

2023

Explosive Safety and Security Plan

Huracan Pty Ltd

Document Control: Private

Huracan Pty Ltd
3-Dec-23
Revision 1.5



Explosive Safety and Security Plan Revision

Rev	Author	Reviewer	Date	Revision Comments
1.0	J. Hollingworth	B. Crowdey	15-Mar-23	First Edition of Document for Review and Submission
1.1	J. Hollingworth		21-Jun-23	Edited to reflect Helidon as the Primary Explosive storage location.
1.2	J. Hollingworth		3-Aug-23	Add additional information on the storage of explosives.
1.3	J. Hollingworth	R. Stewart	24-Aug-23	Recommended adjustment after review from Resources Safety & Health Queensland
1.4	J. Hollingworth	R. Stewart	3-Sep-23	Additional recommended adjustment after review from Resources Safety & Health Queensland
1.5	J. Hollingworth	RSHQ	3-Dec-23	Amended for importation of explosives and reviewed by Resources Safety & Health Queensland

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1 DOCUMENT CONTROL

1.1 REVIEW AND UPDATE PROCEDURES

This document is a ‘live’ document that shall be reviewed and updated as per the Huracan Document Control and Revision Standard with a minimum period of 1 year.

It is also to be reviewed immediately after any of the following;

- Major operational incident (i.e. increased apparent risk)
- Significant operational, procedural, work practice or technology change
- New or amended safety codes, safety requirements or standards are issued.
- When required by relevant State and Federal Government legislation.

Huracan Management is responsible for the review and revision of this document. The updated document is to carry a new revision date and is circulated once the revision has been approved by the following level of Management:

- Operations Manager – Huracan.

1.2 DISTRIBUTION

Distribution of this document is through HIMS in the “document reports” section and is available to all employees on completion of the Huracan induction once intranet access has been granted. Requested changes to the Distribution List are to be addressed to Huracan Management.

1.3 DOCUMENT UPDATES

Huracan personal are to be advised of any revision changes to this document. Only registered copies of the document shall be updated. The latest revision is available on HIMS in the “document reports” section. This document becomes uncontrolled when printed.

1.4 DOCUMENT PUBLICATION AND DISPLAY

This document is accessible through HIMS and shall be displayed at all times in the Huracan office and shall be open for inspection by anyone to whom the plan or part of the plan may affect or apply.

1.5 DISPLAY LOCATIONS

This document shall be available for display at the following locations;

- Huracan Office

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- Huracan Information Management System (HIMS) via controlled access through Huracan.com.au

2 OVERVIEW

2.1 HURACAN GENERAL CODE OF BEHAVIOUR

Huracan Management requires full compliance with the Standard. Infringement of the standards contained in this document shall be regarded as a serious breach of the Huracan code of behaviour and shall result in disciplinary action, which may include counselling or dismissal. Failing to follow safety instructions, deliberately interfering with safety equipment and systems, deliberate damage to equipment, stealing, vandalism, fighting, practical jokes, and horseplay shall not be tolerated and are considered to be serious breaches of the Huracan Code of Behaviour.

2.2 TERMINOLOGY

Term	Definition
AEC	Australian Explosive Code – Current Edition
Australian Border Force (ABF)	Federal Government agency responsible for border security, including Customs import and export
Authorised Name	The name authorised by the appropriate Commonwealth, State or Territory explosives regulator
Bonded Warehouse	A secure location is authorised by the Australian Border Force for the temporary storage of goods that have not yet been import-cleared with ABF.
Booster	An explosive charge that acts as a bridge between the high-sensitivity, low-energy detonator and the low-sensitivity, high-energy explosive
Cargo terminal	A place (other than a depot to which a depot licence relates or a warehouse to which a warehouse licence relates), within the limits of a port, airport or wharf, where: <ol style="list-style-type: none">Goods are located immediately after being unloaded from a ship that has taken the goods on board at a place outside Australia and carried the goods to a port or wharf in a State or Territory where some or all of the goods are unloaded orGoods are located immediately after being unloaded from an aircraft that has taken the goods on board at a place outside Australia and carried the goods to an airport in a State or Territory where some or all of the goods are unloaded.
Cargo terminal operator	In relation to a cargo terminal means a person who manages the cargo terminal.
Carrier	An individual or organisation transporting explosives
Carrier's Agent	Local agent who represents the interests of the carrier, either an airline or ship owner – in the local importation process
Consignment	A package, or load of explosives, which is presented by a consignor for

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	transport
Consignor	Refers to the legal party shipping the goods from overseas
Consignee	Refers to the legal party receiving the goods from the international shipment
CTU	Cargo Transport Unit
Customs Broker	A third party who is licensed by the Federal Government to lodge import and export documentation with Australian Border Force and Department of Agriculture on behalf of an importer
Detonator	A device or small sensitive charge used to detonate an explosive
Explosive	A substance or a thing containing a substance manufactured or used with a view to produce a practical effect by explosion or a pyrotechnic effect; Class 1 Dangerous Goods under the United Nations Recommendations and covering Hazard Divisions 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6
Explosives Incident	Means any of the following events involving an explosive: a. An explosive is or appears to have been lost or stolen. b. An accidental explosion, fire or spillage. c. The death of or an injury to a person during the use of explosives. d. Unexpected damage to property from explosives. e. An event, including a misfire, with the potential to cause any of the events mentioned in paragraphs (a) to (d), other than an event that normally happens when handling or using an explosive.
Freight Forwarder	Third party agent who works on behalf of the shipper or Importer to make bookings with freight carriers. Often the same party as the Customs Broker
Holder	Of an authority means a person to whom it is issued or transferred.
License	An authority prescribed under a regulation to be a license
Magazine	Approved location with security and safety measures in place for storage of explosives.
Net Explosive Quantity (NEQ)	The actual quantity, expressed by mass, of explosive substance in an article, package or container
Package	A barrel, box, canister, case, tin or another container, and includes by which goods may be cased, covered, enclosed, contained or packed.
Possess	An explosive includes: a. Have custody or control of the explosive; and b. Have an ability or right to obtain custody or control of the explosive
Regulatory Authority	In each State or Territory, the regulatory authority is the body that issues and regulates the explosives license or permit.
Security Plan	A plan that has been put in place to effectively minimise security risks to the storage, manufacture, handling, and transport of explosives
Security Risk	The possibility of theft, unexplained loss, sabotage, and unauthorised access to explosives

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Shipper	see Consignor
Ship's Agent	Carrier's agent when the importation is performed by ship. See Carrier's agent
Ship Broker	3 rd party private company acts as an intermediary between a ship owner and the shipper or consignee in negotiating the chartering of a tramp vessel or space on a tramp vessel.
Shipping Line	Liner shipping company which operates vessels on a fixed schedule between fixed ports. These vessels call to container ports with dedicated container handling equipment.
Stevedore	The party who performs the physical act of unloading the cargo from the vessel
Tailgate Inspection	A visual inspection of the container internally and externally will be ordered by Department of Agriculture for any Container that is being unloaded outside the urban area. Random tailgate inspections may also be ordered as required.

3 STATEMENT OF STANDARD

This document is intended to serve as the minimum Huracan requirements for the Management and mitigation of the risks associated with the storage, transport, possession and use of explosives. This plan has been formulated to interface with the company's existing Health, Safety and Environmental Management System (HSMS) to provide guidance and compliance with the Explosives Act 1999 and Explosives Regulation 2017.

This plan applies to all Huracan personnel and contractors who are involved with operations where explosives may be required. Compliance with this plan is mandatory by personnel to help ensure the safe handling, storage and transport of explosives operations.

4 OBJECTIVE

To eliminate explosive-related incidents in our business that cause fatalities and injuries to employees, families, contractors and third parties and minimise damage to equipment through Management of all phases of explosive operations by;

- Identifying and managing explosive hazards and unnecessary exposure
- Preventing and mitigating the residual risk through the selection and preparation of people, training and industry best practices in association with explosive use.

5 SCOPE

This Standard applies at all times to all Huracan locations, Huracan employees and relevant contractors.

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6 RESPONSIBILITY

6.1 CONSIGNOR

To ensure that packages containing explosives are safe to handle under normal conditions, the consignor is responsible for the following:

- Packaging and labelling explosive materials for transport in accordance with the Transport Code; and
- Preparing and certifying the transport documentation as required by the Transport Code

6.2 CARRIER

Checking that appropriate documentation is provided with the package and has been completed in accordance with the Transport Code

Verifying that the information on the consignment note, consignors declaration for dangerous goods (if applicable) and the package containing the explosive materials is consistent;

Identifying labels to ensure appropriate decisions are made about storage, loading and transport;
The loading, unloading, handling, transport and interim storage of packages where appropriate, including any directions given by the consignor, such as special stowage provisions for the safe dissipation of heat; and

Emergency procedures in the event of an incident while loading, transporting, unloading or storing a package.

6.3 EMPLOYER / AUTHORITY HOLDER / OPERATIONS MANAGER

Hold the appropriate license/s as prescribed by the relevant Authority:

- Huracan holds a Corporate Licence to possess explosives;
- Huracan personnel responsible for explosives hold the relevant State licence to use and complies with the restrictions of the licence.

Ensure, so far as is reasonably practicable, workers are appropriate persons to have access to or use explosives;

Take all reasonable precautions in regards to the storage of explosives to prevent an explosives incident and to minimise the likely effects of an explosives incident and ensure the storage place is approved in accordance with the prescribed obligations;

Notify the Chief Inspector of any incident where the explosives authorised is held involved in an explosives incident that results in any loss of life, personal injury or property damage.

6.4 HEALTH AND SAFETY RESPONSIBLE PERSONNEL

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Identify ways, consistent with this plan for administering systems in the Management of the safety and security of explosives;

Identify if this plan is being complied with;

Review the plan in accordance with company processes to ensure its continued effectiveness;

Report, in accordance with the systems and prescribed obligations, any incidents in which explosives are involved.

6.5 EXPLOSIVE LICENSED CASED HOLE TECHNICIAN / OPERATORS

Take all reasonable precautions and use reasonable care to avoid endangering any person's safety, health or property;

Hold and maintain the relevant license for the operations required;

Ensure that the explosives are transported in accordance with prescribed obligations and this Explosives Safety and Security Plan, including delivery of the explosives to a place where they may lawfully be stored or used by someone who may lawfully possess it.

Ensure they are authorised by the Company to use and transport explosives;

Understand this explosives safety and security plan, their obligations and commit to complying with this plan and any safe systems of work required;

Actively participate in the required training and maintain the necessary competence to conduct operations;

Account for and maintain the handling, transport and use of any explosives in accordance with this plan;

Report any incidents or contraventions with this plan and subsequent regulatory standards to the HSE Representative or Authority Holder.

7 HAZARD ASSESSMENT

Huracan may utilise explosives for down-hole perforation of oil and gas (including Coal Seam Gas) wells as operations require. The company recognises there is risk associated with this activity as detailed within the Hazard Risk Register. Details of the explosives utilised include:

Type of Explosives handled	1.1B and 1.1D
Amount of Explosives stored	<250kg of Explosives and <125 detonators
No. of Workers who may come in contact with Explosives	12

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Total size (m) of Explosives Storage Site	24 x 10 = 240m ²
No. of vehicles licensed to transport Explosives	Refer to the Appendix
Address of site of Explosives	151 Warooby Lane, Euthulla, Qld, 4455.
Distance to hazardous or public space from store:	Nearest single dwelling – 180m

Supporting Documents

Huracan_Risk_Register-Roma_RevX.X _DDMMYY

8 MANAGEMENT OF SAFETY AND SECURITY

A safety management system must be implemented, as per prescribed obligations, for the ongoing safe and secure administration of explosives. Huracan maintains an integrated Health, Safety Management System (HSMS) for the control of risks associated with current operations and the discharge of legislative and regulatory obligations. Further details of the functions of the HSMS which are applied to the execution of this Explosives Safety and Security Plan include, but are not limited to:

Safety Policy;

Organisational structure and responsibilities pertaining to the key roles and critical functions for the possession of, safe handling, storage, use and transportation of explosives;

Systematic Procedures:

- Hazard identification and risk management;
- Provision of information, training and Competency;
- Reporting and investigation of explosives incidents;
- Internal auditing of the systems;
- Monitoring and review of the systems for effectiveness;
- Record keeping;
- Legislative compliance review and currency;
- Systems changes; and
- Management of security risks.

Operational Procedures:

- Access management where explosives are used;
- Asset Management (maintaining & cleaning of suitable buildings, plant and equipment, restriction of ignition sources);

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- Storage and handling explosives Management (under the authority, including security provisions and procedures, limiting the amount of explosives in, and the number of persons in, buildings and other places where the activities are carried out) and;
- Using explosives under the authority, including security provisions and procedures;
- Management of unsafe behaviours and other activities which may affect the risk associated with the handling, use and storage of explosives;
- Application of PPE;
- Waste management;
- Testing of safety shut-off systems and alarms;
- Transporting explosives under the authority, including security provisions and procedures;
- Handling chemicals and separating materials that are not compatible;
- Movement of Explosives Management (including receiving explosives at a place where activities are carried out);
- Handling misfires;
- Operating plant and equipment used in the activities, i.e. Wireline Unit, Pump, Cranes;
- Preparing for and responding to emergencies, including an evacuation plan, and the testing of the procedures and responding to adverse weather conditions (i.e. lightning);
- Changing operational processes, the composition of the explosives used for the activities, the ingredients used to manufacture explosives and, the packaging of explosives; and
- Recording and handling complaints about the activities.

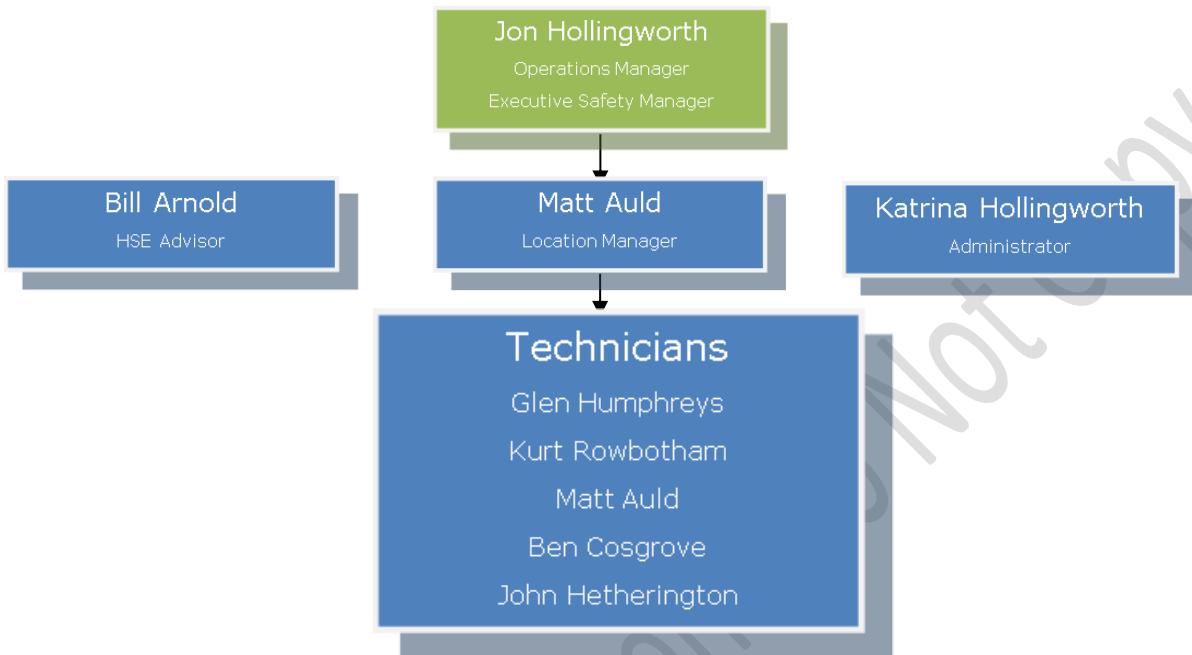
8.1 SAFETY POLICY

All Huracan Policies are maintained using the Huracan Information Management System (HIMS), including the Health and Safety Policy. Policies are displayed in the Roma Office and are available via the Company Server. Policies are reviewed in accordance with the Document Control and Review Standard (HSE_DocumentCRS). Huracan must always consult with Employees and applicable contractors in relation to safety matters when implementing new safety rules and policies and when alterations to existing policies would be considered a significant deviation.

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8.2 ORGANISATION STRUCTURE AND RESPONSIBILITIES

Huracan Organisation Chart



The Operations Manager shall be the Explosives Security Manager

Authorised persons (other than the Operations Managers) will primarily include:

- E-Line Field Technicians
- Wireline Operators

Responsibilities will be in accordance with prescribed regulatory obligations as communicated through training (licensing etc.), Personnel Training and Competency Requirement-FBFV and resource documentation i.e. JSA's, SOP's etc.

Staff must notify the Operations Manager if:

- The person has been convicted in Queensland or elsewhere of a relevant offence;
- A domestic violence order has been made in Queensland or elsewhere against the person at any time;

There is any other reason that would prohibit their ability to successfully secure their license (enabling access to the Explosives Compound), which includes:

- a. Successfully pass a medical
- b. The person's ability to satisfy the statutory requirements (minimum age requirements, licences)
- c. Successfully pass an ASIO check (includes both police criminal history check {PHC} and politically motivated check {PVM})
- d. Produce 100 points of identification
- e. Successfully pass any drug and alcohol tests (random, for-cause or scheduled)

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- f. Successfully pass a police clearance.

Expiry on any required licenses shall be managed by the individual and recorded within HIMS.

8.3 SYSTEMATIC PROCEDURES

8.3.1 HAZARD IDENTIFICATION AND RISK MANAGEMENT

Huracan manages risk in accordance with AS:31000 and the Code of Practice (Managing WHS Risk) of:

- Identify hazards
- Assess the risk
- Implement Controls
- Monitor Controls
- Review Controls for effectiveness

The Company has identified explosives as a significant risk associated with operations, as detailed within the Company Hazard Risk Register. Risk mitigation of explosives is communicated to relevant personnel and is the responsibility of the Operations Manager. Relevant tools to manage the associated risks include, but are not limited to:

- Relevant licenses
- Standard Operating Procedures (SOP's)
- Job Safety Analysis (JSA's)
- HS Management Plan (HSMP)
- Training and competency
- Resource documents (checklists etc.)

Of note are the following JSA's and SOP's specific to Explosive Operations.

- **Standard Operating Procedures;**
 - SOP WEX01 Gun Loading RevX.X
 - SOP WEX02 Wireline Explosives Field Operations RevX.X
 - SOP WEX03 Wireline Perforating RevX.X
 - SOP WEX04 Bridge Plug_Packer Setting Operations RevX.X
 - SOP WEX05 Titan Control RF Safe Perforating RevX.X
 - SOP WEX06 Titan Control RF Safe Bridge Plug_Packer Set RevX.X
 - SOP WEX07 Tubing Cutter RevX.X
 - SOP WEX08 String Shot RevX.X
- **Job Safety Analysis Procedures;**
 - JSA WEX01 Explosives Handling, Gun Loading & Transportation RevX.X
 - JSA WEX02 Arming, Running & Pulling Explosive Devices RevX.X
 - JSA WEX03 Bridge Plug_Packer Operations RevX.X

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- JSA WEX04 Pipe Recovery RevX.X
- JSA WEX05 Tubing Punch_String Shot Bar RevX.X

Supporting Documentation:

Huracan_Risk_Register-Roma_RevX.X _DDMMYY

8.3.2 INFORMATION, TRAINING AND COMPETENCY

Huracan recognises its obligations to provide training and instruction to personnel to assist in the performance of jobs and tasks in a healthy and safe manner. This extends to competencies for the handling, use and transport of explosives. All training and competency is managed in accordance with the Training and Development Procedure. Competency required includes, but is not limited to:

- Current Queensland Shot-firers License for use, or relevant States license if not Qld;
- Completed a relevant oil and gas field explosives safety school to API International and Local regulatory requirements;
- National Police Clearance;

All records of personnel training and licencing as related to explosives are to be recorded in HIMS in the Certifications sections. All licences and training certifications are to be uploaded to HIMS as an attachment to the individual's training records.

Supporting Documentation:

Personnel Training and Competency Requirement-FBFV RevX.X DDMMYY

8.3.3 REPORTING AND INVESTIGATION OF EXPLOSIVES INCIDENTS

All Incidents must be reported to the Operations Manager and investigated in accordance with the Incident Management Procedure. Any incident involving explosives must be reported to the Operations Manager immediately, who is responsible for reporting to the Regulator in accordance with the required timeframe.

In the event any evidence of attempted forced entry, theft of explosives or unaccountable stock discrepancy occurs, the responsible person must report the event immediately to the Police.

An incident investigation must be recorded in HIMS under the HSSE Report section. All action items recorded must have a reasonable time frame associated with closure and must have a final review with the Operations Manager prior to closure.

Supporting Documentation:

Audit & Inspection Schedule YYYY

8.3.4 MONITORING AND REVIEW

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The monitoring and measurement of records provide critical information as to the effectiveness of the Management of HSE matters, including lead (positive) and lag (negative) indicators. Statistics gathered are analysed to ascertain trends and allow for strategic planning in the prevention of reoccurrence or preventing incidents. Data captured regarding explosives, such as stock counts, incident reviews, and quality control feedback, will assist in the Company's ongoing commitment to continual improvement.

This Management Plan shall be reviewed as prescribed by the relevant legislation not less than annually. All audits (both internal and external) and statistics must be recorded and uploaded to HIMS under the Documentation Report section.

8.3.5 EXPLOSIVE RECORD KEEPING

Good record-keeping is critically important in the safety and security of Explosives. Records should be kept of all explosive Import transactions and should record;

- the name of the explosive;
- the amount of the explosive;
- the date the explosive was brought into the State or sent to the country;
- the name of the consignee and consignor of the explosive.

A Dual record inventory system will be kept manually inside the magazines and at the base. The balances should be reconciled monthly. See below for a sample storage sheet that is to be updated when explosive inventory is moved in and out of the bunkers:

Part Number: EXP-3326-422T - Super Deep Penetration Shape Charge - HMX - 28g.					
Date	In	Out	Balance	Reason / Well or Client	By
23-Dec-22	600		600	Stock In	Jon Hollingworth
3-Jan-23		60	540	Origin	Jon Hollingworth
6-Jan-23	23		563	Stock returned	Matt Auld
15-Jan-23			563	Stock Count	Jon Hollingworth

Supporting Documentation:

Document Control and Review Standard (HSE_DocumentCRS_RevX.X _DDMMYY)

8.3.6 ADDITIONAL RECORD KEEPING

Paper records must be kept and recorded in HIMS (when practicable) that relate to the following items;

- internal audits and statistics;
- risk assessments undertaken;
- training of personnel;
- reports and investigations of explosives incidents;

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- e) reviews of operational procedures;
- f) consultations with employees and contractors about safety;
- g) explosives manufactured or stored under the authority;
- h) maintenance carried out on buildings, plant and equipment;
- i) testing of safety shut-off systems and alarms;
- j) testing of emergency procedures and the evacuation plan;
- k) disposal of explosives;
- l) alternative safety and security measures used

8.3.7 LEGISLATION COMPLIANCE

All legislative compliance is managed via 3rd Party Subject Matter Experts (SME) document review.

Legislation consulted in the preparation of this Explosives Safety and Security Plan includes:

- Explosives Act 1999 (Qld)
- Explosives Regulation 2017 (Qld)
- AS2187.1 – 1998 Explosives – Storage, Transport and use Part 1: Storage
- AS2187.2 – 2006 Explosives – Storage and use Part 2: Use of explosives
- Australian Code for the Transport of Explosives by Road and Rail 3rd Edition
- Australian Code for the Transport of Dangerous Goods by Road and Rail Edition 7.4

This Manual has been created using an SME.

8.3.8 MANAGEMENT OF CHANGE

Any changes required to the Huracan HSMS shall be managed via the Management of Change Section of the Health and Safety Management Plan. For example, Management of change shall be required for procedural changes, or management review may facilitate systematic changes. Changes shall be communicated to all relevant parties via direct communication to relevant parties through email and email confirmation.

8.3.9 MANAGEMENT OF SECURITY RISKS

Security risks are managed in accordance with risk management principles. Risks identified and corresponding controls are detailed within the Hazard Risk Register. Further guidance is provided within the Operational Procedures (following). Huracan has determined the security risk/s posed with regard to the storage, transport and use of explosives is low.

Supporting Documentation:

Huracan_Risk_Register-Roma_RevX.X _DDMMYY

8.4 OPERATIONAL PROCEDURES

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8.4.1 ACCESS MANAGEMENT

Key Security

- Magazines, magazine compound yard and gate access to the compound yard are kept locked at all times;
- Keys to the Explosives magazines are only accessible by request to the Operations Manager. Only authorised persons shall be issued the key for access to the explosives storage facility.
- Keys must be returned immediately after removing the required explosives;
- The keys to the magazines are clearly labelled with chains welded to the keys and the T-Bar lock mechanism.

Authorisation

An authorised person must have at least the following:

- a. Current Queensland Shot-firer License for use;
- b. Completed a relevant oil and gas field explosives safety school and Local regulatory requirements

8.4.2 ASSET MANAGEMENT

The compound yard will be kept clear of any weeds, rubbish or other debris that may pose a fire hazard.

A standard poisoning routine shall be kept by inspection and completed as required.

No work is to be permitted to be carried out inside any magazine. The Magazine compound yard is purely for the purpose of storage only.

No smoking is allowed inside the compound yard. All lighters, matches, cigarettes and non-intrinsically safe items are allowed within the compound (they must remain a safe distance away / outside the compound)

8.4.3 STORAGE AND HANDLING OF EXPLOSIVES

8.4.3.1 HURACAN STORAGE LOCATION

Huracan's bulk explosive storage facility will be the Government Explosive Reserve in Helidon, east of Toowoomba. Huracan will require primary and secondary storage. Huracan will apply for access to the facility once a Corporate licence has been obtained. Only Huracan personnel with an "authority to use" licence issued by the QLD Explosive Chief Inspector will be granted access to the facility, and the individual is subject to all safety and security conditions of the Explosive Reserve.

Helidon contact details;

Email: HelidonGER@rshq.qld.gov.au

Phone: (07) 4612 9400

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The following must be adhered to when accessing the Helidon.

Prior to shipping of explosives to Helidon;

- A copy of all applicable explosives licences.
 - Ensure that the Helidon storage facility has received copies of all applicable documents prior to shipping Huracan explosives.
- Completion of the Helidon ‘Request to Store’ prior to all shipment and inward transactions.
 - Complete the form and have the document reviewed prior to submitting.
 - Confirm receipt of the document from Helidon and that it adheres to the required standards.
- All explosive products must be authorised and in specification (not damaged).
- All cases must be compliant, UN Approved, sealed and quantities noted.

Prior to accessing the Helidon Sotage Facility;

- Ensure that a list of vehicles and personnel (and copies of relevant licences) are current with Helidon requirements for accessing the facility and Huracan stock.
- Completion of a Reserve induction has been completed.
- Helidon has received a minimum of 24-hour notice prior to the transfer of inventory.
- AEC3 (Australian Explosive Code) -compliant paperwork must be provided for all transactions.

Monthly Requirements for Storage at Helidon;

- A monthly stocktake is to be provided to the Facility Administrator each month for reconciliation of Huracan and Helidon inventory compliance.

8.4.3.2 HURACAN STORAGE OUTSIDE OF GOVERNMENT MAGAZINE

Huracan personnel with an “authority to use” licence issued by the QLD Explosive Chief Inspector will be responsible for the explosives once they have been removed from the Government Reserve Storage Facility in Helidon. The Huracan personnel “authority to use” licence holder is responsible for the safe transport and storage of the explosives in their care until returned to the Government Reserve. The explosives may be stored at the wellsite in appropriate explosive containers. Short-term storage of explosives when in the Huracan Facility for the purpose of upcoming job activity must be stored in an appropriate explosive-compliant carry or day box outside of a vehicle. Explosives may be transferred to another Huracan person with the appropriate “authority to use” licence only once the following has been completed.

- An explosives physical count must be performed by both personnel, and any discrepancies must be reconciled.
- Both individuals will sign off the explosive count sheet and transported with the explosives.

8.4.4 USING EXPLOSIVES UNDER THE AUTHORITY

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All perforation work will be performed by the Huracan Crew under the direct supervision of a trained and authorised E-Line Field Technician;

All perforation work shall be undertaken per the Client's programme

All perforation work will be performed as per procedures to Australian Standard and API perforating best practice. Applicable perforating hardware manuals should be consulted for all perforating device loading and use.

8.4.5 MANAGEMENT OF UNSAFE BEHAVIOURS

Company Contraband Policy is enforced to ensure the worksites are drug and alcohol-free;

All smoking and non-intrinsically safe items must not be allowed near any explosive service activity; Exclusion zones and additional controls shall be communicated to all relevant personnel at the site during the Pre Job Meeting and documented on the Huracan Pre-Job Safety & Induction Record and, as required, the Wellsite Permit to Work.

An exclusion zone shall be set by Huracan personnel, with all non-essential personnel to remain outside this set where explosives are being used or loaded.

8.4.6 PERSONAL PROTECTIVE EQUIPMENT (PPE)

Safety Data Sheets (SDS) should be reviewed prior to the handling of any chemical substance to ensure no additional control measures are required. A review of the applicable SDS has determined there is no additional PPE required when handling or transporting explosives.

Supporting Documentation:

Safety Data Sheets (SDS) as applicable

Associated Chemical Substance Risk Assessments

8.4.7 WASTE MANAGEMENT

All remnants of explosives shall be returned to the Roma Storage Facility after operations, where it will remain (separated) to be destroyed by a 3rd party taking part in bulk destruction of the Dangerous Goods.

8.4.8 TESTING OF SAFETY SHUT-OFF SYSTEM AND ALARMS

Due to the limited quantity of explosives stored and transported, Huracan does not have safety shut-off systems or alarms within the storage compound. Perforating operating plant safety shut-off systems that are regularly checked as part of a daily checklist.

8.4.9 TRANSPORTING EXPLOSIVES

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Transporting explosives is normally for oil and gas operators from the Helidon Government store to the Huracan Facility and then to the Client's field site, i.e. Huracan's Roma base to Santos's Roma North Field. Transportation occurs as operations require; therefore, typically, explosives are not transported on a regular schedule but more randomly. The distance explosives are transported will vary depending on the Client and location. However, it is expected a journey would not exceed 1,000km.

Only Huracan personnel with an "authority to use" licence issued by the QLD Explosives Chief Inspector will be permitted to transport explosives. The licence allows <250kg of explosives to be transported.

All vehicles containing explosives shall:

- Be either attended the Huracan "authority to use" licence holder or guarded if left stationary;
- Are secured at temporary stops or when the driver is not in the vehicle, preferably within the view of the Huracan "authority to use" licence holder or guarded and inaccessible to the public with the keys removed and on the driver at all times;
- Are parked at least 5m away from combustible materials, including tall, dry vegetation, fuel and LP Gas storage;
- Vehicles are not parked in the same place for consecutive days or nights unless the local police and emergency services have been notified;
- If there is no contact from the driver within a reasonable timeframe of checking in (3 hours), the Explosives Security Manager (Operations Manager) will begin action to ascertain the situation i.e. use IVMS to locate the vehicle and activate the emergency response plan as required.

All Huracan vehicles are fitted with In-Vehicle Monitoring Systems (IVMS), which provide live, real-time location-enabling tracking. All vehicles will have a first aid kit available and inspected as part of Huracan's audit and inspection calendar.

Huracan vehicles transporting explosives will have an accredited day box secured to the tray with a Huracan master key lock. These day boxes are manufactured to comply with the Australian Explosives Code 3rd Edition 2009 and to Quality Assurance accreditation ISO:9001 and shall:

- a. Be lockable;
- b. Inner surface is made of wood or some other material incapable of producing incendive sparks;
- c. Constructed strong enough to maintain its integrity during transport and adequately provide protection and security for the goods contained within;
- d. Is weatherproof;
- e. Closed and has a continuous floor;
- f. Is securely attached to the vehicle.
- g. Is authorised vehicle must also carry the following documentation:
- h. Current Vehicle License to Transport Explosives;

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- i. Emergency Procedures & Guides;
- j. Appropriate SDS for goods carried; and
- k. A Packing List

The Types of Explosives transported by Huracan fall into Category 1 (Low-Risk Category), see [Appendix F](#) for further details. This means that the vehicles are exempt from the marking of road vehicles for transporting explosives (See [Appendix G](#) for further detail) as the explosives are categorised as “generically authorised explosives used in the petroleum, gas and geothermal industries” (See [Appendix H](#) for further detail).

As per AEC Code 3, Section 8.2.3 Requirements for Drivers of Road Vehicles as applies to Explosives for Oil and Gas and Geothermal Industries.

A person must not drive a road vehicle used to transport explosives unless the person is authorised to do so with the appropriate licence.

The provisions outlined above do not apply to transport of the following:

- unrestricted explosives, or
- other explosives, as allowed by the relevant Competent Authority.

Packagings for Explosives for Transport

- Packaging is unsuitable for the transport of explosives if the packaging:
 - is not approved packaging; or
 - does not comply with Chapter 5 of the AEC3; or
 - does not comply with the packing instructions of Appendix 4.1 of this AEC3 Code.
- Every person who packages explosives for transport must ensure that:
 - the packaging of the particular explosives is suitable, and
 - every packaging is marked in relation to the explosives contained within the package.
 - The approval of a packaging design type may be subject to any condition necessary for the safe transport of explosives in packaging of that design type.

Supporting Documentation:

JSA WEX01 Explosives Handling, Gun Loading & Transportation RevX.X

Australian Code for the Transport of Explosives by Road and Rail – Third Edition

8.4.10 HANDLING CHEMICALS

All chemicals shall be handled in accordance with the recommended practices as determined on the Safety Data Sheet provided by the manufacturer or supplier of the chemical substances. Huracan maintains chemical substances register and the appropriate SDS and corresponding risk assessment (required for all hazardous substances and some dangerous goods based on the risk/s posed). All authorised persons are responsible for familiarising themselves with the SDS prior to handling the explosives.

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8.4.11 MOVEMENT OF EXPLOSIVES MANAGEMENT

A stock count is conducted on the explosives by the authorised person both before and after the explosives are removed from the main explosive store. This is recorded on the Huracan Explosives Stock Checklist.

Upon arrival at the delivery location, drivers are to conduct a check of the explosives using the Huracan Explosives Manifest ([Appendix E](#)). The amount must be reconciled against the pick-up quantity. If there is a variance, the Operations Manager must be notified immediately.

Stock shall be rotated to ensure the oldest stock is used (check expiry date prior to use) before new stock.

All explosives used by Huracan are all UN certified to a strict QC process.

The product will not vary from batch to batch.

8.4.12 HANDLING MISS-FIRES

All Misfires, although an uncommon occurrence if the explosives are within the recommended expiration date and are handled by an authorised person, shall be reported as an unwanted event and investigated in accordance with the Huracan Incident Management Standard. Stock that has been returned to the surface after a misfire event must be treated as a live explosive system.

HMX explosives become sensitive when exposed to temperatures >340°F. All misfired HMX explosives to be returned to the Huracan base **must not** be transported for a period of 48 hours after being removed from a well.

Stock that has been recovered (misfire) with no attempt to re-perforate with them must be transported back to the Huracan base for disposal in an appropriate manner. Please see the below section on the [Destruction of Explosives](#).

Supporting Documentation:

HSE_HUR_Incident Mgmt_Standard_Rev1X.X_DDMMYY

8.4.13 OPERATING PLANT AND EQUIPMENT USED IN ACTIVITIES

Huracan operating plant, which may be used in activities, may include Wireline Units, Cranes and Pressure Testing equipment. All Operating Plant shall be managed in accordance with the Huracan HS Management Plan as prescribed by the Petroleum and Gas (Production and Safety) Act 2004.

Supporting Documentation:

HSE Management Plan (HSE_LP_HSMP_RevX_DDMMYY)

8.4.14 EMERGENCY PREPAREDNESS AND RESPONSE

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The Company has identified relevant emergency scenarios and implemented controls to prevent an emergency situation from occurring. In the event an escalating situation occurs, Huracan personnel should implement the Emergency Management Plan immediately. Additionally, Management should be notified as soon as practicable.

Supporting Documentation:

HSE_LP_EmergencyMP_RevX_DDMMYY

8.4.15 MANAGEMENT OF CHANGE

All Management of change is to be administered using the change process and documented within HIMS. Please refer to the Management of Change Section of the HSMP.

Supporting Documentation:

HSE Management Plan (HSE_LP_HSMP_RevX_DDMMYY)

8.4.16 RECORD AND HANDLING COMPLAINTS ABOUT THE ACTIVITIES

All complaints raised, regardless of whom is approached, must be reported to the Operations Manager and managed accordingly at their discretion. Huracan personnel should provide the contact details if approached and report the interaction to the Operations Manager as soon as possible.

8.4.17 DESTRUCTION OF EXPLOSIVES

Reasons for requiring IE/HE to be destroyed may include but are not limited to:

1. Out of date/ past manufacturer's expiry date stock
2. Stock nearing its expiry date.
3. Damaged/defective stock following investigation/quarantine period.
4. Damaged stock not requiring investigation.
5. Defective stock not requiring investigation.
6. Misfired and recovered explosive products.

All (1) out of date/past manufacturer's expiry date stock; (2) stock nearing its expiry date and (3) damaged or defective stock requiring quarantining for investigation must not be destroyed prior to receiving Huracan's Senior Management approval in writing. Any product that is placed in a magazine must be accounted for in the magazine record book.

(1) Out of date/past manufacturer's expiry date stock must be taped off with "Quarantined" written on the explosive tape. This stock is still counted in the magazine stocktakes until it is destroyed.

(3) (4) and (5) Damaged/defective stock must be taped off with "Quarantined" written on the explosive tape. This stock is still counted in the magazine stocktakes until it is destroyed. All damaged/defective stock must also be recorded on the Defective/Damaged Accessories Notification form and submitted by email to the Operations Manager.

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Stock requiring quarantining until further investigation must be taped off with “Quarantined” written on the explosive tape. This stock is still counted in the magazine stocktakes until it is destroyed.

(6) and (7) Misfired and recovered products may be destroyed in the appropriate manner as detailed in this procedure and note made on the blast plan as to the hole ID that the product has been inserted into, or the location where the products have been laid on the surface in relation to the blast. If these products require storage in the magazine until a firing day, they must be marked with explosive tape as “Quarantined” and added to the magazine record book.

8.4.17.1 DESTRUCTION PROCEDURES

Only licenced, approved and appointed shotfirer's will be responsible for the supervision of the destruction of detonators or Initiating Explosives (IE) and Primary and Secondary High Explosives (HE).

A suitable blast site must be chosen for the destruction of the IE/HE. All consideration must be given to the proximity to buildings, personnel, roads, water sources, livestock and the possible outcomes in terms of Air Over Pressure and Fly Rock. Use evacuation distances as described in [Appendix D – Explosive Emergency Procedure](#) as a minimum guideline for an exclusion zone during disposal.

A JSA must be completed for the destruction of all IE/HE or ensure the destruction is considered in the blast JSA.

The following considerations shall be made when completing the JSA.

- A trench must be dug to place the explosives in to minimise lateral movement of the explosive debris after initiation, no shallower than 30cm.
- All shape charges must be initiated by primacord to ensure adequate detonation.
- Shape charges shall have the prima cord in contact with the chape charge prima charge.
- Shape charges will be directed downwards in the base of the trench so that the focus of the explosive energy results in the least amount of flying debris.
- All long lengths of prima-cord must be tapped together along the length of the primacord and initiated by a single electrical detonator.
- Consideration must be given to the different Primacord detonation speeds and the cord with the fastest detonation speed should be used as the primary detonation cord.
- Depending on the quantity, the detonation of shape charges and remnant primacord should not be over the same length of the initiation primacord.
- Prior to detonation, fill the trench with clean fill, free from rocks to minimise flying debris.
- Initiate the disposal site from a safe distance. Use evacuation distances as described in [Appendix D – Explosive Emergency Procedure](#) as a minimum guideline.

Inspect for unfired detonators or products during the post-blast inspection.

Boosters may be tapped to the initiating prima-cord, provided the booster makes direct contact to the primacord.

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8.4.17.2 MANDATORY CONSIDERATIONS DURING DISPOSAL

No product/s are to be destroyed by burning.

When multiple products are laid on the surface for destruction, ensure there is enough separation, so a misfire is not caused by shrapnel or cut off from an adjacent product. Products may need to be covered with cuttings/stemming to reduce the possibility of shrapnel-induced cut-offs.

Always unroll detonating primacord prior to destruction.

This procedure is not intended to be exhaustive. Each destruction task may differ depending on the circumstances; therefore, emphasis is made of the fact that the activity must have been assessed by a JSA to identify the hazards and implement controls prior to the task.

9 IMPORTATION OF EXPLOSIVES

For the importation of explosives, Huracan has appointed DGAir to aid in the importation into Australia. As a member of the AEISG (Association of Explosives Industry Safety Group), DGAir abides by the current version of the 'AEISG Code of Practice – Import of Explosives'. Huracan has taken reasonable steps to ensure that the DGAir representatives and agents are:

- An appropriate person who is authorised to possess explosives
- Competent in the handling of the explosive
- Are aware of their obligations and relevant requirements under the Act
- Trained in the hazards and properties of the explosive
- Are able to recognise a dangerous situation
- working within Huracan's ESSP and our associated procedures.

Of note is that due to the relatively small volume of explosive shipments, Huracan will Airfreight all explosives into Australia through Sydney and Brisbane. This will require a company import permit for NSW and Queensland.

See [Appendix K - Explosives Importation Guidelines](#). The latest revision copy is available on HIMS.

See [Appendix L](#) for a list of potential explosives to be imported.

9.1 IMPORT PROCESS

Generally, the importation of explosives involves 8 distinct steps. Huracan purchases explosives from oil and gas manufacturers that already have UN Testing and Authorisation. The import process would commence at step 3 "Packing at Manufacturer".

8 Steps for the importation of explosives;

1. UN Testing
2. Authorisation of Explosives
3. Packaging

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4. Shipping
5. Import Documentation Process
6. Port Handling Operations
7. Road Transport
8. Storage

9.1.1 PACKAGING

Packages must be in good condition for the journey as required by the IATA code for air freight, IMDG code for sea and the AEC (10). The packages must not be wet, collapsing, torn, delaminated, soiled, stained, improperly sealed, closed or taped, or any other defect that affects the integrity and the intended performance of the package against the tests required under the UN system for package performance tests.

Packages of explosives need to be examined by the packer, and any found to be damaged or leaking should not be packed into the Cargo Transport Unit (CTU). Packages showing evidence of staining, etc., should not be packed without first determining that it is safe and acceptable to do so.

9.1.1.1 DAMAGED PACKAGING

If the packaging is damaged prior to or during transport, then steps must be taken to remediate damage to the packing. See section 9.4.4 – Resolution of Issues.

9.1.2 GLOBALLY HARMONISED SYSTEM OF CLASSIFYING AND LABELLING OF CHEMICALS (GHS)

The GHS is an international system used to classify and communicate chemical hazards using internationally consistent terms and information on chemical labels and Safety Data Sheets.

The GHS provides criteria for the classification of physical hazards (e.g. explosives, flammable liquids), health hazards (e.g. carcinogens) and environmental hazards (e.g. aquatic toxicity).

The supplier should ensure that any GHS marking requirements are met.

9.1.3 PACKAGE APPROVAL

Explosives are to be packaged in approved packages. The types of packages allowed for particular explosives must be in accordance with the Packing Instructions and Special Provisions outlined in -

- columns 8 and 9 of the list of explosives and related goods of the AEC;
- columns 8 and 9 in the list of dangerous goods in the IMDG Code;
- columns G – M of the IATA Dangerous Goods Regulations.

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Packages, combination packages and IBCs are approved under the United Nations system for packaging approvals. Approvals can be identified by the markings on the packages and IBCs. The test certificate from the country of origin can be obtained to identify the approval of the package and IBC. All approvals are undertaken by the competent authority in the country of origin who allocates the approval number.

9.1.4 PACKAGING AND UNIT LOADS

The explosives must be packed in the container in such a manner as to ensure they are safe from unintended movement, rubbing, or stack failure while in transit. Air freight pallets will generally be packed to smaller dimensions than for sea freight, but the requirement for ensuring the pallet is safe from unintended movement is the same.

9.1.5 PACKAGE MARKING

The packages are to be marked in accordance with:

- the AEC; and either
- IMDG Code (sea); or
- IATA Dangerous Goods (air) Regulations.

The shipper is responsible for all necessary marking and labelling on each package of explosives. Each package must be of such a size that there is adequate space to affix all required markings and labels.

9.1.6 AIR FREIGHT CONTAINER

The dimensions of air freight containers vary depending on the type of aircraft and the location of stowage in the aircraft. The shipper of the explosives will liaise with the freight forwarder, who is managing the airfreight on the shipper's or Huracan's behalf, to ensure palletization is appropriate for the type and size of the airfreight container.

9.1.6.1 PROHIBITED MARKING

Arrows for purposes other than indicating proper package orientation must not be displayed on a package. When a package orientation “this way up” label is affixed to a package, the label must be marked on the top of the package.

9.1.6.2 ACCEPTANCE OF CLASS

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Only explosives in Division 1.4 compatibility group S are permitted on a passenger aircraft. Only explosives in Division 1.3 compatibility groups C and G and Division 1.4 compatibility groups B, C, D, E, G and S are permitted on a cargo aircraft.

The extent to which explosives may be stowed together in an aircraft is determined by their compatibility. Explosives are considered to be compatible if they can be stowed together without significantly increasing the probability of an accident. Explosives in compatibility group S may be stowed with other explosives and all compatibility groups. Explosives of class 1.4B must not be loaded with other explosives, except for class 1.4S, when loaded on the same aircraft. With explosives other than class 1.4S, class 1.4B explosives must be loaded into separate CTUs.

9.1.7 SEA FREIGHT CONTAINERS

Sea freight containers are of a consistent size with only minor variations.

DRY CARGO CONTAINERS		• DIMENSIONS								
Type		Container Weight			Interior Measurement				Door Open	
		Gross [kg]	Tare [kg]	Net [kg]	Length [m]	Width [m]	Height [m]	Capacity [m³]	Width [m]	Height [m]
20 ft		24,000	2,370	21,630	5.898	2.352	2.394	33.20	2.343	2.280
40 ft		30,480	4,000	26,480	12.031	2.352	2.394	67.74	2.343	2.280

• CHARACTERISTICS
Manufactured from either Aluminium or steel, they are suitable for most types of cargo / general cargo. Aluminium containers have a slightly larger payload than steel, and steel containers have a slightly larger internal cube

Each sea container used for transport of explosives is required to have 4 locking bars (2 per door) to ensure security during transit.

A consistent palletizing and stowage plan should be developed by the Importer in conjunction with the shipper to ensure the containers are stowed safely and efficiently.

9.1.7.1 LINING THE SHIPPING CONTAINER TO AEC REQUIREMENTS

Australia has specific requirements regarding the internal lining of any shipping container of explosives. The lining of freight containers is an Australian requirement for road and rail transport in addition to the requirements of the IMDG Code. The requirements for lining under the AEC (Section 6.3) are –

- The side and end walls, floor and doors of the container of the container inside be lined and fixed at least 300 mm above the load with an air gap of 25 mm minimum between the lining and the walls of the container. The gap is measured from the walls to the line of the inner most wall surface. The lining being either
 - Bond plywood 12mm thick minimum (type B quality to AS2271 or equivalent), or
 - Other timber 17 mm thick minimum, or
 - Aluminium, sheet 0.8mm thick minimum

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- The floor or floor lining must have a non-metallic surface or covering in sound condition, sift-proof and free from cracks for free-flowing powdery explosives.

The consignee must ensure that the supplier is aware of the above requirements before packing.

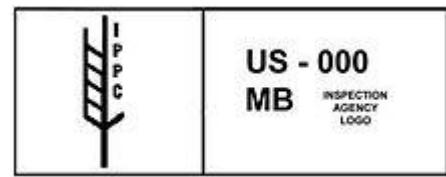
The requirement for lined steel containers for import and export does not apply to:

- Explosives of Classification Code 1.4S excluding detonators of classification code 1.4S (lining applies to detonators of classification code 1.4S);
- Packages having substantially wooden outside surfaces; and
- Type E blasting explosives of UN0241 and UN0332.

9.1.7.2 TIMBER USED WITHIN THE CONTAINER

There are standards that apply for the treatment of the timber that is used within the freight container. International Standard for Phytosanitary Measures No. 15 (ISPM 15) is an International Phytosanitary Measure that directly addresses the need to treat wood materials of a thickness greater than 6mm, used to ship products between countries. Its main purpose is to prevent the international transport and spread of disease and insects that could negatively affect plants or ecosystems. ISPM 15 affects all wood packaging material (pallets, crates, dunnages, etc.) requiring that they be debarked and then heat treated or fumigated and stamped or branded,[1] with a mark of compliance. This mark of compliance is colloquially known as the "wheat stamp". Products exempt from the ISPM 15 are made from alternative material, like paper, plastic or wood panel products (i.e., OSB, hardboard, and plywood).

Sample ISPM logo showing the MB for methyl bromide treatment of the wood.



Any timber packaging and dunnage, including stickering and gluts (space filling timber), must be compliant with ISPM 15 or evidence of other acceptable treatment provided.

9.1.7.3 SECURING OF LOAD WITHIN THE FREIGHT CONTAINER

The consignment within the freight container must be secured to prevent movement of the load during transport. The methods of securing the load should be an approved method in accordance with the approved and endorsed instructions of the import licence holder under their safety management system. Methods of securing the load may vary from the use of ply board, timber, dunnage bags or airbags, etc. Dunnage bags or airbags are an acceptable method of securing a load within a freight container when the provisions in the CTU Code are followed. Any dunnage used

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must be free of any metal including nails. The door end must be shored off using a wooden bulk head.



9.1.7.4 FUMIGATION

Fumigation may be required for shipments being imported by sea. Fumigation is carried out by a licensed and regulator-accredited fumigator prior to loading on the vessel. Transport documentation associated with the carriage of cargo transport units under fumigation must show the date of fumigation, the type and amount of fumigant used, and give instructions for the disposal of the residual fumigant, including fumigation devices if used (Refer section 9.9 of the IMDG code). Special requirements may apply for fumigation when BMSB requirements are involved. (Refer 8.3.1).

9.1.8 MARKING AND PLACARDING

9.1.8.1 PLACARDING FOR SEA FREIGHT

Placarding and marking of cargo transport units (freight containers) must comply with chapter 5.3 of the IMDG Code. Placarding is not required on the CTU for any quantity of class I.4 S explosives. The placard of not less than 25 mm square for the appropriate division of explosives will be clearly displayed, one on each side and one on each end of the cargo transport unit. Where a single proper shipping name is transported in the cargo transport unit, the proper shipping name of the contents shall be marked on at least both sides in letters not less than 65 mm, in a contrasting colour. The UN number shall be displayed in black digits not less than 65 mm high on a white or orange background and does not obscure or detract from the other elements either within the class 1 diamond or adjacent to Class I diamond.



9.1.8.2 PLACARDING FOR ROAD TRANSPORT IN AUSTRALIA

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For road transport in Australia, marking freight containers is done in accordance with section 3.3 of the AEC. When containers are loaded with at least 1,000 kg of explosives or 20,000 detonators, the sides of the freight container or the vehicle must be marked with Emergency Information Panels. Where there are mixed UN numbers within the freight container, no UN number and no proper shipping name is required and the Hazchem Code is E.

9.2 SHIPPING

9.2.1 DEDICATED CHARTER

The vessel will be certified and insured for carriage of explosives. It would normally be “geared” meaning cargo can be unloaded by the ship’s on-board cranes. This will usually be compulsory depending on which port the vessel is calling to unload.



Note the cargo cranes on the ship.

In this case the importer charters (rents) either a whole vessel, or space on a vessel for a voyage from the load port to the discharge port. Bookings for these vessels are made via a ship broker. A ship broker will take the Importer’s requirements (number of containers, load, discharge port) to the market of available ship owners and negotiate an appropriate ship on the charterer’s behalf.

This vessel may carry other cargo, (explosives or non explosives) and may stop at other ports during the voyage. These vessels will usually call to a dedicated explosives port in Australia such as Port Alma due to that Port having higher explosive limits and therefore allowing more explosives to be carried.

9.2.2 LINER SERVICE

In the case of liner shipping the Importer contracts with a liner shipping company, e.g., ANL, or Swire, for the voyage from the load port to the discharge port. Liner ships operate in regular schedules

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between nominated ports and carry general cargo which may not be compatible with explosives. Most liner companies will not accept explosives. Some liner companies which accept explosives will not carry them on all services or on all vessels. Liner ports generally have lower NEQ limits reducing the quantity of explosives which can be imported. Finally, some intermediate ports on liner services will not allow the through carriage or transhipment of explosives. These reasons mean the preferred method of importing commercial quantities of explosives is via tramp shipping or dedicated charter.



Typical Liner vessel. Note lack of on-board cranes, and large number of containers which can cause compatibility problems for carriage of explosives.

Bookings on these ships will be made by the shipper or Importer (depending on the Incoterm) either directly with the shipping line, or more commonly, via a freight forwarder.

9.2.3 VESSEL SUITABILITY

Prior to importing/exporting explosives, the suitability of any shipping provider should be thoroughly checked to reduce the possibility of any unexpected or unanticipated outcomes which may lead to increased risks.

Prior to importing/exporting explosives, the suitability of any shipping provider should be thoroughly checked to reduce the possibility of any unexpected or unanticipated outcomes which may lead to increased risks.

Vessel Suitability Checklist available in [Appendix J](#).

9.3 IMPORTATION DOCUMENTATION PROCESS

9.3.1 IMPORT LICENCES

The licence to import Explosives must be for the state in which the import will take place. Once imported into that state, the Importer can transport the explosives to another state under transport

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licences/regulations. The Importer does not need a separate import licence for a state to which goods are being transported by road. Huracan will import explosives internationally into only either Queensland or NSW and will ensure adequate licencing prior to importation.

9.3.2 AUSTRALIAN BORDER FORCE/CUSTOMS ENTRY

The value, quantity and other details of the import of explosives must be declared to Australian Border Force before approval will be granted to unload. This is handled by a licensed Customs Broker. Australian Border Force keeps a list of current licensed brokers on their website.

The Importer is to obtain from the Shipper the following documents:

- Commercial Invoice showing incoterm and freight amount
- Packing List
- Fumigation Certificate (if required)
- Bill of Lading
- Dangerous goods declaration

The DGAir (Customs Broker), will perform an “import lodgement” with Australian Border Force using the above documents.

This lodgement will be compared to a similar lodgement performed by the Carrier’s Agent. If the details match and all information has been provided then the authorities will provide a release, which allows the Importer to collect the cargo from the wharf or airport.

It is usual practice for the Importer to put their Customs Agent in contact with the Carrier’s Agent to ensure they both lodge the same information with ABF to ensure delays are minimized. Delays can be caused by different reference numbers or typographical errors in one or both party’s lodgments.

When the Importer’s Customs agent receives the ABF release, it should be forwarded to the Carrier’s agent.

9.3.3 DEPARTMENT OF AGRICULTURE, WATER AND THE ENVIRONMENT

The Customs Broker also lodges the appropriate documents with the Department of Agriculture to obtain permission for the Importer to collect the goods. Department of Agriculture has specific inspection requirements for import containers. When containers are to be de-stuffed from a container at a rural location, i.e. outside the metropolitan area, then they require that a “Tailgate Inspection” be performed before leaving the Port.

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A Tailgate Inspection requires the container to be opened and inspected inside and out for the presence of foreign matter, particularly biological matter.

Should the discharge be at a dedicated explosives port then the Customs Broker will also make a booking directly with the Department of Agriculture inspection officer to attend at the Port and inspect the containers.

Should the discharge be at a Liner Port, the container will be taken to the nearest facility which can cater for the Tailgate Inspection.

Department of Agriculture has less interest in air freight imports as the cargo is unpacked from the airline CTU at the airport, which is always in an urban area.

9.3.3.1 BROWN MARMORATED STINK BUG (BMSB)

BMSB is of particular concern to Australian authorities. A BMSB season is advised each year and any shipments from target countries are affected. The Department of Agriculture nominates target countries for each season. Any target high risk or target risk goods which are manufactured in, or shipped from or through the target risk countries will be subject to BMSB seasonal measures.

The Department will be monitoring a number of emerging risk countries (watch list countries) throughout the season. Target high risk and risk goods from these countries may be subject to random onshore inspections to verify freedom from BMSB contamination. Explosives have been categorised as “target high risk goods” by the Department of Agriculture and require mandatory treatment when shipped from target countries. The Department of Agriculture has approved certain fumigators around the world who are authorised to provide BMSB fumigation measures. The list can be found on the Department of Agriculture websites. Any fumigation carried out by a non-approved provider will be considered to have not been fumigated and a re-treatment will have to be done at time of discharge.

9.3.4 NOTIFICATION OF IMPORT TO STATE REGULATOR

A notification of importation of explosives must be submitted prior to importing explosives via Air or Sea with the applicable state authority.

- For Queensland, this form must be submitted to the Chief Inspector of Explosives at least 7 days prior to the activity being undertaken.
- For NSW, this form is to be submitted to SafeWork NSW at least 5 working days prior to the activity being undertaken.

Advise the applicable state inspectorate of any changes to the notified arrival times and discharge dates as soon as practicable and any other issues that impact upon the import.

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9.3.5 PORT AUTHORITY NOTIFICATION

The Importer must advise the port authorities in writing as to who will be the Authorised Representative.

9.4 IMPORT HANDLING OPERATIONS

9.4.1 AIR FREIGHT

Huracan preferred method of importation will be air freight. For airfreight imports the explosives will arrive at the airport and will be unpacked from the airline CTU by the airline. The carrier's agent will collect the goods from the airline and stage them at a Bonded Warehouse to await import clearance by ABF. The Importer should put their Customs Broker in contact with the Carrier's Agent.

Huracan's Customs Agent will lodge the documents when ABF clearance is granted there will be a certain number of days to arrange collection from the carrier's agent. Collection must be by an approved explosive transport company. After the expiration of the "free days", there will be a charge for storage.

9.4.2 SEA FREIGHT

9.4.2.1 LINER PORT

Liner Port operations are designed to remove the explosives from the port precinct as soon as possible to avoid interaction with non-compatible general cargo which may also be at the Port.

The Importer's Customs Agent will perform the ABF clearance which they will send to the Shipping Line who will liaise with the port stevedore. The Stevedore will generally plan to remove the explosive container/s from the vessel before any other container. The Importer must have the approved explosive transport company standing by at the time of discharge to collect the container "under hook". Under Hook means that instead of unloading the container and it being left on the wharf for later collection, the transport operator will be called into the wharf by the stevedore and the container will be loaded directly onto the truck. The import container will usually be directed immediately to a nearby inspection location for the Department of Agriculture Tailgate Inspection before being approved for travel to its final destination.

9.4.2.2 CHARTER PORT

Charter sea freight vessels will generally call to non-liner ports. These ports will generally have higher NEQ levels allowing the importation of greater quantities of explosives.

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The Importer will need to be more closely involved with operations at these ports. They must liaise with the port authorities, arrange the stevedores and road transport, and have an authorised representative at the Port.

Explosives are not usually discharged between sunset and sunrise or during electrical storms for safety reasons. This can lead to issues where other vessels, which can work cargo, are waiting to discharge. The Port Authority will clarify the situation.

9.4.2.3 STEVEDORES

Huracan in consultation with the Customers Broker must make arrangements in advance for a port Stevedore to provide labour to discharge the containers. Stevedore shifts are generally booked for 8 hours at a time, and advance notice is required when booking labour for a weekend discharge.

9.4.2.4 TRANSPORT

Huracan in consultation with the Customers Broker (DGAir) must ensure that sufficient transport is standing by to ensure no delays are incurred due to lack of trucks. Transport paperwork must be provided by the Importer to the transport operator in advance to enable them to plan the number of trucks, routing, etc.

9.4.3 AIR FREIGHT AND SEA FREIGHT - AUTHORISED REPRESENTATIVE

The licensed Importer (Huracan) has nominated DGAir to be their nominated Authorised Representative at the Port during the time of discharge. This representative will be formally identified prior to the Importation and must be: -

- An appropriate person who is authorised to possess explosives
- Competent in the handling of the explosive
- Are aware of their obligations and relevant requirements under the Act
- Trained in the hazards and properties of explosives
- Are able to recognise a dangerous situation
- Work within Huracan's ESSP and our associated procedures.

The Authorised Representative of the licensed Importer is responsible for the inspection of the container and/or the imported products at the Port before being offered for transport and is responsible for authorizing remedial action should this be required.

Huracan will ensure Huracan's representative agent is available during the entire loading and unloading of the explosives.

The representative of the licensed Importer will be competent in the matters that can reasonably be expected to occur, such as explosives safety and security, biosecurity, transport and other matters.

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The representative will have knowledge of the explosives being imported and their properties and be able to determine if a load is safe for transport.

9.4.4 RESOLUTION OF ISSUES

Issues which may be identified at the time of import could include: -

- Inadequate, damaged or potential to damage packaging
- Incorrectly marked boxes
- Inadequate securing of the cargo
- Shifted cargo
- Foreign matter inside or outside the container

Issues related to Explosive Issue Resolution must be actioned as soon as reasonably practicable through consultation between DGAir and the Huracan Operations Manager, deemed the Responsible person for all Explosive matters. The following are potential issues and issue resolution guidelines.

9.4.4.1 INADEQUATE PACKAGING

If the packaging is found to be inadequate, such as wet, damaged or collapsed packaging, nails or dunnage with the potential to penetrate the packaging during transport then steps must be made to first make the area safe. An attempt to rectify the packaging should be made in consultation with the Huracan Authorised person and the DGAir nominated, competent person. Any issue that can not be rectified must be referred to the applicable state explosive directorate, and a plan must be made for safe transportation to the nearest Government Explosive Reserve for unpacking, remediation and rectification. All issues related to non-compliance must be recorded within the Huracan Information Management System (HIMS). When applicable, action items will notify the explosive manufacturer and their packing agent.

9.4.4.2 INCORRECTLY MARKED BOXES

In the event that an explosive box has been incorrectly marked, then an attempt to rectify the issue should be made in consultation with the Huracan Authorised person and the DGAir nominated competent person. In the event that the resolution is inadequate, then the issue should be referred to the applicable state explosive directorate, and a plan must be made for safe transportation to the nearest Government Explosive Reserve for unpacking, remediation and rectification. All issues related to non-compliance must be recorded within the Huracan Information Management System (HIMS). When applicable, an action item will notify the explosive manufacturer.

9.4.4.3 INADEQUATE SECURING OF THE CARGO

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If the cargo is found to be inadequately secured then steps must be made to first make the area safe. An attempt to rectify the issue should be made in consultation with the Huracan Authorised person and the DGAir nominated, competent person. Any issue that can not be rectified must be referred to the applicable state explosive directorate, and a plan must be made for safe transportation to the nearest Government Explosive Reserve for unpacking, remediation and rectification. All issues related to non-compliance must be recorded within the Huracan Information Management System (HIMS). When applicable, action items will notify the explosive manufacturer and their packing agent.

9.4.4.4 SHIFTED CARGO

If the cargo has shifted during transport then steps must be made to first make the area safe. In consultation with the Huracan Authorised person and the DGAir nominated, competent person, an attempt to make the cargo safe may include re-packaging, but only if safe. If the issue can not be rectified must be referred to the applicable state explosive directorate, and a plan must be made for safe transportation to the nearest Government Explosive Reserve for unpacking, remediation and rectification. All issues related to non-compliance must be recorded within the Huracan Information Management System (HIMS). When applicable, action items will notify the explosive manufacturer and their packing agent.

9.4.4.5 FOREIGN MATTER INSIDE OR OUTSIDE THE CONTAINER

If foreign matter is found inside a container, then in consultation with the Huracan Authorised person and the DGAir nominated competent person, depending on the foreign matter, an action plan should be made to remediate the issue, which may include the Department of Agriculture for Fauna and Flora foreign matter or the Australian Border force. All issues related to non-compliance must be recorded within the Huracan Information Management System (HIMS). When applicable, action items will notify the explosive manufacturer, their packing agent and the explosives directorate.

9.4.4.6 OUT OF DATE EXPLOSIVES, LEAKING MATERIAL, OUT OF SPECIFICATION

An unlikely issue as the explosives are direct from the manufacturer, but if it does occur, then the DGAir competent person should consult with the Huracan Authorised person. First, the area should be made safe and must be referred to the applicable state explosive directorate, and a plan must be made for safe transportation to the nearest Government Explosive Reserve for unpacking, remediation and rectification. All issues related to non-compliance must be recorded within the Huracan Information Management System (HIMS). When applicable, an action item will notify the explosive manufacturer.

9.4.5 FUMIGATION

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When an import of explosives requires fumigation or quarantine, the importer will notify the Explosives Inspectorate immediately and provide the intended fumigation facility and written advice about the process they are using to handle and store the explosives prior to consigning from point of import.

The Department of Agriculture Inspector may order a fumigation to be carried out on a container if: -

- Mandatory fumigation was not conducted at the load port;
- Fumigation was conducted at the load port by a provider who is not approved; or
- Foreign matter/biosecurity actionable material is found inside or outside the container.

If the Port of import is configured for fumigation, then arrangements must be made to conduct the fumigation before the container leaves the Port.

Arrangements must be made immediately with the port authority. The Importer must supply:

- Risk Assessment
- Lay out plan
- Timeline
- Details of approved fumigator
- Earthing equipment / lightning protection

to obtain any necessary approval from the port authority.

Each Port will have its own rules around fumigation. Other vessels may or may not be allowed to operate cargo while fumigation is being performed at the Port.

If the Port is not configured for fumigation, then the container may need to travel to the nearest approved facility to have the fumigation performed.

9.4.6 PRE-ARRIVAL CHECKLIST

To minimise delays and unexpected outcomes, the Importer should carry out a pre-arrival check of the systems and procedures for any planned explosive arrival.

DGAir has a suitable checklist as provided in Appendix 2 of the AEISG Code of Practice – Import of Explosives'; however this should be supplemented with more specific detail relevant to any particular shipment.

9.5 PREPARATION FOR ROAD TRANSPORT

Transport of explosives in Australia is regulated by individual States and Territories. Huracan will contract Energy Freighter, out of Roma for the transportation of explosives when possible, or another

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suitably qualified DG freight company will be nominated and will have its own safety and security management plans consistent with the Huracan's

The contractor and the driver have obligations under the transport company's safety and security management plans to ensure: -

- Explosives are safe for transport;
- Cargo is appropriately secured;
- Description, product name, codes are correct and in accordance with transport documentation;
- Placards are in place and appropriate to the cargo being carried; and
- They know the properties of the explosives being transported and the actions to be taken in case of an emergency situation.

The transport route to be followed should be in accordance with the documented route and risk assessment. Documentation should be in order when accepting the explosives for transport and delivering them for the next part of their life cycle.

The Importer who consigns explosives for road transport shall prepare transport documentation, otherwise known as a cart note, for each container being unloaded. This document will be formatted as per requirements in the AEC (Chapter 4).

Three copies of the cart note are prepared. The authorised representative will sign, the transport company representative/driver will sign and the consignee who receives the cargo will sign. Each party retains one copy.

The Importer or consignor will be expected to audit the transport company at regular intervals to ensure it is meeting its obligations.

9.6 CONTAINER UNLOADING

9.6.1 DECONSOLIDATING THE CONTAINER

The freight container, having been transported from the Port to the destination for the first journey, will be set down. This must be in the area where it is to be unloaded or to be unloaded at a later date.

Procedures for unloading the container are as follows: -

- Verify the seals on the container match those recorded on the transport documentation;
- Ensure there has been no tampering of the container;
- The seal and the seal identity number will be recorded under the security plan; and

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- Upon opening the doors, the container is normally vented for two hours before entering or beginning to unload the container.

Upon discovering any issues that require rectification, the unpackers will contact the Importer for advice on addressing those issues.

Those issues could include:

- Quality of the product;
- Non-compliant package markings;
- Unauthorised product; and/or
- Damage to packaging or product.

The shipment or parts of the shipment will be treated in accordance with the unpacker's quality plan for quarantining while awaiting rectification of the issues. This product will then need to be identified as under quarantine, leading to rectification to declare the product is of acceptable quality or to reject the product. Depending upon the product, pallets may need to be stacked, explosives may need to be re-packaged due to damage. A random inspection should be taken of the contents within a package to verify that the quality of the package contents are as intended. This inspection will be carried out under the quality plan to validate the integrity of the shipment received.

It is crucial that a cross check of quantity received matches the quantity shipped. Should a discrepancy be discovered the Importer will conduct an investigation to determine the source of the discrepancy and determine whether there is the possibility of stolen or lost explosives. Should the Importer suspect stolen or lost explosives, the local regulator should be advised immediately.

9.7 REGULATORY REQUIREMENTS SPECIFIC TO EXPLOSIVES

This section identifies the major pieces of legislation that apply to the life-cycle for the import and export of explosives and other general regulatory requirements under legislation. The Commonwealth, States and Territories have specialist legislation regulating the safety and security of explosives through the entire life-cycle. This includes import, export, supply and sale, manufacture, transport, storage and the authorisation of explosives as appropriate. In Australia, explosives safety and security legislation is predominantly legislated and administered at a State/Territory level. For import and export purposes, sea transport is regulated through the Commonwealth by the Australian Maritime Safety Authority and for air transport by the Civil Aviation Safety Authority.

There are other regulatory agencies that also have a role with the import and export of explosives including general health and safety matters, general transport, ports, harbours and marine, biosecurity, environment, customs and other business aspects.

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Therefore, importers and exporters of explosives will need to consider other agencies where relevant, including:

- Department of Defence;
- Australian Border Force (Customs);
- Department of Agriculture and Water Resources;
- Australian Maritime Safety Authority (AMSA);
- Federal Attorney General;
- Department of Health (NICNAS); and /or
- Civil Aviation Safety Authority (CASA).

Agencies who are located overseas will also have a role covering the import and export of explosives, however these are not dealt with in this code. Other agencies that have a more general role, such as health and safety, are also not dealt with in this code.

Each Regulator will operate under their respective legislations which have requirements placed upon the responsible people operating in the import and export of explosives to ensure compliance with their respective legislations. These legislations will provide for administrative arrangements such as powers of authorised officers (inspectors), appointment of authorised officers, licences and permits, notifications, statutory directives, authorisation of explosives, etc.

9.7.1 EXPLOSIVE LIMITS – PORTS AND AIRPORTS

Each Port has an explosives limit defined by the port authority, normally with the assistance of the explosives regulator. Some ports have different limits at different berths at the Port.

Liner ships call to berths being operated by their particular contracted stevedore and will only call to berths with higher explosives limits by special arrangements.

Charter ship owners will check the limits of the Port prior to accepting the booking however the obligation is on the Importer to check the details of the Port prior to making such arrangements.

Airlines know the limits applying at airports and aircraft and will not accept bookings which exceed the limits.

9.7.2 CHAIN OF RESPONSIBILITY

Under the Chain Of Responsibility (COR), if a person consigns, packs, loads or receives goods as part of their business, they could be held legally liable for breaches of the Heavy Vehicle National Law (HVNL) even though the person has no direct role in driving or operating a heavy vehicle. In addition, corporate entities, directors, partners and managers are accountable for the actions of people under their control. This is the 'chain of responsibility'.

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The aim of COR is to make sure everyone in the supply chain shares equal responsibility for ensuring breaches of the HVNL do not occur. Under COR laws if a person exercises (or has the capability of exercising) control or influence over any transport task, the person is part of the supply chain and therefore has a responsibility to ensure compliance with HVNL.

The law recognises that multiple parties may be responsible for offences committed by the drivers and operators of heavy vehicles. A person may be a party in the supply chain in more than one way. For example, they may have duties as the employer, the operator and the consigner of goods.

Legal liability applies to all parties for their actions or inactions. The Importer must ensure it does not put unreasonable demands on the transport company to deliver within an unrealistic time frame.

The Importer should include checks of time sheets when performing regular audits of the transport companies to ensure they have systems in place to ensure all legislation, e.g., fatigue, is being followed.

10 REFERENCE LIBRARY

Legislation, regulatory and other references are consulted to ensure the Company is complying with all due obligations and our commitment for continual improvement.

Explosives Act 1999

Radiation Regulation 2017

AEISG – Code of Practice – Import of Explosives – Current Edition

AS 2187.1 – 1998 Explosives – Storage, transport and use, Part 1: Storage

AS 2187.2 – 2006 Explosives – Storage and use, Part 2: Use of explosives

Australian Code of Transport of Dangerous Goods by Road & Rail Edition 7.4

Australian Code for the Transport of Explosives by Road and Rail 3rd Edition

Amendments from Land, Explosives & Other Legislation Amendment Bill 2017

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APPENDIX A – AUTHORISED UNSUPERVISED ACCESS PERSONNEL

Current licences and document to be stored on Huracan's Information Management System under the Document Report tab. Expiry date to be recorded with automated email expiry reminders.

Name	Licence #	Type	Purpose	Expiry Date	Authority
Jon Paul Hollingworth	2300296	Blasting Explosives, Propellant Powders	Down Hole Perforating	14-Sep-28	QLD

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APPENDIX B – CORPORATE EXPLOSIVE LICENCE



Explosives Act 1999

Licence to Use Explosives

Licence No: 2300425

Issued to: Huracan Pty. Ltd.

Explosive type

Blasting Explosives, Propellant Powders

Purpose

Down Hole Perforating

Terms of use

- This licence authorises the holder pursuant to Section 32 of the Explosives Regulation 2017 to use explosives in Queensland under the Explosives Act 1999 subject to the purpose, type of explosives and conditions listed above.
- The holder must notify the Chief Inspector of Explosives of any change of address, contact details, offences (whether or not a conviction has been recorded), domestic violence orders and any other change to the circumstances under which this licence was issued.
- This certificate remains the property of Resources Safety & Health Queensland (RSHQ). If found please return to the nearest police station or RSHQ, GPO Box 1321, BRISBANE QLD 4001.

Expiry date: 11 September 2028

Effective from: 11 September 2023

v#7



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Explosives Act 1999
**Licence to
Import Explosives**

Licence No: 2300668

Issued to: Huracan Pty. Ltd.

Explosives to be imported
Blasting Explosives, Propellant Powders

Terms of use

- This licence authorises the holder pursuant to Section 25 of the Explosives Regulation 2017 to import explosives under the Explosives Act 1999 subject to the type of explosives to be imported and conditions listed above.
- The holder must notify the Chief Inspector of Explosives of any change of address, contact details, offences (whether or not a conviction has been recorded), domestic violence orders and any other change to the circumstances under which this licence was issued.
- This certificate remains the property of Resources Safety & Health Queensland (RSHQ). If found please return to the nearest police station or RSHQ, GPO Box 1321, BRISBANE QLD 4001.

Expiry date: 22 December 2024
Effective from: 22 December 2023

v#7

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APPENDIX C – APPROVED VEHICLES FOR TRANSPORT OF EXPLOSIVES

A list of the current Approved vehicles for the Transport of Explosives list is kept on HIMS under the Document Report tab. The document format is as below. Each individual Vehicle Licence and expiry is to be recorded in the same section.

Vehicle Registration	Explosive Licence	Expiry Date

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APPENDIX D – EXPLOSIVE EMERGENCY PROCEDURE


EMERGENCY PROCEDURE GUIDE EXPLOSIVES – Divisions 1.1, 1.2, 1.3, 1.5 & 1.6

This Emergency Procedure Guide with all details completed below must be carried with the Transport Documentation in the cabin of the truck or locomotive.

NAME <i>(Proper Shipping Name or Authorised Name)</i>	Classification Code	Subsidiary Risk (if any)	UN Number

HAZARDS:

- Fire:** May burn and/or detonate if subjected to heat, flame or shock.
Explosion will cause a blast and missile effects over a wide area.
- Health:** Fire may produce irritating or toxic smoke.

EMERGENCY CONTACT: Dial "000" Police and Fire Brigade

Notify as to location, material, quantity, UN Number and Company Contact below:

Company	Location	Telephone Number <small>Reverse charges accepted</small>	Ask For

MISSING OR STOLEN EXPLOSIVES:

In the event of explosives being found to be stolen or missing,
the driver shall ensure that the police (dial "000")
and the Competent Authorities are notified as soon as possible.

EVACUATION DISTANCE

(to be completed by consignor)

Total Quantity of Explosives
kg

Evacuation Distance
metres

GUIDE FOR EVACUATION DISTANCE (M) ESTIMATE, BASED ON QUANTITY OF EXPLOSIVES	Quantity	Explosives Division				
		1.1	1.2	1.3	1.5	1.6‡
	Up to 1000 kg	400	200	100	400	400
	1000 to 5000 kg	600	300	150	600	600
	5000 to 20000 kg	800	400	200	800	800
	20000 to 40000 kg	1000	500	250	1000	1000

‡ The risk from articles of Division 1.6 is limited to the explosion of a single article and therefore the quantity of explosives referred to is that of the largest NEQ of any article in the load.

FIRST AID

Smoke Inhalation	<ul style="list-style-type: none"> Remove patient to fresh air, lay down, rest If patient is not breathing, make sure their airway is clear and apply artificial respiration Keep patient warm Call Doctor at once or transport to Doctor or Hospital
Eyes	<ul style="list-style-type: none"> Hold eyes open and wash continuously with water for 15 minutes Transport to Doctor or Hospital
Skin	<ul style="list-style-type: none"> Remove all contaminated clothing, including shoes Wash affected areas with water, using soap, if available
Burns	<ul style="list-style-type: none"> Immerse affected area in cold water for 10-15 minutes Bandage lightly with sterile dressing Treat for shock, if required Transport to Hospital or Doctor

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EMERGENCY PROCEDURES

If this happens
Do this

Cargo Fire	<ul style="list-style-type: none"> • Do not fight fire when fire reaches cargo. The cargo may explode • Contact Police by telephone or messenger. Tell them location, material in load and quantity • Remove all people from the area; see first page for evacuation distances • Divert all traffic away from the area • Allow the cargo to burn and keep area isolated for at least one hour after all fire and explosions have ceased
Tyre Fire	<ul style="list-style-type: none"> • Do not fight fire when fire reaches cargo. The cargo may explode • Contact Police by telephone or messenger. Tell them location, material in load and quantity • Stop vehicle and assess the risk of the fire spreading to the cargo • Flood tyre with water if available. If water is not available use extinguisher, dirt or other means • After extinguishment, remove tyre from vehicle and reignite. • If fire cannot be contained, treat as cargo fire
Body Fire	<ul style="list-style-type: none"> • Do not fight fire when fire reaches cargo. The cargo may explode • Contact Police by telephone or messenger. Tell them location, material in load and quantity • Assess the risk of the fire spreading to the cargo • Remove all people form the area; see first page for evacuation details • Divert all traffic away from the area • Attempt to extinguish fire with dry powder, water or foam extinguisher • If fire cannot be contained, treat as cargo fire
Engine or Cab Fire	<ul style="list-style-type: none"> • Do not fight fire when fire reaches cargo. The cargo may explode • Contact Police by telephone or messenger. Tell them location, material in load and quantity • Assess the risk of the fire spreading to the cargo • If possible, separate the prime mover from the trailer • Shut down engine. Isolate electricity with battery isolation switch or by disconnecting a battery cable • Attempt to extinguish fire with dry powder, water or foam extinguisher <p style="padding-left: 20px;">Caution: fire may erupt if the bonnet is raised; attack through any available opening without raising bonnet</p> <ul style="list-style-type: none"> • If fire cannot be contained, treat as cargo fire
Brake Drum Overheating	<ul style="list-style-type: none"> • Stop vehicle • Allow brake drum to cool, or flood with water, if available • Do not drive vehicle until brake has been dismantled, inspected and if necessary repair • If fire has developed, assess the risk of the fire spreading to cargo, treat as for tyre fire • If fire cannot be contained, treat as cargo fire
Vehicle Accident	<ul style="list-style-type: none"> • Contact Police by telephone or messenger. Tell them location, material in load and Quantity • Check for fire, spills, leaks or movement of cargo • Do not disentangle or move vehicles without specialist advice
Spill	<ul style="list-style-type: none"> • Contact Police by telephone or messenger. Tell them location, material in load and Quantity • Eliminate all sources of ignition (no smoking, sparks, flames or flares) • Do not touch or walk through spilled material • Do not operate mobile telephones or radio transmitters within 100 metres of electric detonators • Do not clean up or dispose of, except under supervision of a specialist

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APPENDIX E – EXPLOSIVE MANIFEST**Huracan Explosive Manifest**

Sold To: (Name)
 (Address)
 (Address)

Ship To: (Name)
 (Address)
 (Address)

Item	Qty	Unit	Part Number	Description	NEW	TEW	UN No, Shipping name, Class
1 Explosive Charges							
1.1							
1.2							
1.3							
1.4							
1.5							
2 Detonators							
2.1							
2.2							
2.3							
2.4							
2.5							
3 Miscellaneous Explosives							
3.1							
3.2							
3.3							
3.4							
3.5							
3.6							
3.7							
3.8							
3.9							
3.1							
Total Explosive Weight: 0							
Document Control	Responsible Department	Document Number	Status	Rev Date	Next Revision		
Operations Manager	Wireline Department	EXMEL201R1.0	Active	18-Jan-23	18-Jan-25		

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APPENDIX F – TRANSPORT RISK CATEGORIES FOR EXPLOSIVES

TABLE 2.1
Risk Categories for Explosives

Type of Explosives (2)	Quantity per Vehicle (1)		
Division	Category 1 (Low Risk)	Category 2 (Moderate Risk)	Category 3 (High Risk)
Division 1.1 A (3)	Transport must be specifically approved by the Competent Authority		
Detonators of 1.1B	≤125 items	>125–5000 items	>5000 items
All other Division 1.1	≤5kg	>5–250kg	>250kg
Division 1.2	≤5kg	>5–250kg	>250kg
Division 1.3	≤50kg	>50–1000kg	>1000kg
Detonators of 1.4B or 1.4S	≤125 items	>125 items	n/a (5)
All other Division 1.4	≤250kg	>250kg	n/a (5)
All other Division 1.4 S (other than Detonators)	Any quantity	n/a (5)	n/a (5)
Division 1.5	≤25kg	>25–250kg (4)	>250kg (4)
Division 1.6	≤25kg	>25kg	n/a (5)

Notes:

- (1) Quantity in NEQ, except where otherwise specified.
- (2) For mixed loads, the Division and Compatibility Group for the entire load shall be determined as outlined in Section 7.3.2, prior to assigning the appropriate Risk Category to that load.
- (3) Transport of explosives of Classification Code 1.1A is to be specifically approved by the Competent Authority.
- (4) This applies only for the purposes of Section 8.4, quantities of explosives of Division 1.5 greater than 250kg are considered to be Category 3.
- (5) "n/a" – means not applicable.
- (6) For transport of Class 5.1 with Class 1 refer to Sections 2.4(3) and 2.4(4) to determine the risk category

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APPENDIX G – MARKING OF ROAD VEHICLES

3.4 Marking of Road Vehicles

3.4.1 Marking of Road Vehicles for Transporting Explosives

- (1) Except where the requirements of Section 3.4.1(3) apply, every road vehicle which has aboard explosives in a quantity sufficient to qualify for inclusion in Risk Category 2 or 3 (see Table 2.1) must be marked:
 - (a) at the front and the rear with reflective Class Placard or Placards and Subsidiary Risk Placard or Placards (if any) appropriate to the explosives aboard; and
 - (b) at the front and rear and on both sides, with a reflective placard displaying the word 'EXPLOSIVES' in red, upper case, not less than 150mm high on a white background.
- (2) The Class and any Subsidiary Risk Placards required by Section 3.4.1 must:
 - (a) comply with Section 3.6;
 - (b) be not less than 250mm square;
 - (c) be firmly affixed to the vehicle; and
 - (d) have a surface immediately surrounding and within 20mm of every Class Placard and Subsidiary Risk Placard of a colour contrasting with the background colour or colours of the Placard.
- (3) Every road vehicle used to transport explosives, of other than Division 1.4, in a quantity not less than 1000kg or 20000 items (for detonators), must be marked:
 - (a) at the front with reflective Class Placard or Placards and Subsidiary Risk Placard or Placards (if any) appropriate to the explosives aboard;
 - (b) on the front, rear and each side with a reflective placard displaying the word 'EXPLOSIVES' in red, uppercase, not less than 150mm high on a white background; and
 - (c) on each side and the rear with Emergency Information Panels in accordance with Section 3.4.1(4).
- (4) The following requirements apply to the Emergency Information Panels required to be displayed on road vehicles by Section 3.4.1(3):
 - (a) each Emergency Information Panel and the means of attaching it must comply with Section 3.7; and
 - (b) where the road vehicle is carrying one or more freight containers or IBCs which are marked with Emergency Information Panels in accordance with this Chapter, no further panels are required at the sides and/or rear of the vehicle provided the panels on the containers are fully exposed to view.

3.4.2 Marking of Combination Road Vehicles

If a combination road vehicle is transporting a load of explosives, required to be marked in accordance with Section 3.4.1, the markings required must be fixed:

- (a) to the front and rear of the combination; and
- (b) to each side of each trailer or rigid vehicle that forms part of the combination and on which a load of explosives required to be marked is being carried.

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APPENDIX H - INFORMATION BULLETIN NO.71 LIST OF AUTHORISED EXPLOSIVES

Department of Natural Resources and Mines



List of authorised explosives

Explosives information bulletin no. 71 | 01 July 2016 | Version 18

List of authorised explosives

This document lists all explosives authorised by the Chief Inspector of Explosives under section 8 of the *Explosives Act 1999*. The list is designed to help people involved with managing explosives to identify authorised explosives. It is updated regularly. This version lists all explosives authorised up to 1 July 2016 and replaces the previous version 17 dated 1 April 2016.

The Explosives Act requires that all explosives used in Queensland must be authorised by the Chief Inspector of Explosives, and that a register of authorised explosives be maintained and made available to anyone requesting it. Explosives compositions and articles may also be authorised.

The Act does not require explosives to be authorised for particular purposes. These details are provided by the manufacturer as the manufacturer's recommendations for the conditions of use as provided through the quality and character of the explosives.

The list groups authorised explosives into six categories:

1. The general list
2. Permitted explosives
3. The Defence explosives ordnance classification list (DEOCL)
4. Generically authorised explosives
5. Generically authorised explosives used in the petroleum, gas and geothermal industries
6. Generically authorised explosives articles of hazard division 1.3 and 1.4 for use by law enforcement agencies

The **general list** of explosives includes those that are authorised through a request to the Chief Inspector under section 13 of the Regulation.

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APPENDIX I – AUTHORITY CONTACTS

Queensland	Explosives Inspectorate - Resources Safety and Health Queensland Level 19 275 George Street Brisbane City, Queensland 4000	Ph: 1300 739 868
Australian Capital Territory	Chief Inspector of Dangerous Goods A.C.T Workcover Canberra Nara Centre 3 Constitution Avenue	Ph: 13 22 81
New South Wales	WorkCover NSW 92-100 Donnison Street, Gosford NSW 2250	Ph: (02) 4321 5000 Ph: 13 10 50
Northern Territory	Chief Inspector of Dangerous Goods NT WorkSafe GPO Box 1722, Darwin, NT 0801	Ph: 1800 019 115
South Australia	Manager, Dangerous Substances Deptment GPO Box 465 Adelaide, SA 5001	PH: 1800 777 209
Tasmania	WorkSafe Tasmania 30 Gordons Hill Road Rosny Park, TAS 7018	Ph: 1300 366 322
Victoria	Licensing Branch PO Box 279 Geelong Vic 3220	Ph: 1300 852 562 Fax 1800 060 727
Western Australia	Dangerous Goods Officer Department of Mines, Industry Regulation and Safety Locked Bag 100 East Perth WA 6892	Ph: (08) 6251 2300

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APPENDIX J - IMPORT EXPLOSIVES VESSEL CHARTERING CHECKLIST

Criteria	Information	Statement on compliance	C/NC/NA
1. Vessel Specifications	Compare vessel length, draft, air draft, crane reach with load and discharge port limits		
2. Crew List	Must comply with current AMSA regulations, marine notices, international sanctions		
3. Sanctions Check	Check whether vessel, owners and operators or managers are on any international sanctions list and have no past history with countries on sanction lists		
4. Independent Vessel Vetting Service	Optional 3 rd party independent vetting of vessel to guarantee suitability to carry Class 1		
5. Ship survey Report	Can be used with or in addition to independent vetting in point 4		
6. Vessel Certificates	Obtain Dangerous goods documents, DOC, SMC, Class certificates, ISSC, P&I certificates to ensure certificates and insurance are current		
7. Ship crane inspection reports	Obtain reports, test certificates and maintenance logs for ropes, hooks, sheave blocks and shackles. Stevedores will check these documents for currency prior to operating cargo		

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8. Crane Markings	Ensure crane markings are clear and visible. Stevedores will not operate cranes unless markings are clearly visible		
9. Check last 6 cargoes carried by vessel	Carriage of Department of Agriculture actionable cargoes such as wheat and grains within the last 6 cargoes presents a risk of residue being on board and failure during inspection		
10. Firefighting Equipment test certificates	Firefighting certificates and inspection regime must be current		
11. History of Class 1 carriage	Considering the strict rules and stringent inspection protocols in Australia it is always preferable to use a carrier with Class 1 experience		
12. Bow Thruster	Vessels with bow thrusters are usually exempt from one or more tugs for berthing and sailing		

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APPENDIX K – EXPLOSIVES IMPORTATION GUIDELINES

Explosives Importation Guidelines



This document serves as a guide for the importation of explosives into Australia. Huracan has contracted DGAir as its designated Dangerous Goods Importer and Customs Broker for all importation of Explosives. This document should be used in conjunction with the current version of Huracans Explosive Safety and Security Plan.

Prior to purchasing and export of the explosives, a check is to be made to ensure that the explosives to be purchased are authorised for the states that the explosives will be imported and transported to there final destination. The following are links to the appropriate state authority.

- State link for explosives authorisation.
 - [Queensland Government Authorised Explosives](#)
 - [NSW Government Authorised Explosives](#)
- If explosives have not been authorised, follow the links to the applicable state request form.
 - [Application form for the Authorisation of Explosives - QLD](#)
 - [Application form for the Authorisation of Explosives - NSW](#)

Explosives approved under the UN classification model or another classification system approved by the Chief Inspector in the applicable state of importation.

- UN classification

The explosives to be imported are packaged, marked and labelled as required under

- The Australian Explosives Code or
- The Australia dangerous goods code
- On the Request of an inspector, a technical safety data sheet for the explosive can be provided.

Huracan will liaise with the manufacturer of the explosives to ensure explosives will function as designed.

- Review documentation of explosives reviewed.
- Documentation reviewed and updated on HIMS of explosives reviewed and applicable test certification accepted.

A competent person from DGAir will be nominated to aid in the facilitation of the importation of explosives, unpacking and first journey.

A notification of the importation of explosives must be submitted prior to importing explosives via Air or Sea with the applicable state authority.

- For Queensland, this form must be submitted to the Chief Inspector of Explosives at least 7 days prior to the activity being undertaken. The information should include:
 - the proper shipping name and authorised name of the explosives (including UN number and classification)
 - conformation that the explosive is authorised
 - the quantity of explosives, including the total NEQ
 - the point of entry/exit into/out of Queensland
 - the anticipated date of arrival/departure
 - the name and address of the consignor and consignee for the explosives
 - name of the competent person, representative and agent
- For NSW, the linked [form](#) is to be emailed to licensing@safework.nsw.gov.au (SafeWork NSW) at least 5 working days prior to the activity being undertaken.

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Explosives Importation Guidelines



Prior to shipping of explosives, confirm with the manufacturer that the consigned explosives are in a safe condition for Transport to Australia and onward to the storage bunker.

- Notify DGAir of the intention to ship explosives.
- Obtain confirmation of shipment packaging prior to shipment.
- Refer to Huracan Explosive Safety and Security Plan, Section 9.1 Packaging, for details on requirements such as the following.
 - Package Approval
 - Package Marking
 - Prohibited Package Markings
 - Damaged Packaging

Ensure explosives packaging is correctly classified and reviewed with the supplier prior to shipment. Suitable explosive safety and security detection methods are present during shipment and document applicable devices used.

Once the shipment has arrived, DGAir will be responsible for the inspection of the shipment prior to the intended first journey.

Issues related to the safety and security of the explosives during storage and transport will be reviewed immediately between the Huracan Authorised representative and the DGAir nominated, competent person and a course of action undertaken to rectify any issue. Any issue that can not be rectified must be referred to the applicable state explosive directorate, and a plan must be made for safe transportation to the nearest Government Explosive Reserve for unpacking, remediation and rectification. All issues related to non-compliance must be recorded within the Huracan Information Management System (HIMS).

- Issues recorded.
- Refer to Huracan Explosive Safety and Security Plan, Section 9.1 Packaging
- Refer to Huracan Explosive Safety and Security Plan, Section 9.4.4 Resolution of Issues

The DGAir nominated, competent person is to confirm that the explosives are loaded safely and securely for the entirety of the first journey.

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APPENDIX L – LIST OF POTENTIAL EXPLOSIVES TO BE IMPORTED

Shipping Classification

Part Number	Description	Expl Wt Each (gm)	Qty of Items per Box	Pkg Gross Wt (lbs)	UN No	Haz Class	Proper Shipping Name	PG	EX No	ECCN	HTS	Sch B	CE No
101978736-JRC	EXPLO/HDW KIT CUTR SEG 3.62500 HMX	54.8	1	18.21	UN 0352	1.4D	ARTICLES, EXPLOSIVE, N.O.S., (PRESSED DESENSITIZED PELLETS OF HMX)	2010080111	1C992	3602.00	3602.00.0060	CE0519, ENB/B/173	
12-0029-100	CHARGE,P29 38.0G HMX PURGING	38	20	22	UN 0352	1.4D	Articles,explosive,n.o.s.(Contains HMX)	2000090137	1C992	360200	3602.00.0060	0080.EXP.10.0023	
BOOSTER-HMX-600-DN	BOOSTER; HMX BI-DIRECTIONAL Z-908	0.6	200	2	UN 0349	1.4S	ARTICLES, EXPLOSIVE, N.O.S.	199409083	1C992	360200	3602.00.0060	0080.EXP.98.0027	
BOOSTER-HMX-600-T	BI-DIRECTIONAL BOOSTER W/ 0.6G HMX	0.6	50	3.5	UN 0384	1.4S	COMPONENTS, EXPLOSIVE TRAIN, N.O.S (Boosters containing HMX)	2019022963	1C992	3602.00	3602.00.0060	0080.EXP.15.0018	
BOOSTER-HMX-600-T2	BI-DIRECTIONAL BOOSTER W/ 0.6G HMX	0.6	50	3.5	UN 0384	1.4S	COMPONENTS, EXPLOSIVE TRAIN, N.O.S (Boosters containing HMX)	2019022963	1C992	3602.00	3602.00.0060	0080.EXP.15.0018	
BOOSTER-HMX-775-AA	BOOSTER; HMX BI-DIRECTIONAL	0.78							1C992	360200	3602.00.0060		
BOOSTER-HNS-600-DN	BOOSTER; HNS BI-DIRECTIONAL Z-909	0.6	0	2	UN 0349	1.4S	ARTICLES, EXPLOSIVE, N.O.S.	199409083	1C992	360200	3602.00.0060	0080.EXP.98.0028	
BOOSTER-HNS-600-T	BI-DIRECTIONAL BOOSTER W/ 0.33G HNS	0.33	50	3.5	UN 0384	1.4S	COMPONENTS, EXPLOSIVE TRAIN, N.O.S (Boosters containing HNS)	2019022963	1C992	3602.00	3602.00.0060	0080.EXP.15.0018	
BOOSTER-HNS-775-AA	BOOSTER; HNS BI-DIRECTIONAL	0.78							1C992	360200	3602.00.0060		
BOOSTER-PYX-600-EB	BOOSTER; PYX BI-DIRECTIONAL	0.6							1C992	360200	3602.00.0060		
BOOSTER-RDX-775-AA	BOOSTER, RDX BI-DIRECTIONAL	0.78							1C992	360200	3602.00.0060		
BOT-H437431000	SECONDARY IGNITER; BAKER	6	20	1.57	UN 0481	1.4S	SUBSTANCES, EXPLOSIVE, N.O.S. (BORON/POTASSIUM NITRATE PELLETS)	2015030650	1C992	360300	3603.00.9020	0	
BOT-H437440001	BP-5S BAKER IGNITER	1.2	20	1.9	UN 0454	1.4S	IGNITERS	199601020	1C992.F	360300	3603.00.9020	ENB/P/081/15	
BOT-H437442200	BP-3S BAKER IGNITER	1.2	20	2	UN 0454	1.4S	IGNITERS	199512109	1C992	360300	3603.00.9020	ENB/P/081/15	
BOT-H437641500	#05 STANDARD POWER CHARGE	150	10	8	UN 0349	1.4S	Articles, explosive, n.o.s. (contains strontium nitrate, potassium perchlorate)	EX1990030405	1C992	3602.00	3602.00.0060	0	
BOT-H437642113	#10 STANDARD POWER CHARGE; BAKER	315	10	12.3	UN 0349	1.4S	Articles, explosive, n.o.s. (contains strontium nitrate, potassium perchlorate)	EX1990030405	1C992	3602.00	3602.00.0060	0	
BOT-H437643223	#20 STANDARD POWER CHARGE; BAKER	430	10	16.2	UN 0349	1.4S	Articles, explosive, n.o.s. (contains strontium nitrate, potassium perchlorate)	EX1990030405	1C992	3602.00	3602.00.0060	0	
BOT-H437660010	#10 SLOW SET POWER CHARGE; BAKER	6	10	17.4	UN 0323	1.4S	CARTRIDGES,POWER DEVICE	2015030653	1C992	360200	3602.00.0060	ENB/P/081/15	
BOT-H437660020	#20 SLOW SET POWER CHARGE; BAKER	570	10	19.4	UN 0323	1.4S	CARTRIDGES,POWER DEVICE	2015030653	1C992	360200	3602.00.0060	ENB/P/081/15	
BOT-H437660550	#05 SLOW SET POWER CHARGE	275	10	13	UN 0323	1.4S	CARTRIDGES,POWER DEVICE	2015030653	1C992	360200	3602.00.0060	ENB/P/081/15	
BOT-H437665225	#05 SLOW SET POWER CHARGE 17.5" LG	275	10	12.4	UN 0323	1.4S	CARTRIDGES,POWER DEVICE	2015030653	1C992	360200	3602.00.0060	0	
CAP-1708-310B	CHARGE 1-11/16" 8G RDX BH	8	50	16.1	UN 0440	1.4D	CHARGES, SHAPED	2007120133	1C992	360200	3602.00.0060	0080.EXP.05.0050	
CAP-1708-321T	CHARGE 1-11/16" 8G RDX SDP	8	50	16.1	UN 0440	1.4D	CHARGES, SHAPED	2007120133	1C992	360200	3602.00.0060	0080.EXP.05.0050	
CAP-1708-410B	CHARGE 1-11/16" 8G HMX BH	8	50	16.1	UN 0440	1.4D	CHARGES, SHAPED	2007120133	1C992	360200	3602.00.0060	0080.EXP.05.0050	
CAP-1708-421T	CHARGE 1-11/16" 8G HMX SDP	8	50	16.1	UN 0440	1.4D	CHARGES, SHAPED	2007120133	1C992	360200	3602.00.0060	0080.EXP.05.0050	
CAP-2114-331T	CHARGE 2-1/8" 14G RDX	14	50	24	UN 0440	1.4D	CHARGES, SHAPED	2007120133	1C992	360200	3602.00.0060	0080.EXP.05.0050	
CAP-2114-431T	CHARGE 2-1/8" 14G HMX	14	50	24	UN 0440	1.4D	CHARGES, SHAPED	2007120133	1C992	360200	3602.00.0060	0080.EXP.05.0050	
CAP-2115-310B	CHARGE 2-1/8" 15G RDX BH	15	50	23.3	UN 0440	1.4D	CHARGES, SHAPED	2007120133	1C992	360200	3602.00.0060	0080.EXP.05.0050	
CAP-2115-320T	CHARGE 2-1/8" 15G RDX SDP	15	50	24.9	UN 0440	1.4D	CHARGES, SHAPED	2007120133	1C992	360200	3602.00.0060	0080.EXP.05.0050	
CAP-2115-420T	CHARGE 2-1/8" 15G HMX SDP	15	50	24.9	UN 0440	1.4D	CHARGES, SHAPED	2007120133	1C992	360200	3602.00.0060	0080.EXP.05.0050	
CIR-1302-3C50	CHARGE 1-3/8 1.8G RDX CIR 1/2"	1.8	30	4	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1302-3C63	CHARGE 1-3/8 1.8G RDX CIR 5/8"	1.8	30	4.5	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0051	
CIR-1302-3T251	CHARGE 1-3/8 2G RDX CIR 1/4"	2	30	4.68	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0051	
CIR-1302-3T381	CHARGE 1-3/8 2G RDX CIR 3/8"	2	30	4.575	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1302-4C50	CHARGE 1-3/8 1.8G HMX CIR 1/2"	1.8	30	4	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1302-4C63	CHARGE 1-3/8 1.8G HMX CIR 5/8"	1.8	30	4.5	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1302-4T25	CHARGE 1-3/8 1.8G HMX CIR 1/4"	1.8	30	3.93684	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1302-4T251	CHARGE 1-3/8 2G HMX CIR 1/4"	2	30	4.68	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1302-4T38	CHARGE 1-3/8 1.8G HMX CIR 3/8"	1.8	30	3.93684	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1302-4T381	CHARGE 1-3/8 2G HMX CIR 3/8"	2	30	4.575	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1603-3C501	CHARGE 1-9/16 3.2G RDX CIR 1/2"	3.2	30	5.706	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1603-3C631	CHARGE 1-9/16 3.2G HMX CIR 5/8"	3.2	30	5.66306	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1603-4C631	CHARGE 1-9/16 3.2G HMX CIR 5/8"	3.2	30	5.725	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1603-4T25	CHARGE 1-9/16 3.2G HMX CIR 1/4"	3.2	30	5.706	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1603-4T251	CHARGE 1-9/16 3G HMX CIR 1/4"	3	30	5.6	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1603-4C501	CHARGE 1-9/16 3.2G HMX CIR 1/2"	3.2	30	5.725	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1603-4C63	CHARGE 1-9/16 3.2G HMX CIR 5/8"	3.2	30	5.66306	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1603-4C631	CHARGE 1-9/16 3.2G HMX CIR 5/8"	3.2	30	5.725	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1603-4T25	CHARGE 1-9/16 3G HMX CIR 1/4"	3.2	30	5.66306	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1603-4T251	CHARGE 1-9/16 3G HMX CIR 1/4"	3	30	5.6	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	

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Explosive Safety and Security Plan



Part Number	Description	Expl Wt Each (gm)	Qty of Items per Box	Pkg Gross Wt (lbs)	UN No	Haz Class	Proper Shipping Name	PG	EX No	ECCN	HTS	Sch B	CE No
CIR-1603-4T38	CHARGE 1-9/16 3.2G HMX CIR 3/8"	3.2	30	5.66306 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1603-4T381	CHARGE 1-9/16 3.5G HMX CIR 3/8"	3.5	30	5.725 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-1603-ST381	CHARGE 1-9/16 3.5G HNS CIR 3/8"	3.5	30	5.725 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-2106-4C50	CHARGE 2" 6.5G HMX CIR 1/2"	6.5	30	8.95015 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-2106-4C63	CHARGE 2" 6.5G HMX CIR 5/8"	6.5	30	8.9 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-2106-4T38	CHARGE 2" 6.5G HMX CIR 3/8"	6.5	30	8.95015 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-2107-3C501	CHARGE 2" 7G RDX CIR 1/2"	7	30	8.624 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-2107-3C631	CHARGE 2" 7G RDX CIR 5/8"	7	30	8.69 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-2107-3T251	CHARGE 2" 7G RDX CIR 1/4"	7	30	8.492 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-2107-3T381	CHARGE 2" 7G RDX CIR 3/8"	7	30	8.558 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-2107-4C501	CHARGE 2" 7G HMX CIR 1/2"	7	30	8.624 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-2107-4C631	CHARGE 2" 7G HMX CIR 5/8"	7	30	8.69 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-2107-4T251	CHARGE 2" 7G HMX CIR 1/4"	7	30	8.492 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-2107-4T381	CHARGE 2" 7G HMX CIR 3/8"	7	30	8.558 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CIR-4522-48961	CHARGE 4-1/2 22G HMX 9-5/8 K0360CIR	22	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
CL-3106-3T1T	CHARGE 3-1/8" 6G RDX CL EQ	6.5	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060		
CL-3106-4T1T	CHARGE 3-1/8" 6G HMX CL EQ	6.5	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060		
CL-3107-3T1T	CHARGE 3-1/8" 7G RDX CL EQ	8	50	12.32 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0047	
CL-3107-4T1T	CHARGE 3-1/8" 7G HMX CL EQ	8	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0047	
CORD-100PETN-EB	DET. CORD; 100 GRAIN PETN	6479.89	1	24.9 UN 0289	1.4D	CORD, DETONATING		1992020035	1C992	360300	3603.00.3020	0	
CORD-40HMX-LS-AIR-EB	DET. CORD; 40 GRAIN HMX ROUND LS	1315	1	10.5 UN 0289	1.4D	CORD, DETONATING		1995050048	1C992	360300	3603.00.3020	0	
CORD-40HMX-LS-DT	DET. CORD; 40 GRAIN HMX ROUND LS	1296	1	10.5 UN 0289	1.4D	CORD, DETONATING		2005100220	1C992	360300	3603.00.3020	PvTT177/08	
CORD-40HMX-LS-DT-100	DET. CORD; 40 GRAIN HMX ROUND LS	260	1	3 UN 0289	1.4D	CORD, DETONATING		2005100220	1C992	360300	3603.00.3020	PvTT177/08	
CORD-40HMX-LS-EB	DET. CORD; 40 GRAIN HMX ROUND LS	1315	1	10.5 UN 0289	1.4D	CORD, DETONATING		1992020035	1C992	360300	3603.00.3020	0	
CORD-40HMX-LS-RIB-AIR-EB	DET. CORD; 40 GRAIN L5 HMX RIBBON	1315	1	10.5 UN 0289	1.4D	CORD, DETONATING		1995050048	1C992	360300	3603.00.3020	0	
CORD-40HMX-LS-RIB-DT	DET. CORD; 40 GRAIN HMX LS RIBBON	1296	1	10.5 UN 0289	1.4D	CORD, DETONATING		2005100220	1C992	360300	3603.00.3020	PvTT178/08	
CORD-40HMX-LS-RIB-EB	DET. CORD; 40 GRAIN HMX LS RIBBON	1315	1	10.5 UN 0289	1.4D	CORD, DETONATING		1992020035	1C992	360300	3603.00.3020	0	
CORD-40RDX-LS-AIR-EB	DET. CORD; 40 GRAIN RDX ROUND	1296	1	10.5 UN 0289	1.4D	CORD, DETONATING		EX1995050048	1C992	360300	3603.00.3020	0	
CORD-40RDX-LS-DT	DET. CORD; 40 GRAIN RDX ROUND LS	1296	1	10.5 UN 0289	1.4D	CORD, DETONATING		2005100219	1C992	360300	3603.00.3020	PvTT172/08	
CORD-40RDX-LS-EB	DET. CORD; 40 GRAIN RDX ROUND LS	1315	1	10.5 UN 0289	1.4D	CORD, DETONATING		1992020035	1C992	360300	3603.00.3020	0	
CORD-40RDX-LS-RIB-AIR-EB	DET. CORD; 40 GRAIN RDX LS RIBBON	1315	0	35.6 UN 0289	1.4D	Cord, Detonating		1997010142	1C992	3603.00	3603.00.3020	0	
CORD-40RDX-LS-RIB-DT	DET. CORD; 40 GRAIN RDX LS RIBBON	1296	1	10.5 UN 0289	1.4D	CORD, DETONATING		2005100219	1C992	360300	3603.00.3020	PvTT173/08	
CORD-40RDX-LS-RIB-EB	DET. CORD; 40 GRAIN RDX RIBBON	1315	1	10.5 UN 0289	1.4D	CORD, DETONATING		0	1C992	360300	3603.00.3020	0	
CORD-40RDX-PB-EB	DET. CORD; 40 GRAIN RDX LEAD	263	1	0 UN 0289	1.4D	CORD, DETONATING		0	1C992	360300	3603.00.3020	0	
CORD-60HMX-LS-AIR-EB	DET. CORD; 60 GRAIN HMX LS	3.89	1	9 UN 0289	1.4D	Cord, Detonating		1997010144	1C992C	3603.00	3603.00.3020	ENB/C/021/06	
CORD-60HMX-XP-DN-PT185	DET. CORD; 60 GRAIN HMX	1950	1	9 UN 0289	1.4D	CORD, DETONATING		0	1C992	360300	3603.00.3020	0	
CORD-60HNS-SLIM-DN-PT250	DET.CORD 60 GRAIN HNS SLIM CORD	3.9	1	22.9 UN 0289	1.4D	CORD, DETONATING		0	1C992	360300	3603.00.3020	0589.EXP.1251/01	
CORD-80HMX-LS-AIR-DT	DET. CORD; 80 GRAIN HMX LS AIR	2600	0	35 UN 0289	1.4D	Cord, detonating, flexible		2003080150	1C992	3603.00	3603.00.3020	0	
CORD-80HMX-LS-AIR-EB	DET. CORD; 80 GRAIN HMX LS	2585	0	11.2 UN 0289	1.4D	Cord, Detonating		1995050048	1C992	3603.00	3603.00.3020	0	
CORD-80HMX-LS-DN-T190	DET. CORD; 80 GRAIN HMX LS	2585	1	11.2 UN 0289	1.4D	CORD, DETONATING		1992020035	1C992	360300	3603.00.3020	0	
CORD-80HMX-LS-DT	DET. CORD; 80 GRAIN HMX LS	2585	1	11.2 UN 0289	1.4D	CORD, DETONATING		2005100220	1C992	360300	3603.00.3020	PvTT179/08	
CORD-80HMX-LS-EB	DET. CORD; 80 GRAIN HMX LS	2585	1	11.2 UN 0289	1.4D	CORD, DETONATING		1992020035	1C992	360300	3603.00.3020	0	
CORD-80HMX-LS-XHV-AIR-DT	DET. CORD; 80 GRAIN HMX XHV LS	2585	0	11.2 UN 0289	1.4D	Cord, detonating, flexible		2003080150	1C992	3603.00	3603.00.3020	0	
CORD-80HMX-LS-XHV-AIR-EB	DET. CORD; 80 GRAIN HMX XHV LS	2585	0	11.2 UN 0289	1.4D	Cord, Detonating		1995050048	1C992	3603.00	3603.00.3020	0	
CORD-80HMX-LS-XHV-DT	DET. CORD; 80 GRAIN HMX XHV LS	2585	1	11.2 UN 0289	1.4D	CORD, DETONATING		2005100220	1C992	360300	3603.00.3020	PvTT180/08	
CORD-80HMX-LS-XHV-EB	DET. CORD; 80 GRAIN HMX XHV LS	2585	1	11.2 UN 0289	1.4D	CORD, DETONATING		1992020035	1C992	360300	3603.00.3020	0	
CORD-80HMX-XP-AIR-EB	FIRELINE 80HMX LS EXPOSED, AIR PACK	2585	0	39 UN 0289	1.4D	Cord, Detonating		2007060067	1C992	3603.00	3603.00.3020	0	
CORD-80HMX-XP-DN-PT165	DET. CORD; 80 GRAIN HMX LS	2585	1	11.2 UN 0289	1.4D	CORD, DETONATING		19950175	1C992	360300	3603.00.3020	0	
CORD-80HMX-XP-DN-PT185	DET. CORD; 80 GR HMX	2585	1	11.2 UN 0289	1.4D	CORD, DETONATING		2001020044	1C992	360300	3603.00.3020	0	
CORD-80HMX-XP-EB	DET. CORD; 80 GRAIN HMX; EXPOSED	2585	1	11.2 UN 0289	1.4D	CORD, DETONATING		1992020035	1C992	360300	3603.00.3020	0	
CORD-80HNS-LS-DN	FIRELINE 17/80 HNS LS (EXPOSED)	518	1	4.2 UN 0289	1.4D	Cord, Detonating		2007120149	1C992	360300	3603.00.3020		
CORD-80HNS-XP-PT250-AIR	DET. CORD; 80 GR HNS EXPOSED AIR	2585		11.2				II	1C992	360300	3603.00.3020		
CORD-80PETN-DT	DET. CORD; 80 GRAIN PETN	2585	1	11.2 UN 0289	1.4D	CORD, DETONATING		2005100221	1C992	360300	3603.00.3020	0	
CORD-80PETN-EB	DET. CORD; 80 GRAIN PETN	2585	1	9.3 UN 0289	1.4D	CORD, DETONATING		1992020035	1C992	360300	3603.00.3020	0	
CORD-80PYX-XP-EB	DET. CORD; 80 GRAIN PYX	2585		11.2				II	1C992	360300	3603.00.3020		
CORD-80RDX-AIR-DT	DET. CORD; 80 GRAIN RDX AIRPACK	2585	1	39 UN 0289	1.4D	Cord, detonating, flexible		2003080150	1C992	3603.00	3603.00.3020		
CORD-80RDX-AIR-EB	DET. CORD; 80 GRAIN RDX AIRPACK	2585	1	39 UN 0289	1.4D	Cord, Detonating		199505048	1C992	3603.00	3603.00.3020	0	

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Operations Manager	J. Hollingworth	ESSP_Rev1.5	Public	3-Dec-23	3-Dec-24	Page 62 of 70

Explosive Safety and Security Plan



Part Number	Description	Expl Wt Each (gms)	Qty of Items per Box	Pkg Gross Wt (lbs)	UN No	Haz Class	Propper Shipping Name	PG	EX No	ECCN	HTS	Sch B	CE No
CORD-80RDX-DT	DET. CORD; 80 GRAIN RDX	2585	1	11.2 UN 0289	1.4D	CORD, DETONATING		2005100219	1C992	360300	3603.00.3020	PVTT174/08	
CORD-80RDX-EB	DET. CORD; 80 GRAIN RDX	2585	1	11.2 UN 0289	1.4D	CORD, DETONATING		1992020035	1C992	360300	3603.00.3020	0	
CORD-80RDX-LS-AIR-DT	DET.CORD; 80 GRAIN RDX LOW SHRINK	2585	1	47.89 UN 0289	1.4D	Cord, detonating, flexible		2003080150	1C992	360300	3603.00.3020	0	
CORD-80RDX-LS-AIR-EB	DET.CORD; 80 GRAIN RDX LOW SHRINK	2585	1	11.2 UN 0349	1.4S	ARTICLES, EXPLOSIVE, N.O.S (Detonating Cord Containing RDX)		0	1C992	360300	3603.00.3020	0	
CORD-80RDX-LS-DT	DET. CORD; 80 GRAIN RDX LS	2585	1	11.2 UN 0289	1.4D	CORD, DETONATING		199601046	1C992	360300	3603.00.3020	0080.EXP.97.0023	
CORD-80RDX-LS-EB	DET. CORD; 80 GRAIN RDX LS	2585	1	11.2 UN 0289	1.4D	CORD, DETONATING		2005100219	1C992	360300	3603.00.3020	PVTT175/08	
CORD-80RDX-LS-XHV-AIR-DT	DET.CORD; 80 GRAIN RDX XHV LS 500'	2585	1	11.2 UN 0289	1.4D	Cord, detonating, flexible		2003080150	1C992	360300	3603.00.3020	0	
CORD-80RDX-LS-XHV-AIR-EB	DET.CORD; 80 GRAIN RDX XHV LS 500'	2585	1	11.2 UN 0289	1.4D	Cord, Detonating		1995050048	1C992	360300	3603.00.3020	0	
CORD-80RDX-LS-XHV-DT	DET. CORD; 80 GRAIN RDX XHV LS	2585	1	11.2 UN 0289	1.4D	CORD, DETONATING		2005100219	1C992	360300	3603.00.3020	PVTT176/08	
CORD-80RDX-LS-XHV-EB	DET.CORD; 80 GRAIN RDX XHV LS	2585	1	11.2 UN 0289	1.4D	CORD, DETONATING		1992020035	1C992	360300	3603.00.3020	0	
CORD-80RDX-XP-DN-PT150ST	DET. CORD; 80 GRAIN RDX; PVC-NOT LS	2585		11.2			II		1C992	360300	3603.00.3020		
CORD-80RDX-XP-LS-DN-PT150	DET. CORD; 80 GRAIN RDX; LOW SHRINK	2585		11.2			II		1C992	360300	3603.00.3020		
CORD-80RDX-XPLS-AIR-PT150	DET. CORD; 80 GRAIN RDX; LOW SHRINK	2585		11.2			II		1C992	360300	3603.00.3020		
CTR-100014494-JRC	CASING CUTTER HMX 4.5IN	101	1	10.28 UN 0059	1.1D	CHARGES, SHAPED		1989080246	1C992	3602.00.0030	3602.00	ENB/B/056	
CTR-101293449-JRC	CASING CUTTER FOR 3.625 IN CASING	54	1	4.5 UN 0059	1.1D	CHARGES, SHAPED		1989080238	1C992	3602.00.0030	3602.00	ENB/B/056	
CTR-C7250-JRC	EXPLO/HDW KIT CUTR SEG 7.25 OD HMX	421	1	31.36 UN 0352	1.4D	ARTICLES, EXPLOSIVE, N.O.S., (PRESSED DESENSITIZED PELLETS OF HMX)		2010080111	1C992	360200	3602.00.0060	CE0519, ENB/B/173	
CUT-5750-062NT-OW	CASING CUTTER, NT SEGMENTED 5-3/4"	318	1	26 UN 0349	1.4S	Articles, explosive, n.o.s (Articles containing HMX)		1994060082	1C992J	360200	3602.00.0030	0080.EXP.01.0014	
CUT-7250-032-OW	SEGMENTED CASING CUTTER 7.250IN HMX	334.2	1	40 UN 0349	1.4S	Articles, explosive, n.o.s (Articles containing HMX)		1994060082	1C992J	360200	3602.00.0030	0080.EXP.01.0014	
DB-BPC-0800-005	#05 SLOW SET POWER CHARGE	160	10	7 UN 0276	1.4C	CARTRIDGES,POWER DEVICE		2006010093A	1C992	360200	3602.00.0060	0	
DB-BPC-0800-0055	#05 STANDARD POWER CHARGE FOR BAKER	160	10	7 UN 0276	1.4C	CARTRIDGES,POWER DEVICE		2006050014	1C992	360200	3602.00.0060	0	
DB-BPC-1300-010	#10 SLOW SET POWER CHARGE FOR BAKER	360	10	11 UN 0276	1.4C	CARTRIDGES,POWER DEVICE		2006010093A	1C992	360200	3602.00.0060	0	
DB-BPC-1300-0105	#10 STANDARD POWER CHARGE FOR BAKER	360	10	11 UN 0276	1.4C	CARTRIDGES,POWER DEVICE		2006050014	1C992	360200	3602.00.0060	0	
DB-BPC-1300-0105N	#10 STANDARD POWER CHARGE FOR BAKER	360	10	13 UN 0276	1.4C	CARTRIDGES,POWER DEVICE		2006050014	1C992	360200	3602.00.0060	0080.EXP.10.0001	
DB-BPC-1500-020	#20 SLOW SET POWER CHARGE FOR BAKER	460	10	14 UN 0276	1.4C	CARTRIDGES,POWER DEVICE		2006010093	1C992	360200	3602.00.0060	0	
DB-BPC-1500-0205	#20 STANDARD POWER CHARGE FOR BAKER	460	10	14 UN 0276	1.4C	CARTRIDGES,POWER DEVICE		2006050014	1C992	360200	3602.00.0060	0	
DB-BPC-1500-0205N	#20 STANDARD POWER CHARGE FOR BAKER	460	10	15 UN 0276	1.4C	CARTRIDGES,POWER DEVICE		2006050014	1C992	3602.00	3602.00.0060	0080.EXP.10.0001	
DB-DET-2700-075	BP-3 IGNITER	0.65	20	5 UN 0454	1.4S	IGNITERS		2013050733	1C992	360300	3603.00.9020	0	
DB-DET-2700-075 (4)	BP-4 IGNITER	0.65	20	5 UN 0454	1.4S	IGNITERS		2013050733	1C992	360300	3603.00.9020	0	
DB-DET-2700-076	SECONDARY IGNITOR	6	20	4 UN 3178	4.1	FLAMMABLE SOLID INORGANIC, N.O.S (Contains Pyrodex)	II	2006050012	EAR99	360690	3606.90.0000	0	
DB-HDO-1500-100	CHG 1 1/2 & 1 11/16 SHORT	170	10	6 UN 0278	1.4C	CARTRIDGES, OIL WELL		2006110356	1C992	360200	3602.00.0060	0	
DB-HDO-1687-100	POWER CHG; 1 11/16 TOOL	410	10	13 UN 0278	1.4C	CARTRIDGES, OIL WELL		2006110356	1C992	360200	3602.00.0060	0	
DB-HDO-2500-200	P.CHG 2.5 "GO" SHORTY TOOL	460	10	14 UN 0278	1.4C	CARTRIDGES, OIL WELL		2006110356	1C992	360200	3602.00.0060	0	
DB-HDO-3500-100	P.CHG 3.5 "GO" SHORTY TOOL	600	10	18 UN 0278	1.4C	CARTRIDGES, OIL WELL		2006110356	1C992	360200	3602.00.0060	0	
DB-HDO-3500-200	STANDARD P.CHG 3.5 "GO" TOOL	450	10	9.2 UN 0278	1.4C	CARTRIDGES, OIL WELL		2006110356	1C992	360200	3602.00.0060	0	
DB-HDO-3625-100	POWER CHG 3 5/8" COMPACT	400	10	13 UN 0278	1.4C	CARTRIDGES, OIL WELL		2006110356	1C992	360200	3602.00.0060	0	
DET-2700-0742-DB	IGNITER "GO" SETTING TOOLS	3.29	20	4 UN 0454	1.4S	IGNITERS		2013050733	1C992f	360300	3603.00.9020	0	
DET-5306-074-OW	IGNITOR ASSY - POWER CHARGE	3.4	50	11 UN 0454	1.4S	Igniters		2008120360	1C992F	3603.00	3603.00.9020	0080.EXP.01.0024	
DET-105100-AP	DETONATOR; 100GR 15 KSI CRIMP-ON	0.97	0	0 UN 0255	1.4B	DETONATORS, ELECTRIC, FOR BLASTING		1995110002	1C992	3603.00	3603.00.9030	0	
DET-3050-008-OW	DETONATOR; OWEN HNS TOP FIRE	0.87	50	0 UN 0456	1.4S	DETONATORS, ELECTRIC		1985120225	1C992	360300	3603.00.9030	0	
DET-3050-009-OW	DET ASSY - TUBING CUTTER HNS	0.92	10	2 UN 0456	1.4S	DETONATORS, ELECTRIC		2011021340	1C992E	360300	3603.00.0000	0080.EXP.01.0017	
DET-51-6956-3	INITIATOR; CLCP PERCUSSION	0.37	0	0 UN 0455	1.4S	DETONATORS, NON-ELECTRIC		2004070275	1C992	360300	3603.00.9010	0	
DET-A105-AP	DETONATOR; 80GR 15 KSI CRIMP-ON	0.97	50	0 UN 0255	1.4B	DETONATORS, ELECTRIC, FOR BLASTING		1995110002	1C992	3603.00	3603.00.9030	1019-138/V/2008	
DET-A140-AP	DETONATOR; 100PSI UTILITY SQUIB	0.32	50	0 UN 0255	1.4B	DETONATORS, ELECTRIC, FOR BLASTING		1995110002	1C992	3603.00	3603.00.9030	0	
DET-A140F SHORT W/BLOCK	DETONATOR, ELECTRIC	0.45	500	18.1 UN 0255	1.4B	DETONATORS, ELECTRIC		2015020543	1C992.e	360300	3603.00.9030	1019-008/V/2015	
DET-A140F WITH BLOCK-AP	DETONATOR; 80GR BLOCK STYLE	0.32	22	0 UN 0255	1.4B	DETONATORS, ELECTRIC, FOR BLASTING		1995110002	1C992	3603.00	3603.00.9030	1019-139/V/2008	
DET-A140S-AP	DETONATOR; FLUID RESISTORIZED	0.32	50	0 UN 0255	1.4B	DETONATORS, ELECTRIC, FOR BLASTING		1995110002	1C992	3603.00	3603.00.9030	1019-140/V/2008	
DET-A161-AP	DETONATOR; HNS FLUID DISABLED	0.4	50	0 UN 0255	1.4B	DETONATORS, ELECTRIC		200107065	1C992	360300	3603.00.9030	1019-046/V/2007	
DET-A85-AP	DETONATOR; FLUID DISABLED CRIMP-ON	0.48	50	0 UN 0255	1.4B	DETONATORS, ELECTRIC, FOR BLASTING		1995110002	1C992	3603.00	3603.00.9030	1019-134/V/2008	
DET-A96L-AP	DETONATOR; 15 KSI RDX DUMP BAILER	0.45	50	0 UN 0255	1.4B	DETONATORS, ELECTRIC, FOR BLASTING		1995110002	1C992	3603.00	3603.00.9030	1019-137/V/2008	
DET-CFA BUS BAR	BUS BAR CONNECTOR FOR CFA ASSEMBLY	0											
DET-CFA-A105-T V1.8	DETONATOR; CONTROL FIRE WITH A105	0.45	5	UN 0255	1.4B	Detonators, Electric		2008020283	1C992E	360300	3603.00.9030	0080.EXP.12.0031	
DET-CFA-A105100-T V1.8	DETONATOR; CONTROL FIRE W/A105100	0.45	5	UN 0255	1.4B	Detonators, Electric		2008020283	1C992E	360300	3603.00.9030	0080.EXP.12.0031	

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Explosive Safety and Security Plan



Part Number	Description	Expl Wt Each (gm)	Qty of Items per Box	Pkg Gross Wt (lbs)	UN No	Haz Class	Proper Shipping Name	PG	EX No	EOCN	HTS	Sch B	CE No
DETO-CFA-A140-T V1.8	DETTONATOR: CONTROL FIRE WITH A140	0.32	5	UN 0255	1.4B	Detonators, Electric		2008020283	1C992E	360300	3603.00.9030	0080.EXP.12.0031	
DETO-CFC-A140F-T V1.8	CONTROLFIRE SWITCH TO A140F DETO	0.32	5	1.17 UN 0255	1.4B	Detonators, Electric		2008020283	1C992E	3603.00.9030	0080.EXP.12.0031		
DETO-CFA-A140S-T V1.8	DETTONATOR: CONTROL FIRE WITH A140S	0.32	5	UN 0255	1.4B	Detonators, Electric		2008020283	1C992E	360300	3603.00.9030	0080.EXP.12.0031	
DETO-CFA-A85-T V1.8	CONTROLFIRE SWITCH TO A85 DETO	0.48	5	UN 0255	1.4B	Detonators, Electric		2008020283	1C992E	360300	3603.00.9030	0080.EXP.12.0031	
DETO-CFC-A140F-T V1.8	INITIATION CARTRIDGE ASSY	0.32	25	17.323 UN 0255	1.4B	DETTONATORS, ELECTRIC		2019032062	1C992	3603.00	3603.00.9030	0080.EXP.16.0001	
DETO-CFC-A140F-T V1.8	INITIATION CARTRIDGE ASSY	0.32	25	26.3 UN0456	1.45	DETTONATORS, ELECTRIC		2015040594	1C992	360300	3603.00.9030	0080.EXP.16.0001	
DETO-D1209-J	DETTONATOR; JRC MODIFIED E161 CUTT	0.4	0	0 UN 0255	1.4B	DETTONATORS, ELECTRIC		1995010044	1C992	360300	3603.00.9030	ENB/D/145/08	
DETO-D1208-T	TUBING CUTTER DETONATOR	0.4	5	0 UN0255	1.4B	DETTONATORS, ELECTRIC		2010110788	1C992	360300	3603.00.9030	0080.EXP.12.0030	
DETO-D1210-J	DET. ASSY; COIL TUBING CUTTER ASSY.	0.4	0	0 UN 0255	1.4B	DETTONATORS, ELECTRIC		1995010044	1C992	360300	3603.00.9030	ENB/D/145/08	
DETO-DW0026FD-DN	DETTONATOR; HNS FLUID DISABLED W/SLV	0.75	25	3.3 UN 0255	1.4B	DETTONATORS, ELECTRIC		199409082	1C992	360300	3603.00.9030	0080.EXP.98.0026	
DETO-DW1019-D	DETTONATOR; 15 KSI HNS DUMP B. SQUIB	0.48	0	0 UN 0255	1.4B	DETTONATORS, ELECTRIC		199409082	1C992	360300	3603.00.9030	0080.EXP.98.0023	
DETO-FPC-2-350150	FIRING PIN CARTRIDGE	0.6	0	0 UN 0323	1.45	CARTRIDGES, POWER DEVICE		1994120147	1C992	360300	3603.00.9020	0080.EXP.03.0043	
DETO-FUSE-088011-6.0	FUSE TIME DELAY - 6 MINUTE	64.4	10	50 UN 0500	1.45	DETTONATOR ASSEMBLIES, NON-ELECTRIC		2010020315	1C992	360300	3603.00.3010	0	
DETO-FUSE-2-350140	FUSE DELAY - 10 MINUTE	42	0	0 UN 0455	1.45	DETTONATORS, NON-ELECTRIC		2011031329	1C992	360300	3603.00.3010	0080.EXP.03.0044	
DETO-FUSE-51-6200	FUSE DELAY - 6 MINUTE PAC SCI	30.6	10	0 UN 0455	1.45	Detonators, Non-Electric		2011031329	1C992	360300	3603.00.3010	0	
DETO-IGNT-072130-3	IGNITER .375" PERCUSSION HT	0.05	10	5 UN 0454	1.45	IGNITERS		2008060097	1C992	360300	3603.00.9020	0	
DETO-IGNT-072170-1	FUSE IGNITER.482 OD PERCUSSION HT	0.06	10	5 UN 0454	1.45	IGNITERS		2015040369	1C992	360300	3603.00.9020	0080.EXP.15.0016	
DETO-IGNT-072170-3	IGNITER .375" PERCUSSION HT	0.06	10	5 UN 0454	1.45	IGNITERS		2015040369	1C992	360300	3603.00.9020	0080.EXP.15.0016	
DETO-IGNT-101761488-JRC	IGNTR ASSY; CORE GUN IGNTRS; 50 OHM	0.05	100	2.2 UN 0454	1.45	IGNITERS		2008110082	1C992	3603.00	3603.00.9020		
DETO-IGNT-2-350160	FUSE IGNITER- .375 OD	0.37	0	0 UN 0444	1.45	PRIMERS, CAP TYPE		199412146	1C992	360300	3603.00.9020	0	
DETO-IGNT-2-350220	FUSE IGNITER - .484 OD	0.3	0	0 UN 0444	1.45	PRIMERS, CAP TYPE		199703143	1C992	360300	3603.00.9020	0	
DETO-INIT-072120-1	INITIATOR PERCUSSION	4.5	10	8 UN 0323	1.45	CARTRIDGE, POWER DEVICE		2009070008	1C992	360300	3603.00.6000	0	
DETO-INIT-072140-3	INITIATOR PERCUSSION - HI-TEMP	4.7	5	0 UN 0323	1.45	CARTRIDGE, POWER DEVICE		2010101404	1C992	360300	3603.00.6000	0	
DETO-INIT-074140	INITIATOR PERCUSSION -SLIM- HI-TEMP	0.61	12	4.1 UN 0455	1.45	DETTONATORS, NON-ELECTRIC		2011050376	1C992	360300	3603.00.6000	0	
DETO-JRC GO IGNITER	IGNITER JRC GO 100004220	2.95	20	6.5 UN 0454	1.45	IGNITERS		2015120775	1C992	360300	3603.00.9020	0	
DETO-RED BLOCK 102478439	HMX BLOCK RED DETONATOR-JRC	1	20	9 UN0255	1.4B	DETTONATORS, ELECTRIC		EX1995010044	1C992	3603.00	3603.00.9030	ENB/D/008	
DETO-RED CAPSUL 101272600	SAFE FIRE RED CAPSULE DETO-JRC	1.11	10	7.2 UN 0255	1.4B	DETTONATORS, ELECTRIC		EX1995010044	1C992	360300	3603.00.9030	ENB/D/008	
DETO-RED GO 101320910	SAFE FIRE RED GO STYLE IGNITER-JRC	1.06	20	3.36 UN 0255	1.4B	DETTONATORS, ELECTRIC		EX1995010044	1C992	360300	3603.00.9030	ENB/D/008	
DETO-RED GO IGN 102351326	SAFE FIRE RED GO STYLE IGNITER-JRC	1	20	3.36 UN 0255	1.4B	DETTONATORS, ELECTRIC		EX1995010044	1C992	360300	3603.00.9030	ENB/D/008	
DETO-RED TOP FI 102350510	SAFE TOP FIRE RED DETONATOR-JRC	1.02	20	4.9 UN 0255	1.4B	DETTONATORS, ELECTRIC		1995010044	1C992	360300	3603.00.9030	ENB/D/008/15	
DETO-RJ-215-5-PE	DETTONATOR FOR TESTING	0.32	50		1.4B	DETTONATOR, ELECTRICAL							
DETO-RP 880-EBW-TR	DETTONATOR FLUID DISABLED RDX-EBW	0.66	200	12 UN 0255	1.4B	DETTONATORS, ELECTRIC		8812012	1A007b.2	360300	3603.00.9030	0080.EXP.03.0007	
DETO-SBC-A140F-T V1.8	INITIATION CARTRIDGE ASSEMBLY	0.33	25	23.5 UN 0456	1.45	DETTONATORS, ELECTRIC, FOR BLASTG		EX2015040594	1C992	3603.00	3603.00.9030		
DETO-SBC-A140F-T V1.8	INITIATION CARTRIDGE ASSEMBLY	0.33	25	17.162 UN 0255	1.4B	DETTONATORS, ELECTRIC, FOR BLASTG		2019032062	1C992	3603.00	3603.00.9030	0080.EXP.16.0001	
DETO-SBC-HT1-T V1.8	INITIATION CARTRIDGE ASSEMBLY	0.5	25	17.162 UN 0255	1.4B	DETTONATORS, ELECTRIC, FOR BLASTG		EX2019032062	1C992	3603.00	3603.00.9030		
DETO-SBC-HT51-T V1.8	INITIATION CARTRIDGE ASSEMBLY	0.5	25	17.162 UN 0255	1.4B	DETTONATORS, ELECTRIC, FOR BLASTG		EX2019032062	1C992	3603.00	3603.00.9030		
DETO-TF-CFC-A140F-CRIMP	TF CPC CRITG/A140F DETO CRIMP ASSY	0.32	0			Detonators, Electric							
DETO-TF-CFC-A140F-T V1.8	TOP FIRE INITIATION CARTRIDGE ASSY	0.32	5	13.5 UN 0456	1.45	DETTONATORS, ELECTRIC		2015040594	1C992.e	360300	3603.00.9030	0080.EXP.16.0001	
DETO-Z480-DN	DETTONATOR; 80GR CRIMP-ON 15 KSI RDX	1	0	0 UN 0255	1.4B	DETTONATORS, ELECTRIC		199409082	1C992	360300	3603.00.9030	0080.EXP.98.0021	
EXP-2715-422T	CHARGE 2-3/4 15G HMX DP GUNSLIN	15	50	20.25903 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2716-321T	CHARGE 2-3/4 16G RDX SDP	16	50	18.6 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2716-321T-H1	CHARGE 2-3/4 16G RDX SDP	16	50	19.2 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2716-371T	CHARGE 2-3/4 16G RDX	16	50	19.4 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2716-371T-H1	CHARGE 2-3/4 16G RDX	16	50	20.2 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2716-372T	CHARGE 2-3/4 16G RDX	16	50	19.1 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2716-372T-H1	CHARGE 2-3/4 16G RDX	16	50	19.8 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2716-421T	CHARGE 2-3/4 16G HMX SDP	16	50	18.6 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2716-421T-H1	CHARGE 2-3/4 16G HMX SDP	16	50	19.2 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2716-471T	CHARGE 2-3/4 16G HMX	16	50	19.4 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2716-471T-H1	CHARGE 2-3/4 16G HMX	16	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2716-472T	CHARGE 2-3/4 16G HMX	16	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2716-472T-H1	CHARGE 2-3/4 16G HMX	16	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2716-521T	CHARGE 2-3/4 16G HNS SDP	16	50	18.6 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2816-371T	CHARGE 2-7/8 16G RDX	16	50	19.8 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2818-321T	CHARGE 2-7/8 18G RDX SDP	18	50	18.9 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2818-321T-H1	CHARGE 2-7/8 18G RDX SDP	18	50	22 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2818-421T	CHARGE 2-7/8 18G HMX SDP	18	50	18.9 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	

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Explosive Safety and Security Plan



Part Number	Description	Expl Wt Each (gm)	Qty of Items per Box	Pkg Gross Wt (lbs)	UN No	Haz Class	Proper Shipping Name	PG	EX No	ECCN	HTS	Sch B	CE No
EXP-2818-421T-H1	CHARGE 2-7/8 18G HMX SDP	18	50	19.7 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-2818-521T	CHARGE 2-7/8 18G HNS SDP	18	50	18.9 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602000060	0080.EXP.05.0047	
EXP-3112-321T	CHARGE 3-1/8" 12G RDX SDP	12	50	20.2 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3112-421T	CHARGE 3-1/8" 12G HMX SDP	12	50	20.2 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3112-521T	CHARGE 3-1/8" 12G HNS SDP	12	50	20.2 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3303-3Q1	CHARGE 3"-4" 3G RDX SQUEEZE	3	36	6.68 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3319-302	CHARGE 3-3/8" 19G RDX DP	19	50	32.264 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3319-302-H1	CHARGE 3-3/8" 19G RDX DP	19	50	28.1 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3319-304	CHARGE 3-1/8" 19G RDX DP	19	50	32.264 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3319-323T	CHARGE 3-3/8" 19G RDX SDP	19	50	34.4 UN0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00.0060	3602.00.0060	0080.EXP.05.0047	
EXP-3319-323T-H1	CHARGE 3-3/8" 19G RDX SDP	19	50	29.5 UN0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00.0060	3602.00.0060	0080.EXP.05.0047	
EXP-3319-331	CHARGE 3-3/8" 19G RDX GH	19	50	32.70522 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3319-331-H1	CHARGE 3-3/8" 19G RDX GH	19	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3319-361	CHARGE 3-3/8" 19G RDX	19	50	32.7 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992b	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3319-361-H1	CHARGE 3-3/8" 19G RDX	19	50	28.8 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992b	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3319-402	CHARGE 3-3/8" 19G HMX DP	19	50	32.264 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3319-402-H1	CHARGE 3-3/8" 19G HMX DP	19	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3319-423T-H1	CHARGE 3-3/8" 19G HMX SDP	19	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00.0060	3602.00.0060	0080.EXP.05.0048	
EXP-3319-431	CHARGE 3-3/8" 19G HMX GH	19	50	31.94683 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3319-431-H1	CHARGE 3-3/8" 19G HMX GH	19	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3319-461	CHARGE 3-3/8" 19G HMX	19	50	32.7 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992b	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3319-461-H1	CHARGE 3-3/8" 19G HMX	19	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992b	3602.00	3602.00.0060	0080.EXP.05.0047	
EXP-3321-321T	CHARGE 3-3/8" 21G RDX SDP	21	50	33.76 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3321-321T-H1	CHARGE 3-3/8" 21G RDX SDP	21	50	29.7 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3321-331	CHARGE 3-3/8" 21G RDX GH	21	50	31.94 UN0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3321-331-H1	CHARGE 3-3/8" 21G RDX GH	21	50	29.5 UN0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3321-372T	CHARGE 3-3/8" 21G RDX	21	50	34.3 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0047	
EXP-3321-372T-H1	CHARGE 3-3/8" 21G RDX	21	50	30.4 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0047	
EXP-3321-421T	CHARGE 3-3/8" 21G HMX SDP	21	50	33.76 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3321-421T-H1	CHARGE 3-3/8" 21G HMX SDP	21	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3321-431	CHARGE 3-3/8" 21G HMX GH	21	50	32.8 UN0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3321-431-H1	CHARGE 3-3/8" 21G HMX GH	21	50	29.4 UN0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3321-472T	CHARGE 3-3/8" 21G HMX	21	50	34.3 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0047	
EXP-3321-472T-H1	CHARGE 3-3/8" 21G HMX	21	50	34.3 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0047	
EXP-3321-521T	CHARGE 3-3/8" 21G HNS SDP	21	50	33.76 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-301T	CHARGE 3-3/8" 20G RDX DP	20	50	34.4 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-301T-H1	CHARGE 3-3/8" 20G RDX DP	20	50	29 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-302	CHARGE 3-3/8" 22G RDX DP	20	50	32.2 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-302-H1	CHARGE 3-3/8" 22G RDX DP	20	50	28 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-323T	CHARGE 3-3/8" 22.7G RDX SDP	22.7	50	33.6 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-323T-H1	CHARGE 3-3/8" 22.7G RDX SDP	22.7	50	30.2 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-331-H1	CHARGE 3-3/8" 20G RDX GH	20	50	29.5 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-361T	CHARGE 3-3/8" 22.7G RDX SDP	22.7	50	32.5 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-361T-H1	CHARGE 3-3/8" 22.7G RDX SDP	22.7	50	29 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-371T	CHARGE 3-3/8" 23G RDX	23	50	34.3 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-371T-H1	CHARGE 3-3/8" 23G RDX	23	50	30.4 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-401T	CHARGE 3-3/8" 22.7G HMX DP	20	50	33.44377 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-401T-H1	CHARGE 3-3/8" 20G HMX DP	20	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-402	CHARGE 3-3/8" 22G HMX DP	20	50	32.2 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-402-H1	CHARGE 3-3/8" 22G HMX DP	20	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-423T	CHARGE 3-3/8" 22.7G HMX SDP	22.7	50	33.6 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-423T-H1	CHARGE 3-3/8" 22.7G HMX SDP	22.7	50	30 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-431	CHARGE 3-3/8" 20G HMX GH	20	50	32.79561 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-431-H1	CHARGE 3-3/8" 20G HMX GH	20	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-461T	CHARGE 3-3/8" 22.7G HMX SDP	22.7	50	32.5 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-461T-H1	CHARGE 3-3/8" 22.7G HMX SDP	22.7	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-471T	CHARGE 3-3/8" 23G HMX	23	50	34.3 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	

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Operations Manager	J. Hollingworth	ESSP_Rev1.5	Public	3-Dec-23	3-Dec-24	Page 65 of 70

Explosive Safety and Security Plan



Part Number	Description	Expl Wt Each (gms)	Qty of Items per Box	Pkg Gross Wt (lbs)	UN No	Haz Class	Propper Shipping Name	PG	EX No	ECCN	HTS	Sch B	CE No
EXP-3323-471T-H1	CHARGE 3-3/8" 23G HMX	23	50	30.4 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-502	CHARGE 3-3/8" 22G HNS DP	22	50	32.2 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-523T	CHARGE 3-3/8" 22.7G HNS SDP	22.7	50	33.6 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-531	CHARGE 3-3/8" 22.7G HNS GH	22.7	50	32.79561 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-561T	CHARGE 3-3/8" 22.7G HNS SDP	22.7	50	32.8 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3323-531	CHARGE 3-3/8" 25G RDX GH	25	50	32.43075 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3325-331-H1	CHARGE 3-3/8" 25G RDX GH	25	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3325-431	CHARGE 3-3/8" 25G HMX GH	25	50	32.43075 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3325-431-H1	CHARGE 3-3/8" 25G HMX GH	25	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3325-531	CHARGE 3-3/8" 25G HNS GH	25	50	32.43075 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3326-321T	CHARGE 3-3/8" 26G RDX SDP	26	50	33.75352 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3326-321T-H1	CHARGE 3-3/8" 26G RDX SDP	26	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3326-371T	CHARGE 3-3/8" 26G RDX SDP	26	50	33.5 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3326-371T-H1	CHARGE 3-3/8" 26G RDX SDP	26	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3326-421T	CHARGE 3-3/8" 26G HMX SDP	26	50	33.75 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3326-421T-H1	CHARGE 3-3/8" 26G HMX SDP	26	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3326-471T	CHARGE 3-3/8" 26G HMX SDP	26	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3326-471T-H1	CHARGE 3-3/8" 26G HMX SDP	26	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3326-521T	CHARGE 3-3/8" 26G HNS SDP	26	50	33.75 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-3327-721TB	CHARGE 3-3/8" 26.5G HSK	26.5	50	37.5 UN 0440	1.4D	CHARGES, SHAPED		1C992	360200	3602.00.0062			
EXP-4006-3Q1	CHARGE 4"-5" 6G RDX 5QJEEZE	6	36	6.6 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-4016-302	CHARGE 4" 16G RDX GH NSG	15.25	50	27.9 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602000060	0080.EXP.05.0047	
EXP-4023-301	CHARGE 4" 22.7G RDX DP NSG	22.7	50	28.96729 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-4032-301	CHARGE 4" 32G RDX DP	32	50	53.49474 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-4036-301	CHARGE 4" 36G RDX DP	36	50	53.93567 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-4039-323T	CHARGE 4" 38.5G RDX SDP	38.5	50	56.2 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-4039-423T	CHARGE 4" 38.5G HMX SDP	38.5	50	56.2 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-4039-523T	CHARGE 4" 38.5G HNS SDP	38.5	50	56.2 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-4521-323T	CHARGE 4-1/2" 21G RDX SDP	21	50	27.61144 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-4521-331	CHARGE 4-1/2" 21G RDX GH	21	50	26.62 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-4521-423T	CHARGE 4-1/2" 21G HMX SDP	21	50	27.61144 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-4521-431	CHARGE 4-1/2" 21G HMX GH	21	50	26.62 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602000060	0080.EXP.05.0047	
EXP-4521-523T	CHARGE 4-1/2" 21G HNS SDP	21	50	27.61144 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-4521-531	CHARGE 4 1/2" 21G HNS GH	21	50	26.62 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-4539-325T	CHARGE 4-1/2" 38.5G RDX SDP	38.5	50	60.5 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-4539-425T	CHARGE 4-1/2" 38.5G HMX SDP	38.5	50	60.5 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-4539-525T	CHARGE 4-1/2" 38.5G HNS SDP	38.5	50	60.5 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-4542-721TB	CHARGE 4-1/2" 42G HSK	42	40	48.5 UN 0440	1.4D	CHARGES, SHAPED		1C992	360200	3602.00.0062			
EXP-7039-331	CHARGE 7" 38.5G RDX GH	38.5	50	53.6 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
EXP-7039-431	CHARGE 7" 38.5G HMX GH	38.5	50	53.6 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	360200	3602.00.0060	0080.EXP.05.0047	
FLG-5507-4F251	CHARGE 5.5" 7G HMX CIR 1/4" FLO	7	50	10.3 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0051	
FLG-5509-401T	CHARGE 5.5" 9G HMX DP FLOWGUN	9	50	12.5 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0047	
FLG-1603-310	CHARGE 1-9/16" 3.2G RDX BH RTG	3	50	7.5 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0048	
FLG-1603-410	CHARGE 1-9/16" 3.2G HMX BH RTG	2.9	50	7.5 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0048	
FLG-1603-510	CHARGE 1-9/16" 3.2G HNS BH RTG	3	50	7.5 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0048	
FLG-1604-310	CHARGE 1-9/16" 4G RDX BH RTG	4	50	7.5 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0048	
FLG-1604-410	CHARGE 1-9/16" 4G HMX BH RTG	4	50	7.5 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0048	
FLG-1604-510	CHARGE 1-9/16" 4G HNS BH RTG	3	50	6.95 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0048	
FLG-2106-310	CHARGE 2" 6.5G RDX BH RTG	6	50	12.5 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0048	
FLG-2106-410	CHARGE 2" 6.5G HMX BH RTG	6	50	12.6 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0048	
FLG-2106-510	CHARGE 2" 6.5G HNS BH RTG	5.3	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0048	
FLG-2107-310	CHARGE 2" 7G RDX BH RTG	7	50	13.49 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0048	
FLG-2107-410	CHARGE 2" 7G HMX BH RTG	7	50	13.49 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0048	
FLG-2107-510	CHARGE 2" 7G HNS BH RTG	7	50	13.49 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0048	
FLG-2107-310B	CHARGE 2-1/2" 11G RDX BH	11	50	17.115 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0048	
FLG-2107-410B	CHARGE 2-1/2" 11G HMX BH	11	50	17.115 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0048	
FLG-2107-510B	CHARGE 2-1/2" 11G HNS BH	11	50	17.115 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0048	
FLG-2107-310B	CHARGE 2-3/4" 15G RDX BH	15	50	17.55616 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0048	

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Part Number	Description	Expl Wt Each (gm)	Qty of Items per Box	Pkg Gross Wt (lbs)	UN No	Haz Class	Proper Shipping Name	PG	EX No	ECCN	HTS	Sch B	CE No
FLO-2715-310B-H1	CHARGE 2-3/4" 15G RDX BH	15	50	17.55616 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-2715-410B	CHARGE 2-3/4" 15G HMX BH	15	50	17.55616 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-2715-410B-H1	CHARGE 2-3/4" 15G HMX BH	15	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-2715-510B	CHARGE 2-3/4" 15G HNS BH	15	50	17.55616 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-3112-310B	CHARGE 3-1/8" 12G RDX BH	12	50	14.46 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-3112-311CFZ	CHARGE 3-1/8" 12G RDX BH CFZ	12	50	11.8 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-3112-410B	CHARGE 3-1/8" 12G HMX BH	12	50	14.46 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-3112-411CFZ	CHARGE 3-1/8" 12G HMX BH CFZ	12	50	11.8 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-3112-510B	CHARGE 3-1/8" 12G HNS BH	12	50	14.46 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-3112-511CFZ	CHARGE 3-1/8" 12G HNS BH CFZ	12	50	11.8 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-3323-310B	CHARGE 3-3/8" 22G RDX BH EXP	22	50	30.4 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-3323-310B-H1	CHARGE 3-3/8" 22G RDX BH EXP	22	50	26.9 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-3323-410B	CHARGE 3-3/8" 22G HMX BH CF	22	50	30.36 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-3323-410B-H1	CHARGE 3-3/8" 22G HMX BH CF	22	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-3323-510B	CHARGE 3-3/8" 22G HNS BH CF	22	50	30.36 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-3326-310B	CHARGE 3-3/8" 26G RDX BH	26	50	29.12815 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4032-311B	CHARGE 4" 32G RDX BH EXP	32	50	47.68336 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4036-311B	CHARGE 4" 36G RDX BH EXP	36	50	48.56 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4039-311B	CHARGE 4" 38.5G RDX BH	38.5	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4039-311CF	CHARGE 4" 38.5G RDX BH CF	38.5	50	48.45 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4039-411B	CHARGE 4" 38.5G HMX BH	38.5	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4039-411CF	CHARGE 4" 38.5G HMX BH CF	38.5	50	48.45 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4039-511B	CHARGE 4" 38.5G HNS BH	38.5	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4039-511CF	CHARGE 4" 38.5G HNS BH CF	38.5	50	48.45 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4521-310B	CHARGE 4-1/2" 21G RDX BH	21	50	24.6 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4521-310CF	CHARGE 4-1/2" 21G RDX BH CF	21	50	24.6 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4521-410B	CHARGE 4-1/2" 21G HMX BH	21	50	24.6 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4617-311CFZ	CHARGE 4-5/8" 17G RDX BH CFZ	17	50	17 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4620-311CFZ	CHARGE 4-5/8" 20G RDX BH CFZ	20	50	18.7 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4620-312CFZ	CHARGE 4-5/8" 20G RDX BH CFZ	20	50	18.7 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4620-411Z	CHARGE 4-5/8" 20G HMX BH LD	20	50	18.7 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4620-412CFZ	CHARGE 4-5/8" 20G HMX BH CFZ	20	50	18.7 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4621-311CF	CHARGE 4-5/8" 21G RDX CJBH CF	21	50	22.84505 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4621-411CF	CHARGE 4-5/8" 21G HMX CJBH CF	21	50	22.84505 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4623-311CF	CHARGE 4-5/8" 23G RDX BH CFZ	22.7	50	20.04 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4623-311CFZ	CHARGE 4-5/8" 23G RDX BH CFZ	22.7	50	18.7 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-4623-411CFZ	CHARGE 4-5/8" 23G HMX BH CFZ	22.7	50	18.7 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-5028-310B	CHARGE 5" 28G RDX BH	28	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-5028-410B	CHARGE 5" 28G HMX BH	28	50	30.13 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-5030-340Z	CHARGE 5" 30G RDX SBH LOW DEBRIS	30	40	21.2 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-5128-311CFZ	CHARGE 5-1/8" 28G RDX BH CFZ	28	40	20.3 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-5128-411CFZ	CHARGE 5-1/8" 28G HMX BH CFZ	28	40	20.3 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-5130-311CF	CHARGE 5-1/8" 30G RDX BH CF	30	40	23.4 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-5130-411CF	CHARGE 5-1/8" 30G HMX BH CF	30	40	23.4 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-5130-511CF	CHARGE 5-1/8" 30G HNS BH CF	30	40	23.4 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-7039-312CF	CHARGE 7" 38.5G RDX BH CF	38.5	24	22.22 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-7039-312CFZ	CHARGE 7" 38.5G RDX BH CFZ	38.5	24	0 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-7039-412CF	CHARGE 7" 38.5G HMX BH CF	38.5	24	22.22 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-7039-412CFZ	CHARGE 7" 38.5G HMX BH CFZ	38.5	24	0 UN 0440	1.4D	CHARGES, SHAPED		1994090002	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-7045-312CF	CHARGE 7" 45G RDX BH CF	45	24	22.7 UN 0440	1.4D	CHARGES, SHAPED		2014120453	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
FLO-7045-412CF	CHARGE 45G HMX BH CF	45	24	22.7 UN 0440	1.4D	CHARGES, SHAPED		2014120453	1C992	3602.00	3602.00.0060	0080.EXP.05.0048	
HJC-1680-3001	JET CUTTER 1.680" 13.6G RDX	13.6	1	4.14 UN 0440	1.4D	CHARGES, SHAPED		2014120547	1C992	3602.00	3602.00.0060	0080.EXP.14.0026	
HJC-1680-4001	JET CUTTER 1.680" 13.6 GRAM	13.6	1	4.14 UN 0440	1.4D	CHARGES, SHAPED		2014120547	1C992	3602.00	3602.00.0060	0080.EXP.14.0026	
HJC-2063-3001	JET CUTTER 2.063" 16.6G RDX	16.6	1	4.85 UN 0440	1.4D	Charges, Shaped		2014120547	1C992	3602.00	3602.00.0060	0080.EXP.14.0026	
HJC-2063-4001	JET CUTTER 2.063" 16.6 GRAM	16.6	1	4.85 UN 0440	1.4D	Charges, Shaped		2014120547	1C992	3602.00	3602.00.0060	0080.EXP.14.0026	
HJC-2500-3001	JET CUTTER 2.500" 28.6G RDX	28.6	1	6.53 UN 0440	1.4D	Charges, Shaped		2014120547	1C992	3602.00	3602.00.0060	0080.EXP.14.0026	
HJC-2500-4001	JET CUTTER 2.500" 28.6 GRAM	28.6	1	6.53 UN 0440	1.4D	Charges, Shaped		2014120547	1C992	3602.00	3602.00.0060	0080.EXP.14.0026	

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Part Number	Description	Expl Wt Each (gm)	Qty of Items per Box	Pkg Gross Wt (lbs)	UN No	Haz Class	Proper Shipping Name	PG	EX No	ECCN	HTS	Sch B	OE No
HJC-3500-3001	CUTTER CSG 3.500" DIA. 55.8G RDX	55.8	1	9	UN 0440	1.4D	Charges, Shaped	2015100485	1C992	3602.00	3602.00.0060	0080.EXP.16.0009	
HJC-3500-3001RED	CUTTER CSG 3.500" DIA. 55.8G RDX	55.8	1	9.5	UN 0440	1.4D	Charges, Shaped	2015100485	1C992	3602.00	3602.00.0060	0080.EXP.16.0009	
HJC-4250-3001	CUTTER CSG 4.250" DIA. 90.9G RDX	90.9	1	11	UN 0440	1.4D	Charges, Shaped	2015100485	1C992	3602.00	3602.00.0060	0080.EXP.16.0009	
HJC-4250-3001RED	CUTTER CSG 4.250" DIA. 90.9G RDX	90.9	1	11.5	UN 0440	1.4D	Charges, Shaped	2015100485	1C992	3602.00	3602.00.0060	0080.EXP.16.0009	
HJC-5800-3001	CUTTER CSG 5.800" DIA. 150.6G RDX	150.6	1	17.6	UN 0440	1.4D	Charges, Shaped	2015121683	1C992	3602.00	3602.00.0060	0080.EXP.16.0009	
HJC-5800-3001RED	CUTTER CSG 5.800" DIA. 150.6G RDX	150.6	1	18.1	UN 0440	1.4D	Charges, Shaped	2015121683	1C992	3602.00	3602.00.0060	0080.EXP.16.0009	
HLS-IGNITER 101761487	HTHP CORE GUN IGNITER	0.05	100	2.2	UN 0454	1.45	IGNITERS	2008110083	1C992	360300	3603.00.0000		
HPC-0010-410	HUNTING #10 POWER CHARGE	375	10	12.8	UN 0278	1.4C	Cartridges, oil well	2016020060	1C992	3602.00	3602.00.0060	0080.EXP.18.0015	
HPC-0010-411	HUNTING #10 POWER CHARGE	369.3	10	0	UN 0278	1.4C	Cartridges, oil well	2016020060	1C992	3602.00	3602.00.0060		
HPC-0020-510	HUNTING #20 POWER CHARGE	545	10	17	UN 0278	1.4C	Cartridges, oil well	2016020060	1C992	3602.00	3602.00.0060	0080.EXP.18.0015	
HPC-0020-511	HUNTING #20 POWER CHARGE	533.9	10	16.8	UN 0278	1.4C	Cartridges, oil well	2016020060	1C992	3602.00	3602.00.0060		
HPC-3500-510	HUNTING 3-1/2" POWER CHARGE	518	0	0	UN 0278	1.4C	Cartridges, oil well	2016020060	1C992	3602.00	3602.00.0060	0080.EXP.18.0015	
HPC-3625-410	HUNTING 3-5/8" POWER CHARGE	425	0	0	UN 0278	1.4C	Cartridges, oil well	2016020060	1C992	3602.00	3602.00.0060	0080.EXP.18.0015	
JEC-5332-024-OW	POWER CHARGE 1-11/16" MULTISTAGE HT	385	10	25	UN 0275	1.3C	Cartridges, Power Device	2011120499	1C992D	3604.90	3604.90.0000	0080.EXP.12.0015	
KIT-101293167-JRC	KIT,PELLET/CRTG,1.75IN,HMXDCST993.5	0.99	1	6.9	UN 0444	1.4D	CHARGES, EXPLOSIVE, COMERCIAL	EX2016020739	1C992	3602.00	3602.00.0030	ENB/B/211/17	
KIT-101293168-JRC	KIT,PELLET/CRTG,2IN,HMX,DCST,1340.4	1.34	1	13.82	UN 0444	1.4D	CHARGES, EXPLOSIVE, COMERCIAL	EX2016020739	1C992	3602.00	3602.00.0030	ENB/B/211/17	
LTD-0005-501F	CHARGE 0.75G HNS DONOR WITH SLEEVE	0.75	10	4.892	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
LTD-1010-400	CHARGE 1G HMX DONOR	1	10	3.2	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
LTD-1010-500	CHARGE 1G HNS DONOR	1	10	3.1	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
MDF-100118417-JRC	MDF ASSMBLY,DCST-A, S274-5, HNS2.3G	2.3	1	3.4	UN 0367	1.45	FUZE, DETONATING	EX1983080700	1C992	3603.00	3603.00.3020	ENB/C/052/03	
OPC-3250-000-MS	3.25" MULTISTAGE POWER CHARGE(OWEN)	1535	3	14	UN 0276	1.4C	CARTRIDGE POWER DEVICE	2012110392	1C992	360200	3604.90.0000	0080.EXP.12.0013	
OW-JEC-5334-103	OWEN POWER CHG F/ 3 5/8" TOOL	360	10	0	UN 0323	1.45	CARTRIDGES, POWER DEVICE	198312235	1C992	0	0	0	
PPG-2706-301	CHARGE 2-3/4" 6G RDX DP PPG WO/	6	50	12.88981	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
PPG-3111-301	CHARGE 3-1/8" 11G RDX DP PPG	11	50	16.78454	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
PPG-3111-311	CHARGE 3-1/8" 11G RDX BH	11	50	16.2	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
PPG-3111-321	CHARGE 3-1/8" 11G RDX SDP PPG WO	11	50	16.78454	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
PPG-3111-331	CHARGE 3-1/8" 11G RDX GH PPG WO	11	50	17.3357	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
PPG-3111-401	CHARGE 3-1/8" 11G HMX DP PPG WO/SLV	11	50	16.78	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
PPG-3111-421	CHARGE 3-1/8" 11G HMX SDP PPG WO/SLV	11	50	16.78	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
PPG-3112-310B	CHARGE 3-1/8" 12G RDX BH PPG WO	12	50	16.64	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
PPG-3112-321T	CHARGE 3-1/8" 12G RDX SDP PPG WO	12	50	17.005	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
PPG-3112-421T	CHARGE 3-1/8" 12G HMX SDP PPG WO/SLV	12	50	17.005	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
PPG-4019-301	CHARGE 4" 19G RDX DP PPG	19	50	35.5	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
PPG-4019-321T	CHARGE 4" 19G RDX SDP PPG WO/SL	19	50	37.03944	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
PPG-4019-401	CHARGE 4" 19G HMX DP PPG WO/SLV	19	50	38.23	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
PPG-4022-301	CHARGE 4" 22G RDX DP PPG WO/SLV	22	50	38.56	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
PPG-4022-310B	CHARGE 4" 22G RDX BH PPG WO/SLV	22	50	36.32	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
PPG-4022-401	CHARGE 4" 22G HMX DP PPG WO/SLV	22	50	38.56	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
PPG-4023-321T	CHARGE 4" 22.7G RDX SDP PRO WO/	22.7	50	37.44729	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
PPG-4023-421T	CHARGE 4" 22.7G HMX SDP PPG WO/SLV	22.7	50	37.44729	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0049	
RTG-1302-300	CHARGE 1-3/8" 1.8G RDX DP RTG	2	50	5.5	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	3602.00	3602.00.0060	0080.EXP.05.0046	
RTG-1302-400	CHARGE 1-3/8" 1.8G HMX DP RTG	1.8	50	4.9	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-1603-300	CHARGE 1-9/16" 3.2G RDX DP RTG	3.2	50	7.168	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-1603-400	CHARGE 1-9/16" 3.2G HMX DP RTG	3.2	50	7.17	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-1603-500	CHARGE 1-9/16" 3.2G HNS DP RTG	3.2	50	0	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-1604-321T	CHARGE 1-9/16" 3.5G RDX SDP	3.5	50	7.57667	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-1604-421T	CHARGE 1-9/16" 3.5G HMX SDP	3.5	50	7.57667	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-1604-521T	CHARGE 1-9/16" 3.5G HNS SDP	3.5	50	7.57667	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-2106-331	CHARGE 2" 6.5G RDX GH OUTLAW™	6	50	12.6	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-2106-431	CHARGE 2" 6.5G HMX GH	6	50	12.6	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-2106-531	CHARGE 2" 6.5G HNS GH	6.5	50	12.6	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-2107-321T	CHARGE 2" 7G RDX SDP PERFECTA™	6.5	50	13.1	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-2107-421T	CHARGE 2" 7G HMX SDP	6.5	50	13.1	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-2107-521T	CHARGE 2" 7G HNS SDP	6.5	50	13.78	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-2511-301	CHARGE 2-1/2" 11G RDX DP PRO	11	50	20.5	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-2511-522T	CHARGE 2-1/2" 11G HNS SDP PRO	11	50	20.1488	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-2512-321T	CHARGE 2-1/2" 12G RDX SDP	12	50	20.1488	UN 0440	1.4D	CHARGES, SHAPED	1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	

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Explosive Safety and Security Plan



Part Number	Description	Expl Wt Each (gm)	Qty of Items per Box	Pkg Gross Wt (lbs)	UN No	Haz Class	Proper Shipping Name	PG	EX No	ECCN	HTS	Sch B	CE No
RTG-2512-321T-H1	CHARGE 2-1/2" 12G RDX SDP	12	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-2512-331	CHARGE 2-1/2" 12G RDX GH	12	50	20.1488 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-2512-371T	CHARGE 2-1/2" 12G RDX	12	50	20.6 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-2512-421T	CHARGE 2-1/2" 12G HMX SDP	12	50	20.1488 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-2512-421T-H1	CHARGE 2-1/2" 12G HMX SDP	12	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-2512-431	CHARGE 2-1/2" 12G HMX GH	12	50	20.1488 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-2512-471T	CHARGE 2-1/2" 12G HMX	12	50	20.6 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-2512-521T	CHARGE 2-1/2" 12G HNS SDP	11	50	20.1488 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
RTG-2512-531	CHARGE 2-1/2" 12G HNS GH	12	50	20.1488 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	360200	3602.00.0060	0080.EXP.05.0046	
SCH-3118-371	CHARGE 3-1/8" 18G RDX	17	50	0 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060		
SCH-3121-371	CHARGE 3-1/8" 21G RDX	19	50	31.4 UN 0440	1.4D	CHARGES, SHAPED		1994090001	1C992	3602.00	3602.00.0060		
SCP-1188T002	CUTTER TBG 1.188" DIA. 5.7 GRAM	5.7	1	2.43 UN 0440	1.4D	CHARGES, SHAPED		2014120547	1C992	360200	3602000060	0080.EXP.14.0026	
SCP-1375T002	CUTTER TBG 1.375" DIA. 6.8 GRAM	6.8	1	2.43 UN 0440	1.4D	CHARGES, SHAPED		2014120547	1C992	360200	3602000060	0080.EXP.14.0026	
SCP-1680T002	CUTTER TBG 1.680" DIA. 13.6 GRAM	13.6	1	3.94 UN 0440	1.4D	CHARGES, SHAPED		2014120547	1C992	360200	3602000060	0080.EXP.14.0026	
SCP-1680T002LP	CUTTER TBG LP 1.680" DIA. 7.2 GRAM	7.2	1	3.94 UN 0440	1.4D	CHARGES, SHAPED		2014120547	1C992	360200	3602000060	0080.EXP.14.0026	
SCP-1680T002LPRED	CUTTER TBG LP 1.680" DIA. 7.2 GRAM	7.2	1	4.84 UN 0440	1.4D	CHARGES, SHAPED		2014120547	1C992	360200	3602000060	0080.EXP.14.0026	
SCP-1680T002RED	CUTTER TBG 1.680" DIA. 13.6 GRAM	13.6	1	4.84 UN 0440	1.4D	Charges, Shaped		2014120547	1C992	360200	3602000060	0080.EXP.14.0026	
SCP-2063T002	CUTTER TBG 2.063" DIA. 16.6 GRAM	16.6	1	4.8 UN 0440	1.4D	Charges, Shaped		2014120547	1C992	360200	3602000060	0080.EXP.14.0026	
SCP-2063T002LP	CUTTER TBG LP 2.063" DIA. 12.6 GRAM	12.6	1	4.8 UN 0440	1.4D	Charges, Shaped		2014120547	1C992	360200	3602000060		
SCP-2063T002LPRED	CUTTER TBG LP 2.063" DIA. 12.6 GRAM	12.6	1	5.8 UN 0440	1.4D	Charges, Shaped		2014120547	1C992	360200	3602000060	0080.EXP.14.0026	
SCP-2063T002RED	CUTTER TBG 2.063" DIA. 16.6 GRAM	16.6	1	5.8 UN 0440	1.4D	Charges, Shaped		2014120547	1C992	360200	3602000060	0080.EXP.14.0026	
SCP-2500T002	CUTTER TBG 2.500" DIA. 28.6GRAM T/C	28.6	1	6.29 UN 0440	1.4D	Charges, Shaped		2014120547	1C992	360200	3602.00.0060	0080.EXP.14.0026	
SCP-2500T002RED	CUTTER TBG 2.500" DIA. 28.6 GRAM	28.6	1	7.77 UN 0440	1.4D	Charges, Shaped		2014120547	1C992	360200	3602.00.0060	0080.EXP.14.0026	
SCP-C3500T302	CUTTER CSG 3.500" DIA. 55.8 GRAM	55.86	1	9 UN 0440	1.4D	Charges, Shaped		2015100485	1C992	360200	3602.00.0060	0080.EXP.16.0009	
SCP-C3500T302RED	CUTTER CSG 3.500" DIA. 55.8 GRAM	55.8	1	9.5 UN 0440	1.4D	Charges, Shaped		2015100485	1C992	360200	3602.00.0060	0080.EXP.16.0009	
SCP-C4250T302	CUTTER CSG 4.250" DIA. 90.9 GRA	90.9	1	11 UN 0440	1.4D	Charges, Shaped		2015100485	1C992	360200	3602.00.0060	0080.EXP.16.0009	
SCP-C4250T302RED	CUTTER CSG 4.250" DIA. 90.9 GRA	90.9	1	11.5 UN 0440	1.4D	Charges, Shaped		2015100485	1C992	360200	3602.00.0060	0080.EXP.16.0009	

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