valuation Charge | | | |
| | | Tax | | | |
| | | Total Other Charges Due Agent | | | |
| | | Total Other Charges Due Carrier | | | |
| Total Prepaid | | Total Collect | | | |
| Currency Conversion Rates | | CC Charges in Dest. Currency | | | |
| For Carriers Use only at Destination | | Charges at Destination | | Total Collect Charges | |
| | | | | 172141 | |

ORIGINAL (FOR SHIPPER)

Commercial Invoice

Page 1/1
Invoice LOT 11-23 4230D
Date 11/27/2023



388 Kinsman Road
Jamestown PA 16134

Tel: 724-932-2177
Fax: 724-932-2166
E-Mail: Sales@CombinedSystems.com
FEL - 8-PA-085-20-1D-12510

Bill To: GOVERNMENT OF ISRAEL
MINISTRY OF DEFENSE
HAKIRYA, KAPLAN STREET
TEL AVIV
Israel

Ship To: GOVERNMENT OF ISRAEL
MINISTRY OF DEFENSE
HAKIRYA, KAPLAN STREET
TEL AVIV
Israel

| Purchase Order No. | Payment Terms | Shipping Method | F.O.B. | Rep. | Master No. |
|--------------------|---------------|-----------------|----------|------------|------------|
| 4441131971 | | | | | 41,704 |
| Item Number | Description | | Ordered | Unit Price | Ext. Price |
| 10 | CART 40MM CS | | 7,498.00 | | |

Subtotal

Total

The Contractor (CSI) acknowledges U.S. Government funds are being used by the Government of Israel to finance this purchase and certifies that the invoice(s) submitted with respect thereto are free from any material false statement or misrepresentation and do not omit any material facts.

The Contractor (CSI) acknowledges that U.S. Government funds are being used by the Government of Israel to finance this purchase and certifies that no shipping cost has been incurred by this firm for exporting this materiel from the United States and no shipping cost is included in the sales price or otherwise included in the invoiced amount for which payment is requested.

These items are controlled by the U.S. Government and authorized for export only to ISRAEL for use by GOVERNMENT OF ISRAEL MINISTRY OF DEFENSE. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. Government or as otherwise authorized by U.S. law and regulations.

U.S. DEPARTMENT OF COMMERCE LICENSE D1229674 - ECCN 1A607.e, Schedule B 9306.90.0040

Pack List

Page 1/1
Invoice LOT 11-23 4230D
Date 11/27/2023



388 Kinsman Road
Jamestown PA 16134

Tel: 724-932-2177
Fax: 724-932-2166
E-Mail: Sales@CombinedSystems.com

Bill To: GOVERNMENT OF ISRAEL
MINISTRY OF DEFENSE
HAKIRYA, KAPLAN STREET
TEL AVIV
Israel

Ship To: GOVERNMENT OF ISRAEL
MINISTRY OF DEFENSE
HAKIRYA, KAPLAN STREET
TEL AVIV
Israel

| Purchase Order No. | Payment Terms | Shipping Method | F.O.B. | Rep. | Master No. |
|--------------------|---------------|-----------------|--------|---------|------------|
| 4441131971 | | | | | 41,704 |
| Item Number | Description | | | Ordered | |
| 10 | CART 40MM CS | | | | 7,498 |

The Contractor (CSI) acknowledges U.S. Government funds are being used by the Government of Israel to finance this purchase and certifies that the invoice(s) submitted with respect thereto are free from any material false statement or misrepresentation and do not omit any material facts.

The Contractor (CSI) acknowledges that U.S. Government funds are being used by the Government of Israel to finance this purchase and certifies that no shipping cost has been incurred by this firm for exporting this materiel from the United States and no shipping cost is included in the sales price or otherwise included in the invoiced amount for which payment is requested.

SHIPPER'S DECLARATION FOR DANGEROUS GOODS

| | | | | | | |
|--|---------------------------|--|---------------------------|--|------------------|---------------|
| Shipper COMBINED SYSTEMS, INC. 388 KINSMAN ROAD JAMESTOWN, PA 16134 U.S.A. | | Air Waybill No. 700-7411-9216 Page 1 of 2 Pages Shipper's Reference Number (optional) | | | | |
| Consignee Government of Israel Ministry of Defense Hakirya, Tel Aviv, Israel | | For optional use for Company logo name and address | | | | |
| Two completed and signed copies of this Declaration must be handed to the operator. | | WARNING Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties. | | | | |
| TRANSPORT DETAILS This shipment is within the limitations prescribed for: (delete non-applicable) <table border="1"><tr><td>PASSENGER AND CARGO AIRCRAFT</td><td>CARGO AIRCRAFT ONLY</td></tr></table> | | PASSENGER AND CARGO AIRCRAFT | CARGO AIRCRAFT ONLY | Airport of Departure: JFK New York USA Airport of Destination: Tel Aviv, Israel Shipment type: (delete non-applicable) NON-RADIOACTIVE XXXXXXXXXX | | |
| PASSENGER AND CARGO AIRCRAFT | CARGO AIRCRAFT ONLY | | | | | |
| NATURE AND QUANTITY OF DANGEROUS GOODS | | | | | | |
| Dangerous Goods Identification | | | | | | |
| UN or ID No. | Proper Shipping Name | Class or Division (Subsidiary Risk) | Pack- ing Group | Quantity and type of packing | Packing Inst. | Authorization |
| UN0303 | AMMUNITION SMOKE | 1.4G | | 36 STEEL DRUMS X 23 KILOGRAM NET N.E.W. = 11.20 KILOGRAM OVERPACK USED X2 #1A-2A TOTAL QUANTITY PER OVERPACK 142 KG | 130 | EX-9711093 |
| Additional Handling Information EMERGENCY CONTACT: CHEMTEL++1-813-248-0585 COMBINED SYSTEMS CONTRACT-MIS0007663 36 (1A2) STEEL DRUMS IN OVER-PACK AS 1 SKID FOR HANDLING PURPOSES. TOTAL NET EXPLOSIVE WEIGHT 806.4KG | | | | | | |
| I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable International and national governmental regulations. I declare that all of the applicable air transport requirements have been met. | | | | Name/Title of Signatory MIKE RILEY SHIPPING MANAGER Place and Date JAMESTOWN PA, 22/DEC/2023 Signature (see warning above) | | |

SHIPPER'S DECLARATION FOR DANGEROUS GOODS

| | | | | | | |
|--|---------------------------|--|---------------------------|--|------------------|---------------|
| Shipper COMBINED SYSTEMS, INC. 388 KINSMAN ROAD JAMESTOWN, PA 16134 U.S.A. | | Air Waybill No. 700-7411-9216 Page 2 of 2 Pages Shipper's Reference Number (optional) | | | | |
| Consignee Government of Israel Ministry of Defense Hakirya, Tel Aviv, Israel | | For optional use for Company logo name and address | | | | |
| Two completed and signed copies of this Declaration must be handed to the operator. | | WARNING Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties. | | | | |
| TRANSPORT DETAILS This shipment is within the limitations prescribed for: (delete non-applicable) <table border="1"><tr><td>PASSENGER AND CARGO AIRCRAFT</td><td>CARGO AIRCRAFT ONLY</td></tr></table> | | PASSENGER AND CARGO AIRCRAFT | CARGO AIRCRAFT ONLY | Airport of Departure: JFK New York USA Airport of Destination: Tel Aviv, Israel Shipment type: (delete non-applicable) NON-RADIOACTIVE XXXXXXXXXX | | |
| PASSENGER AND CARGO AIRCRAFT | CARGO AIRCRAFT ONLY | | | | | |
| NATURE AND QUANTITY OF DANGEROUS GOODS | | | | | | |
| Dangerous Goods Identification | | | | | | |
| UN or ID No. | Proper Shipping Name | Class or Division (Subsidiary Risk) | Pack- ing Group | Quantity and type of packing | Packing Inst. | Authorization |
| UN0303 | AMMUNITION SMOKE | 1.4G | | 6 STEEL DRUMS X 23 KILOGRAM NET N.E.W. = 11.20 KILOGRAM 1 STEEL DRUMS X 4 KILOGRAM NET N.E.W. = 1.17 KILOGRAM OVERPACK USED X1 #3A TOTAL QUANTITY PER OVERPACK 142 KG | 130 | EX-9711093 |
| Additional Handling Information EMERGENCY CONTACT: CHEMTEL++1-813-248-0585 COMBINED SYSTEMS CONTRACT-MIS0007663 7 (1A2) STEEL DRUMS IN OVER-PACK AS 1 SKID FOR HANDLING PURPOSES. TOTAL NET EXPLOSIVE WEIGHT 68.37KG | | | | | | |
| I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. I declare that all of the applicable air transport requirements have been met. | | | | Name/Title of Signatory MIKE RILEY SHIPPING MANAGER Place and Date JAMESTOWN PA, 22/DEC/2023 Signature (see warning above) | | |



U.S. Department
of Transportation

Research and
Special Programs
Administration

400 Seventh Street, S.W.
Washington, D.C. 20590

The US Department of Transportation
Competent Authority for the United States

CLASSIFICATION OF EXPLOSIVES

Based upon a request by Lynn R. Coonrod on behalf of Combined Tactical Systems, Inc., 388 Kinsman Road, P.O. Box 506, Jamestown, Pennsylvania, the following items are classed in accordance with Section 173.56, Title 49, Code of Federal Regulations (49 CFR).

U.N. PROPER SHIPPING NAME AND NUMBER: Ammunition, smoke, UN0303

U.N. CLASSIFICATION CODE: 1.4G

| <u>REFERENCE NUMBER</u> | <u>PRODUCT DESIGNATION/PART NUMBER</u> |
|-------------------------|--|
| EX-9711094 | PAK4200 (Model Number: #4210, #4210D) |
| EX-9711096 | 5210, 5220 |

U.N. PROPER SHIPPING NAME AND NUMBER: Ammunition, tear producing, UN0301

U.N. CLASSIFICATION CODE: 1.4G

| <u>REFERENCE NUMBER</u> | <u>PRODUCT DESIGNATION/PART NUMBER</u> |
|-------------------------|--|
| EX-9711093 | PAK4200 (Model Number: #4220, #4220D, #4230, #4230D) |
| EX-9711095 | PAK3400 (Model Number: #3420, #3430, #3440) |

U.N. PROPER SHIPPING NAME AND NUMBER:

Cartridges for weapons, inert projectile, UN0012

U.N. CLASSIFICATION CODE: 1.4S

| <u>REFERENCE NUMBER</u> | <u>PRODUCT DESIGNATION/PART NUMBER</u> |
|-------------------------|--|
| EX-9711092 | PAK2500 (Model Number: #2550, #2552, #2554, #2560, #2570, #2580) |

Coonrod, Combined Tactical Systems, Inc.

Cartridges for weapons, inert projectile, UN0012 (continued)

Approved by:

Christine E. Whitney
for Alán I. Roberts
Associate Administrator
for Hazardous Materials Safety

DEC - 2 1997

(DATE)



U.S. Department
of Transportation

Research and
Special Programs
Administration

The US Department of Transportation
Competent Authority for the United States

APR 6 1971

100 Seventh Street S.W.
Washington, D.C. 20590

CLASSIFICATION OF EXPLOSIVES

Based upon a request by Lynn R. Coonrod on behalf of Combined Tactical Systems, Inc., P.O. Box 506, 388 Kinsman Road, Jamestown, Pennsylvania, the following items are classed in accordance with Section 173.56, Title 49, Code of Federal Regulations (49 CFR).

U.N. PROPER SHIPPING NAME AND NUMBER: Ammunition, Smoke, UN0303 (see note 1)

U.N. CLASSIFICATION CODE: 1.4G

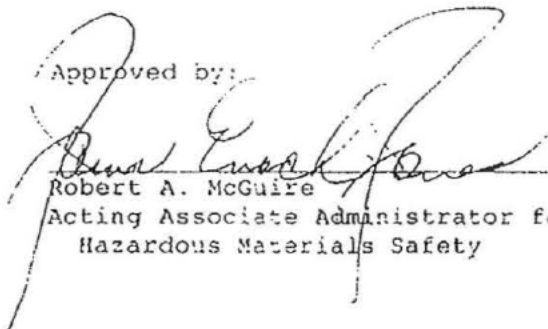
| <u>REFERENCE NUMBER</u> | <u>PRODUCT DESIGNATION/PART NUMBER</u> |
|-------------------------|--|
| EX-9611061 | PAK3220, PAK3220D, PAK3230, PAK3230D, PAK3223, PAK3233, PAK3221, PAK3221D, PAK3231, PAK3231D |
| EX-9702113 | PAK 3225, PAK 3235 |
| EX-9707010 | PAK 3320, PAK 3330, PAK 3340 |
| EX-9708051 | PAK2320, PAK2330, PAK2340 |
| EX-9711093 | PAK4200 (Model Number: #4220, #4220D, #4230, #4230D) |
| EX-9711095 | PAK3400 (Model Number: #3420, #3430, #3440) |
| EX-9802070 | 6220, 6230 |
| EX-9802111 | PAK 4300 (Model 4320, Model 4330, Model 4340) |
| EX-9802114 | PAK 3421, PAK 3431, PAK 3441 |
| EX-9802115 | PAK 2420, PAK 2430, PAK 2440 |
| EX-9802141 | 640010 (Model 6420, Model 6430, Model 6440) |
| EX-9810023 | 8231, 8221, 8222, 8232 |
| EX-9810043 | 8220, 8230 |

Note 1 - Outer packaging must be a UN1A2/Y/ metal drum. Each article must be placed in an individual paper tube and then the tubes must be tightly packed inside the metal drum in such a manner that would prevent movement of the articles inside the drum during transportation.

Coonrod, Combined Tactical Systems, Inc.

Ammunition, Smoke, UN0303 (continued)

Approved by:


Robert A. McGuire
Acting Associate Administrator for
Hazardous Materials Safety

APR 6 2000
(DATE)

Model 4230D, Grenade, CS

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Date of Issue: 06/12/2023

Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Model 4230D, Grenade, CS

Product Code: 4230D

1.2. Intended Use of the Product

Use of the Substance/Mixture: Explosive product

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

Company

Combined Systems, Inc.

388 Kinsman Rd.

Jamestown, PA16134

Phone: (724) 932-2177

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 Classification

| | |
|--|------|
| Explosive Category 1.4 | H204 |
| Acute toxicity (oral) Category 4 | H302 |
| Acute toxicity (inhalation:dust,mist) Category 2 | H330 |
| Skin corrosion/irritation Category 2 | H315 |
| Serious eye damage/eye irritation Category 2 | H319 |
| Respiratory sensitization, Category 1 | H334 |
| Skin sensitization, Category 1 | H317 |
| Hazardous to the aquatic environment - Acute Hazard Category 2 | H401 |
| Hazardous to the aquatic environment - Chronic Hazard Category 3 | H412 |

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US)

: Danger

Hazard Statements (GHS-US)

: H204 - Fire or projection hazard.
H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H330 - Fatal if inhaled.
H334 - May cause an allergy or asthma symptoms or breathing difficulties if inhaled.
H401 - Toxic to aquatic life.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary Statements (GHS-US)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P250 - Do not subject to grinding/shock/friction.
P260 - Do not breathe dust, fume.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P273 - Avoid release to the environment.

Model 4230D, Grenade, CS

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P280 - Wear protective gloves, protective clothing, and eye protection.
P284 - In case of inadequate ventilation wear respiratory protection.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P302+P352 - If on skin: Wash with plenty of water.
P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a poison center or doctor.
P320 - Specific treatment is urgent (see section 4 on this SDS).
P330 - Rinse mouth.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P342+P311 - If experiencing respiratory symptoms: Call a poison center or doctor.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P380 - In case of fire: Evacuate area.
P372 - Explosion risk in case of fire.
P373 - DO NOT fight fire when fire reaches explosives.
P374 - Fight fire with normal precautions from a reasonable distance.
P401 - Store in accordance with as defined in the Explosives Act of Canada and the provisions of the Bureau of Alcohol, Tobacco and Firearms regulations contained in 27 CFR part 555.
P403 - Store in a well-ventilated place.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with as defined in the Explosives Act of Canada and the provisions of the Bureau of Alcohol, Tobacco and Firearms regulations contained in 27 CFR part 555.

2.3. Other Hazards

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

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

| Name | Synonyms | Product Identifier | % | GHS US classification |
|-----------------------------------|---|------------------------|---------|---|
| o-Chlorobenzylidene malononitrile | [(2-Chlorophenyl)methylene]malononitrile / Malononitrile, o-chlorobenzylidene- / Propanedinitrile, [(2-chlorophenyl)methylene]- / (o-Chlorobenzylidene) malononitrile / 2-Chlorobenzylidenemalononitrile / Propanedinitrile, 2-[(2-chlorophenyl)methylene]- / CS / o-Chlorobenzal-malononitrile / ortho-Chlorobenzylidene malononitrile / [(2-Chlorophenyl)methylene] propanedinitrile / 2-Chlorobenzal-malononitrile / ortho-Chlorobenzylidenemalononitrile / o-chlorobenzylidene-malononitrile / o-Chlorobenzylidenemalononitrile | (CAS-No.) 2698-41-1 | 10 – 30 | Acute Tox. 3 (Oral), H301 Acute Tox. 1 (Inhalation), H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335 Comb. Dust |
| 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 |
| Potassium chlorate | potassium chlorate / POTASSIUM CHLORATE / Chloric acid, potassium salt (1:1) / Chloric acid, potassium salt / Berthollet's salt / Berthollet salt | (CAS-No.) 3811-04-9 | 10 – 30 | Ox. Sol. 1, H271 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Aquatic Acute 2, H401 Aquatic Chronic 2, H411 |
| Silicon | Silicon powder / Silicon powder, amorphous / SILICON / silicon | (CAS-No.) 7440-21-3 | 10 – 30 | Flam. Sol. 2, H228 Comb. Dust |

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| | | | | |
|---|---|-------------------------|---------|---|
| Sucrose | .beta.-D-Fructofuranosyl .alpha.-D-glucopyranoside / D-(+)-Saccharose / Sacarose / sucrose / Sugar distillate / D-(+)-Sucrose / SUCROSE / Sugar / Saccharose / .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl | (CAS-No.) 57-50-1 | 10 – 30 | Comb. Dust |
| Potassium nitrate | Nitric acid potassium salt / Nitric acid, potassium salt / Nitric acid potassium salt (1:1) / POTASSIUM NITRATE / potassium nitrate | (CAS-No.) 7757-79-1 | 5 – 15 | Ox. Sol. 3, H272 |
| Magnesium carbonates | Magnesium carbonate / Carbonic acid, magnesium salt (1:?) / Carbonic acid, magnesium salt | (CAS-No.) 7757-69-9 | 5 – 15 | Not classified |
| 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 |
| 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 Acute Tox. 4 (Inhalation:dust,mist), H332 Comb. Dust |
| Titanium | Titanium powder, dry / Titanium powder / Titanium powder, wetted / Titanium sponge powders / titanium | (CAS-No.) 7440-32-6 | 1 – 5 | Flam. Sol. 1, H228 Comb. Dust |
| Copper | Copper, metallic / Pigment Metal 2 / Copper metal / CI 77400 / Copper, elemental / C.I. Pigment Metal 2 / C.I. 77400 / Granulated copper / copper | (CAS-No.) 7440-50-8 | 0.1 – 1 | Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Comb. Dust |
| Potassium perchlorate | Perchloric acid, potassium salt / Perchloric acid, potassium salt (1:1) / potassium perchlorate | (CAS-No.) 7778-74-7 | 0.1 – 1 | Ox. Sol. 1, H271 Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 STOT SE 3, H335 STOT RE 2, H373 |
| 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 | Pyr. Sol. 1, H250 Water-react. 1, H260 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Comb. Dust |
| Boron | boron | (CAS-No.) 7440-42-8 | 0.1 – 1 | Comb. Dust |
| 1,3-Benzenediol, 2,4,6-trinitro-, lead salt | 1,3-Benzenediol, 2,4,6-trinitro-, lead(2+) salt (1:1) / Lead 2,4,6-trinitro-m-phenylene dioxide / Lead 2,4,6-trinitroresorcin oxide / Lead styphnate / Lead trinitroresorcinate / Tricinate / 2,4,6-Trinitro-1,3-phenylenedioxylead(II) / Lead 2,4,6-Trinitroresorcin oxide / Lead styphnate, wetted / Normal lead styphnate / Propylene / Lead(II) 2,4,6-trinitrobenzene-1,3-diolate | (CAS-No.) 15245-44-0 | < 0.1 | Unst. Expl., H200 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 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-phrases: see section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

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.

First-aid Measures After Inhalation: First, take proper precautions to ensure your own safety before attempting rescue (e.g. wear appropriate respiratory protective equipment, use the buddy system), then remove the exposed person to fresh air. Keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Seek medical attention.

First-aid Measures After Skin Contact: Remove contaminated clothing. After rinsing with water, then wash with plenty of soap and water. Obtain medical attention if irritation/rash develops or persists.

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

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

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

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

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

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

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

Chronic Symptoms: May cause sensitization by inhalation and skin contact. Prolonged exposure, especially in an enclosed area, may lead to long-term effects such as eye problems including scarring, glaucoma, and cataracts, and may possibly cause breathing problems such as asthma.

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

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

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

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

Unsuitable Extinguishing Media: DO NOT fight fires involving explosives.

5.2. Special Hazards Arising From the Substance or Mixture

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

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

Reactivity: Fire or projection hazard.

5.3. Advice for Firefighters

Precautionary Measures Fire: This product is an explosive with a fire or projection hazard. DO NOT FIGHT FIRES INVOLVING EXPLOSIVE MATERIALS.

Firefighting Instructions: In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. 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: Carbon oxides (CO, CO₂). Chlorine compounds. Metal oxides. Nitrogen oxides.

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: 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. Evacuate danger area. Do not handle until all safety precautions have been read and understood.

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. Evacuate danger area.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: 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. Eliminate ignition sources.

6.2. Environmental Precautions

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

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6.3. Methods and Materials for Containment and Cleaning Up

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

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Use only non-sparking tools. Be careful to avoid shock, friction, and contact with grit. Collect product for recovery or disposal. Recover the product by vacuuming, shoveling or sweeping. 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: 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.

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

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 under moderate temperatures recommended by competent authority. Store under dry conditions in a well ventilated magazine that has been approved for either detonator storage or explosive storage. Do NOT store explosives in a detonator magazine or detonators in an explosive magazine. Keep away from heat, spark and flames. Keep containers closed. Explosives should be kept well away from initiating explosives; protected from physical damage; separated from oxidizing materials, combustibles, and sources of heat. Isolate from incompatibles. Store locked up/in a secure area.

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

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

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), or OSHA (PEL).

| Copper (7440-50-8) | | |
|---|-------------------------|--|
| USA ACGIH | ACGIH OEL TWA | 0.2 mg/m ³ (fume) |
| USA NIOSH | NIOSH REL (TWA) | 1 mg/m ³ (dust and mist) |
| | | 0.1 mg/m ³ (fume) |
| USA IDLH | IDLH | 100 mg/m ³ (dust, fume and mist) |
| USA OSHA | OSHA PEL (TWA) [1] | 0.1 mg/m ³ (fume) |
| | | 1 mg/m ³ (dust and mist) |
| Sucrose (57-50-1) | | |
| 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 (total dust) |
| | | 5 mg/m ³ (respirable dust) |
| USA OSHA | OSHA PEL (TWA) [1] | 15 mg/m ³ (total dust) |
| | | 5 mg/m ³ (respirable fraction) |
| o-Chlorobenzylidene malononitrile (2698-41-1) | | |
| USA ACGIH | ACGIH OEL Ceiling [ppm] | 0.05 ppm (inhalable fraction and vapor) |
| USA ACGIH | ACGIH chemical category | Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route |

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| | | |
|----------------------------|---------------------|--|
| USA NIOSH | NIOSH REL (Ceiling) | 0.4 mg/m ³ |
| USA NIOSH | NIOSH REL C (ppm) | 0.05 ppm |
| USA IDLH | IDLH | 2 mg/m ³ |
| USA OSHA | OSHA PEL (TWA) [1] | 0.4 mg/m ³ |
| USA OSHA | OSHA PEL (TWA) [2] | 0.05 ppm |
| Silicon (7440-21-3) | | |
| USA NIOSH | NIOSH REL (TWA) | 10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust) |
| USA OSHA | OSHA PEL (TWA) [1] | 15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction) |

8.2. Exposure Controls

Appropriate Engineering Controls

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Proper grounding procedures to avoid static electricity should be followed. Product to be handled in a closed system and under strictly controlled conditions. Use explosion-proof equipment. Gas detectors should be used when toxic gases may be released.

Personal Protective Equipment

: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing

: Chemically resistant materials and fabrics. Wear fire/flamm resistant/retardant clothing.

Hand Protection

: Wear protective gloves.

Eye and Face Protection

: Chemical goggles, safety glasses, or face shield.

Skin and Body Protection

: Wear suitable protective clothing.

Respiratory Protection

: Suitable respiratory protective device recommended. Wear positive pressure NIOSH or European EN149 vapor respirators when deploying product in large quantities. 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 |
| Vapor Pressure | : No data available |
| Relative Vapor Density at 20°C | : No data available |
| Relative Density | : No data available |
| Solubility | : No data available |
| Partition Coefficient: N-Octanol/Water | : No data available |
| Viscosity | : No data available |

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Explosive Properties

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

9.2. Other Information

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Fire or projection hazard.

10.2. Chemical Stability

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

10.3. Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

10.4. Conditions to Avoid

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

10.5. Incompatible Materials

Strong acids, strong bases, strong oxidizers.

10.6. Hazardous Decomposition Products

Thermal decomposition may produce: Carbon oxides (CO, CO₂). Chlorine compounds. Metal oxides. Nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity (Oral): Harmful if swallowed.

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Fatal if inhaled.

| | |
|--|-----------------------------|
| Copper (7440-50-8) | |
| LC50 Inhalation Rat | > 5.11 mg/l/4h |
| 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 (Oral) | 500.00 mg/kg body weight |
| ATE (Dust/Mist) | 1.50 mg/l/4h |
| Potassium chlorate (3811-04-9) | |
| LD50 Oral Rat | 1870 mg/kg |
| LD50 Dermal Rat | > 2000 mg/kg |
| LC50 Inhalation Rat | > 5.1 mg/l/4h |
| ATE (Dust/Mist) | 1.50 mg/l/4h |
| Boron (7440-42-8) | |
| LD50 Oral Rat | > 2000 mg/kg |
| LC50 Inhalation Rat | > 5.08 mg/l/4h |
| LC50 Inhalation Rat | > 5.08 mg/l/4h |
| Polyvinyl alcohol (9002-89-5) | |
| LD50 Oral Rat | > 20 g/kg |
| Potassium perchlorate (7778-74-7) | |
| ATE (Oral) | 500.00 mg/kg body weight |
| 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 |
| ATE (Dust/Mist) | 1.50 mg/l/4h |
| Sucrose (57-50-1) | |

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| | |
|---|--------------------------|
| LD50 Oral Rat | 29700 mg/kg |
| Nitrocellulose (9004-70-0) | |
| LD50 Oral Rat | 5000 mg/kg |
| o-Chlorobenzylidene malononitrile (2698-41-1) | |
| LD50 Oral Rat | 178 mg/kg |
| ATE (Oral) | 100.00 mg/kg body weight |
| ATE (Gases) | 10.00 ppmV/4h |
| ATE (Vapors) | 0.05 mg/l/4h |
| ATE (Dust/Mist) | 0.01 mg/l/4h |
| Silicon (7440-21-3) | |
| LD50 Oral Rat | 3160 mg/kg |

Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Irritation: Causes serious eye irritation.

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

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

| | |
|--|--|
| 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. |

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

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

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

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

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

Chronic Symptoms: May cause sensitization by inhalation and skin contact. Prolonged exposure, especially in an enclosed area, may lead to long-term effects such as eye problems including scarring, glaucoma, and cataracts, and may possibly cause breathing problems such as asthma.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General : Toxic to aquatic life.

| | |
|--|---|
| Copper (7440-50-8) | |
| LC50 Fish 1 | 0.0068 – 0.0156 mg/l (Exposure time: 96 h - Species: Pimephales promelas) |
| EC50 - Crustacea [1] | 0.03 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static]) |
| EC50 Other Aquatic Organisms 1 | 0.0426 (0.0426 – 0.0535) mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata [static]) |
| LC50 Fish 2 | < 0.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static]) |
| EC50 Other Aquatic Organisms 2 | 0.031 (0.031 – 0.054) mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata [static]) |
| Zinc (7440-66-6) | |
| LC50 Fish 1 | 2.16 – 3.05 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| EC50 - Crustacea [1] | 0.139 – 0.908 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static]) |
| LC50 Fish 2 | 0.211 – 0.269 mg/l (Exposure time: 96 h - Species: Pimephales promelas [semi-static]) |
| ErC50 (Algae) | 0.15 mg/l |
| 1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0) | |

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| | |
|-----------------------------------|---|
| EC50 - Crustacea [1] | 7 mg/l |
| Potassium chlorate (3811-04-9) | |
| LC50 Fish 1 | 13500 mg/l (Exposure time: 96 h - Species: Pimephales promelas) |
| EC50 - Crustacea [1] | 879.7 mg/l |
| LC50 Fish 2 | 1750 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss) |
| ErC50 (Algae) | 2.8 mg/l |
| NOEC Chronic Algae | 1.5 mg/l |
| Potassium perchlorate (7778-74-7) | |
| EC50 - Crustacea [1] | 1310 mg/l |
| Potassium nitrate (7757-79-1) | |
| EC50 - Crustacea [1] | 490 mg/l |
| Sulfur (7704-34-9) | |
| LC50 Fish 1 | 866 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static]) |
| EC50 - Crustacea [1] | 736 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| LC50 Fish 2 | 14 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static]) |
| Nitrocellulose (9004-70-0) | |
| ErC50 (Algae) | 579 mg/l |

12.2. Persistence and Degradability

| | |
|-------------------------------|----------------------------|
| Model 4230D, Grenade, CS | |
| Persistence and Degradability | Not established. |
| Copper (7440-50-8) | |
| Persistence and Degradability | Not readily biodegradable. |

12.3. Bioaccumulative Potential

| | |
|--|---|
| Model 4230D, Grenade, CS | |
| Bioaccumulative Potential | Bioaccumulation of metals cannot be excluded. |
| 1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0) | |
| Partition coefficient n-octanol/water (Log Pow) | -2.19 (at 20 °C) |
| Charcoal (16291-96-6) | |
| Partition coefficient n-octanol/water (Log Pow) | (0.3 - <=3.48 - at 25 °C (at pH 6.97) |

12.4. Mobility in Soil

| | |
|--------------------------|--------------------|
| Model 4230D, Grenade, CS | |
| Ecology - Soil | No data available. |

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

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

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

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.

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14.1. In Accordance with DOT

EX # 9711093

Proper Shipping Name : AMMUNITION, SMOKE (CS GRENADES)
Hazard Class : 1.4G
Identification Number : UN0303
Label Codes : 1.4G



14.2. In Accordance with IMDG

Proper Shipping Name : AMMUNITION, SMOKE (CS GRENADES)
Hazard Class : 1
Division : 1.4
Compatibility Group : G
Subsidiary Risk(s) : SP204, 6.1, 8
Identification Number : UN0303
Packing Group : II
Label Codes : 1.4G
EmS-No. (Fire) : F-B
EmS-No. (Spillage) : S-X



14.3. In Accordance with IATA

Proper Shipping Name : AMMUNITION, SMOKE (CS GRENADES)
Packing Group : II
Identification Number : UN0303
Hazard Class : 1
Label Codes : 1.4G
Division : 1.4
Compatibility Group : G
Subsidiary Risk(s) : None
ERG Code (IATA) : 1L



SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

| | |
|--|--|
| Model 4230D, Grenade, CS | |
| SARA Section 311/312 Hazard Classes | Physical hazard - Explosive Health hazard - Specific target organ toxicity (single or repeated exposure) Health hazard - Respiratory or skin sensitization Health hazard - Skin corrosion or Irritation Health hazard - Serious eye damage or eye irritation Health hazard - Acute toxicity (any route of exposure) |
| 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 µm |
| SARA Section 313 - Emission Reporting | 1 % |
| Zinc (7440-66-6) | |
| 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 | 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 Reporting | 1 % (dust or fume only) |
| 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 | |

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| | |
|--|---|
| Potassium chlorate (3811-04-9) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active | |
| Boron (7440-42-8) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active | |
| Titanium (7440-32-6) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active | |
| Potassium perchlorate (7778-74-7) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active | |
| Potassium nitrate (7757-79-1) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active | |
| Sulfur (7704-34-9) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active | |
| Charcoal (16291-96-6) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active | |
| Sucrose (57-50-1) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active | |
| Magnesium carbonates (7757-69-9) | |
| 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). |
| o-Chlorobenzylidene malononitrile (2698-41-1) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active | |
| Silicon (7440-21-3) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active | |

15.2. US State Regulations

| | |
|---|--|
| Copper (7440-50-8) | |
| U.S. - New Jersey - Right to Know Hazardous Substance List | |
| U.S. - Pennsylvania - RTK (Right to Know) List | |
| U.S. - Massachusetts - Right To Know List | |
| U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List | |
| Zinc (7440-66-6) | |
| U.S. - New Jersey - Right to Know Hazardous Substance List | |
| U.S. - Pennsylvania - RTK (Right to Know) List | |
| U.S. - Massachusetts - Right To Know List | |
| U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List | |
| 1,3-Benzenediol, 2,4,6-trinitro-, lead salt (15245-44-0) | |
| U.S. - New Jersey - Right to Know Hazardous Substance List | |
| U.S. - Massachusetts - Right To Know List | |
| Potassium chlorate (3811-04-9) | |
| 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 | |
| Boron (7440-42-8) | |
| U.S. - New Jersey - Right to Know Hazardous Substance List | |
| Titanium (7440-32-6) | |
| U.S. - New Jersey - Right to Know Hazardous Substance List | |
| Potassium perchlorate (7778-74-7) | |
| 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 | |

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| |
|--|
| 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 |
| Sucrose (57-50-1) |
| U.S. - Pennsylvania - RTK (Right to Know) 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 |
| o-Chlorobenzylidene malononitrile (2698-41-1) |
| U.S. - New Jersey - Right to Know Hazardous Substance List |
| U.S. - Pennsylvania - RTK (Right to Know) List |
| U.S. - Massachusetts - Right To Know List |
| Silicon (7440-21-3) |
| 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 |

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 | | | |

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

Date of Preparation or Latest Revision

: 06/12/2023

Other Information

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

GHS Full Text Phrases:

| | |
|------|---|
| H200 | Unstable explosive |
| H201 | Explosive; mass explosion hazard |
| H204 | Fire or projection hazard |
| H228 | Flammable solid |
| H250 | Catches fire spontaneously if exposed to air |
| H252 | Self-heating in large quantities; may catch fire |
| H260 | In contact with water releases flammable gases which may ignite spontaneously |
| H261 | In contact with water releases flammable gas |
| H271 | May cause fire or explosion; strong oxidizer |
| H272 | May intensify fire; oxidizer |
| H301 | Toxic if swallowed |
| H302 | Harmful if swallowed |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H319 | Causes serious eye irritation |
| H330 | Fatal if inhaled |
| H332 | Harmful if inhaled |

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| | |
|------|--|
| H334 | May cause an allergy or asthma symptoms or breathing difficulties if inhaled |
| H335 | May cause respiratory irritation |
| H350 | May cause 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.

SDS US (GHS HazCom)