



High Explosive & Demolition Stores



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Demolition Stores

All of our Demolition Store products have been operationally proven and we are proud to be the exclusive supplier to the UK Armed Forces.

What are they?

- A range of Dual Use, Energetic products designed to meet
 - Battlefield Explosive Engineering requirements
 - Civil Demolitions and decommissioning activities

They fall into one of three product categories

- Initiation Products
- Transmission Products
- Main Charges

They fall into one of five operational categories

- Conventional and Unconventional Demolition (Military or Civil)
- Underwater Demolitions
- Explosive Method of Entry
- Explosive Ordnance Disposal (EOD) /Counter IED
- Route Clearance / Denial

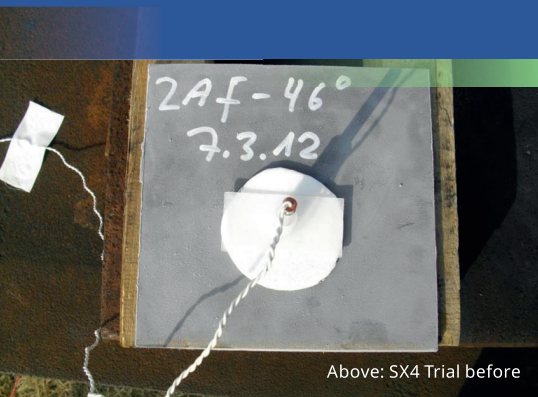
Main Charge Products

- Charge Demolition Sheet Explosive SX4
- PE8 Plastic Explosive
- Advanced Performance Bangalore Torpedo (APBT)
- Charge Demolition User Filled (CDUF Conical & Linear)

Main Charge Products

Charge Demolition Sheet Explosive SX4

SX4 can be configured into charges specific to the target by cutting to shape, rolling or moulding into geometric shapes. It is malleable across a wide temperature range and is easily cut with a sharp knife or scissors to form precise shapes.



Above: SX4 Trial before



Above: SX4 Trial after

Application

SX4 is designed for a range of tactical applications by users ranging from Explosive Method Of Entry (EMOE) teams to Explosive Ordnance Disposal (EOD) teams.

Description

SX4 Sheet Explosive is fully compliant with the UN Convention on the Marking of Plastic Explosives for the Purposes of Detection and is an insensitive RDX-based high explosive suitable for a wide range of general demolition tasks including EOD.

The specially formulated insensitive explosive composition (DPX9) provides a high level of safety whilst maintaining peak performance for metal cutting where minimum shock wave and noise levels are required.

SX4 is designed to be easily and reliably initiated by L1A2 or L2A2 detonators, shock tubes or Detonating Cord Boosters.

SX4 may be used underwater if required.

SX4 is supplied packaged as:

- 5 sheets in an Intermediate/ Tactical pack
- 4 off Intermediate packs in an outer wooden over-pack (i.e. $5 \times 4 = 20$ sheets per over-pack)

Specifications	
RDX Content	86.5% by weight (nominal)
Plasticiser / Binder content	12.5% by weight (nominal)
DMNB Taggant	1% by weight (nominal)
Detonation Velocity	8200 m/s (nominal)
Density	1.57 g/cm ³ (nominal)
Dimensions (per sheet)	250 x 250 x 3mm
NEQ (per sheet)	310 grams (nominal)
Temperature	-46°C to +71°C
Shelf Life	Qualified to 5 years

References	
Product Code	SX4 Sheet Explosive
NATO Stock Number	1375-99-983-1451
Hazard Class	1.1D
UN Number	0084
Proper Shipping Name	EXPLOSIVE BLASTING, TYPE D

Packaging	
Outer Pack	Wooden Logistic Pack
Quantity per Pack	20
NEQ	6.4kg
Gross Weight	23kg
Dimensions	443 x 326 x 331mm
Volume	0.045m ³

Main Charge Products

PE8 Plastic Explosive

PE8 is an advanced formulation plastic explosive used in military and commercial demolition operations, mouldable by hand to form demolition charges of various shapes and weights.

Application

- On-site loading of user-filled charges
- General cutting purposes ranging from the most basic to very sophisticated tasks
- Explosive Ordnance Disposal bomb and mine clearance tasks
- Explosive welding and forming
- Easily cut with a sharp knife to match the charge weight to the target

Description

PE8 is fully compliant with the UN Convention on the Marking of Plastic Explosives for the Purposes of Detection and is an insensitive, RDX-based high explosive suitable for EOD or general demolition tasks. The specially formulated explosive composition (DPX10) provides a high level of safety whilst maintaining peak performance for metal cutting.

It is waterproof and may be deployed underwater if necessary.

PE8 is designed to be easily and reliably initiated by Chemring's range of detonators, detonating cord and Detonating Cord Boosters.

PE8 is supplied in a 20kg full military pack containing two 10kg bulk packs each containing five 2kg slab packs. Each slab pack is fitted with two detonator holders to allow rapid deployment.



Above: 2kg Slab Pack



Above: Two 10kg Bulk Pack

Specifications	
RDX Content	86.5% by weight
Plasticiser / Binder Content	12.5% by weight (nominal)
DMNB Taggant	1% by weight (nominal)
Detonation Velocity	8000m/s (nominal)
Density	1.57g/cm ³
Mass	500g
NEQ	20kg (per logistic pack)
Temperature	-46°C to +71°C
Shelf Life	5 Years

References

Product Code	PE8
NATO Stock Number	1375-99-488-9723
Hazard Class	1.1D
UN Number	0084
Proper Shipping Name	EXPLOSIVE BLASTING, TYPE D

Packaging

Outer Logistic Pack	
Quantity per Pack	40
NEQ	20kg
Gross Weight	37.9kg
Net Weight	20kg
Dimensions	523 x 464 x 267mm
Volume	0.071m ³
Inner Tactical Pack	
Quantity per Pack	20
NEQ	10kg
Gross Weight	12.5kg
Net Weight	10kg
Dimensions	350 x 229 x 232mm
Volume	0.019m ³
2kg Slab Pack	
Quantity per Pack	4
NEQ	2kg
Gross Weight	2.5kg
Net Weight	2kg
Dimensions	290 x 214 x 36mm
Volume	0.002m ³

Main Charge Products

Advanced Performance Bangalore Torpedo (APBT)

The APBT incorporates a unique and patented design feature which enhances its cutting capability against traditional non-resilient and incoherent target arrays.

Application

The traditional use for the Bangalore Torpedo has been to defeat entanglements made up of barbed or razor wire. This design feature has also demonstrated cutting performance against a 6mm steel target. A single APBT tube can be joined with up to seven additional tubes for tactical deployment to defeat large or extended obstacles up to 8 metres in length.

Description

The APBT provides a significant improvement in performance and is easier to carry and use than other products. It has been chosen by and is in service with a number of countries around the world including the UK.

Operation

An APBT tube connects to the detonator housing, nose cone and up to seven other tubes via a quick turn thread. The design of the thread has been optimised to ensure ease of assembly under conditions where the thread is contaminated with sand, soil, or mud, whilst being strong enough to allow the tactical deployment of up to eight connected tubes (without decoupling).

The detonator is fitted via a quick fit initiation gland, that will accommodate a wide range of in-service detonators such as L1A2, L2A2 and L10A1 DCB.



Above: APBT Trial before



Above: APBT Trial after



Specifications	
Initiation	L1A2, L2A2, DCB
Tube Diameter / Length	50mm/1000mm
Charge Weight	2.03kg DPX1/DPX10
Temperature	-46°C to +71°C
Shelf Life	5 Years

References	
Product Code	APBT
NATO Stock Number	1375-99-670-9317
Hazard Class	1.1D
UN Number	0048
Proper Shipping Name	CHARGES DEMOLITION

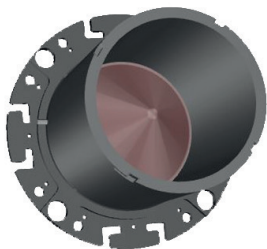
Packaging	
Outer Pack	Wooden Logistic Pack
Quantity per Pack	1 set (4 APBT)
NEQ	8.12kg
Gross Weight	51kg
Dimensions	1282 x 321 x 390mm
Volume	0.160m ³

Left: APBT Tube & Carry Sling

Main Charge Products

Charge Demolition User Filled (CDUF – Conical)

The CDUF Conical Charge is intended to be filled by the user with a Plastic Explosive such as PE8, immediately prior to being deployed as a shaped charge demolition conical.



Application

The CDUF Conical Charge is filled with 12kg PE8 Plastic Explosive prior to deployment. It is intended to produce a hole in a wide range of target materials (e.g. concrete, steel, soil etc). To enable secondary charges to be used to create the chosen demolition effect.

Description

The CDUF Conical Charge Empty consists of a circular plastic body containing a copper cone. The lid has a pre-threaded hole to accept an initiator and four standoff legs locate the product at the correct standoff.

Specifications	
Dimensions	Ø372 x 825 (Including Standoff)
Charge Weight	12kg
Temperature	-46°C to +71°C
Shelf Life	Indefinite until filled

References	
Product Code	CDUF Conical
NSN Empty	1375-99-731-4876

Packaging

Outer Pack	Cardboard Box
Quantity per Pack	1
Gross Weight	11.5kg
Dimensions	864 x 400 x 385mm
Volume	0.133m³

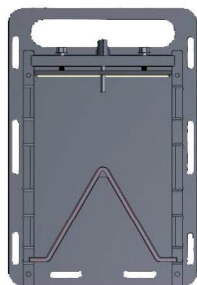


Right and top:
CDUF Conical Charge

Main Charge Products

Charge Demolition User Filled (CDUF – Linear)

The CDUF Linear Charge is intended to be filled by the user with a Plastic Explosive such as PE8, immediately prior to being deployed as a shaped charge demolition linear.



Application

The CDUF Linear Charge is filled with 8kg PE8 Plastic Explosive prior to deployment. It is intended to produce a linear cut in a wide range of target materials (e.g. concrete, steel etc).

Description

The CDUF Linear Charge Empty consists of a plastic body containing a copper liner. The lid has a pre-threaded hole to accept an initiator.

Specifications	
Dimensions	225 x 220 x 325mm
Charge Weight	8kg when filled
Temperature	-46°C to +71°C
Shelf Life	Indefinite until filled

References	
Product Code	CDUF Linear
NSN Empty	1375-99-843-9918

Packaging	
Outer Pack	Cardboard Box
Quantity per Pack	1
Gross Weight	6.5kg
Dimensions	353 x 245 x 300mm
Volume	0.026m ³



Right and top:
CDUF Linear Charge

Initiation Products

- Igniter Safety Fuze Electric (ISFE)
- Detonating Cord Booster (DCB) L10A1
- Demolition Detonator Non-Electric L1A2
- Demolition Detonator Electric L2A2

Igniter Safety Fuze Electric (ISFE)

This device is designed to provide a means of ignition from an electrically ignited fusehead to a pyrotechnic fuse of specific diameter.



Above: ISFE

Description

Supplied in full military pack the igniter consists of a military E type fusehead crimped into a copper tube with a vent hole in the side.

The tube has an integral stop to ensure correct fitting to safety fuze.

The wires are twisted to reduce the risk of accidental initiation by stray Radio Frequency (RF) interference.

Specifications	
Body Length	34mm
Body Diameter	6mm
Wire Gauge/Length	23swg (0.5mm)/380mm
Resistance	0.9 to 1.6 ohms 0.76A (10ms pulse)
All Fire Current	0.55A (10ms pulse)
No Fire Current	0.3A
Shelf Life	5 Years

References	
NATO Stock Number	1375-99-942-3348
UN Number	0131
Proper Shipping Name	LIGHTERS, FUSE

Packaging	
Outer Pack	H83 Steel Box
Quantity per Pack	500
Hazard	1.4S
NEQ	0.020kg
Gross Weight	6.5kg
Dimensions	300 x 160 x 190mm
Volume	0.009m³

ISFE are packed 100 to a steel tin, with five tins packed in an H83 steel ammunition container.

Detonating Cord Booster (DCB) L10A1

Ideal for initiating SABREX (Flexible Linear Cutting Charge), PE8 (Plastic Mouldable Explosive) and SX4 (Sheet Explosive).



Above: DCB L10A1

Description

This product is designed to easily and reliably initiate a range of charges from L5A1 detonating cord. There is no limit to the number that may be attached to any one length of detonating cord. To maximise the effect of charges more than one detonation point may be used by using multiple boosters. This product contains secondary explosives only hence is safe to handle.

Two DCB are packed in a compact black conducting plastic rigid wallet ideal for carrying in field operations.

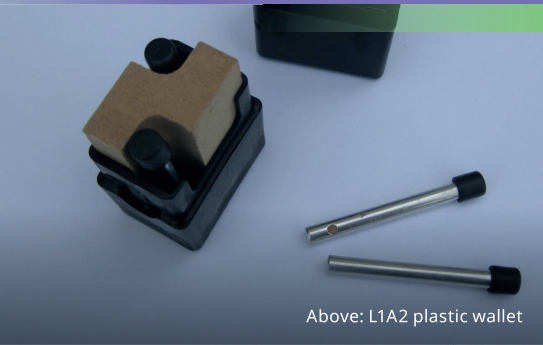
Specifications	
Initiation	L5A1 Detonating Cord
Charge Weight	1.8grams PETN
Temperature	-40°C to +70°C
Shelf Life	10 Years

References	
Product Code	L10A1
NATO Stock Number	1375-99-588-0670
Hazard Class	1.4D
UN Number	0352
Proper Shipping Name	ARTICLES, EXPLOSIVE, N.O.S. (Boosters)

Packaging	
Outer Pack	H83 Steel box
Quantity per Pack	10
NEQ	0.020kg
Gross Weight	6.0kg
Dimensions	300 x 160 x 190mm
Volume	0.009m³

Demolition Detonator Non-Electric L1A2

The L1A2 detonator comprises an aluminium tube with an output charge of PETN initiated with a primary charge of Aluminium/Lead Styphnate/Lead Azide.



Above: L1A2 plastic wallet

Description

The L1A2 detonator is supplied in a full military pack. The L1A2 detonator is designed to be initiated with safety fuze. Each detonator is fitted with a waterproof rubber cap.

Detonators are packed in a compact, black, conducting, plastic, rigid wallet ideal for carrying in field operations.

Specifications	
Tube Diameter / Length	6.4mm / 59mm
Charge Weight	1.1 grams max PETN
Shelf Life	5 Years

References	
Product Code	L1A2
NATO Stock Number	1375-99-577-1644
Hazard Class	1.4S
UN Number	0455
Proper Shipping Name	DETONATORS, NON-ELECTRIC

Packaging	
Outer Pack	H83 Steel Box
Quantity per Pack	24
NEQ	0.035kg
Gross Weight	7.1kg
Dimensions	300 x 160 x 190mm
Volume	0.009m ³

Twelve (12) wallets containing two (2) detonators each are packed into an H83 ammunition container. Alternative packs and classifications are available.

Demolition Detonator Electric L2A2

The L2A2 detonator comprises an aluminium tube with an output charge of PETN initiated by a primary charge of Aluminium/Lead Styphnate/Lead Azide.



Above: L2A2 Plastic Wallet

Description

The L2A2 detonator is supplied in a full military pack. The detonator is designed to be initiated electrically via its flying leads to the inbuilt E Type Fuzehead. The wires are supplied twisted to reduce the risk of accidental initiation by stray radio frequency interference. Two detonators are packed in a black conducting plastic rigid wallet ideal for carrying in field operations.

Specifications	
Tube Diameter / Length	6.4mm / 59mm
Charge Weight	1.1 grams max PETN
Shelf Life	5 Years
Lead Length	0.9m
Resistance	1.0 to 1.7 ohms
Firing Current	0.55 amps min
No Fire Current	0.3 amps max

References	
Product Code	L2A2
NATO Stock Number	1375-99-392-1127
Hazard Class	1.4S
UN Number	0456
Proper Shipping Name	DETONATORS, ELECTRIC

Packaging

Outer Pack	H83 Steel Box
Quantity per Pack	24
NEQ	0.036kg
Gross Weight	7.2kg
Dimensions	300 x 160 x 190mm
Volume	0.009m ³

Twelve (12) wallets containing two (2) detonators each are packed into an H83 ammunition container. Alternative packs and classifications are available.

Intermediary Products

- Detonating Cord 10g/m L5A1
- Detonating Cord 20g/m
- Safety Fuze L1A3

Detonating Cord 10g/m L5A1

L5A1 Detonating Cords have been designed to meet stringent requirements and form part of a range of initiating accessories supplied by Chemring Energetics.



Above: L5A1 10g/m Detonating Cord

Description

L5A1 detonating cord is supplied on 70 metre reels and is used for transmitting a detonation wave from an initiation device to a charge and between subsequent charges.

It provides a means of simultaneously detonating a number of charges. L5A1 has a grey waterproof covering 4.8-5.3mm diameter.

L5A1 detonating cord is supplied with junction clips which can be used to connect branch lines for multiple charges and sealing sleeves to seal the ends when shorter lengths are used.

Specifications	
Initiation	L1A2, L2A2
Diameter/Colour	5.0mm (nominal)/ Grey
Charge Weight	10g/m PETN (nominal)
Detonation Velocity	6000m/s Minimum
Temperature	-40°C to +70°C
Shelf Life	5 Years

References	
Product Code	L5A1
NATO Stock Number	1375-99-382-4040
Hazard Class	1.1D
UN Number	0065
Proper Shipping Name	CORD, DETONATING, flexible

Packaging

Outer Pack	H83 Steel box
Quantity per Pack	70 metre reel plus accessories
NEQ	0.8kg
Gross Weight	5.3kg
Dimensions	300 x 160 x 190mm
Volume	0.009m ³

Detonating Cord 20g/m

20g/m Detonating Cord has been designed to meet stringent military requirements and form part of a range of initiating accessories supplied by Chemring Energetics.



Above: 10g/m Detonating Cord*

Description

20g/m Detonating Cord is supplied on 50 metre reels and is used for transmitting a detonation wave from an initiation device to a charge and between subsequent charges.

It provides a means of simultaneously detonating a number of charges. 20g/m detonating cord has a red waterproof covering 6.2mm diameter.

* 20g/m Detonating Cord picture unavailable at this time

Specifications	
Initiation	L1A2, L2A2
Diameter/Colour	6.2mm (nominal)/ Red
Charge Weight	20g/m PETN (nominal)
Detonation Velocity	6000m/s Minimum
Temperature	-40°C to +70°C
Shelf Life	5 Years

References	
Product Code	DR9047
NATO Stock Number	1375-99-722-6818
Hazard Class	1.1D
UN Number	0065
Proper Shipping Name	CORD, DETONATING, flexible

Packaging

Outer Pack	H83 Steel box
Quantity per Pack	50 metre reel
NEQ	1.1kg
Gross Weight	5.5kg
Dimensions	300 x 160 x 190mm
Volume	0.009m ³

Safety Fuze L1A3

Safety Fuze is used in demolition work where timed demolitions are desirable or to provide a delay for users retire to a place of safety before the main charge detonates.



Above: L1A3 Safety Fuze

Application

Safety Fuze burns at 131 ±13 second per metre allowing the user to accurately calculate the length of Safety Fuze required to provide the desired delay. Safety Fuze is typically used with an L1A2 Non-Electric Detonator crimped onto one end to initiate the main charge. The other end is initiated via Igniter Safety Fuze Electric (ISFE), or Grip Switch fitted with a flash initiator.

Specifications	
Detonation Velocity	131 ±13 second per metre
Explosive Quantity	5.6 g/m Black Powder
Shelf Life	5 Years

References	
NATO Stock Number	1375-99-248-4203
Hazard Class	1.4S
UN Number	0105
Proper Shipping Name	FUSE, SAFETY

Packaging	
Outer Pack	H83 Steel box
Quantity per Pack	80 metres
NEQ	0.488kg
Gross Weight	5.0kg
Dimensions	300 x 160 x 190mm
Volume	0.009m ³

Military pack contains ten (10) x 8m coils per H83.

Description

Safety Fuze has waterproof black outer polyethylene covering with a nominal diameter of 5.1mm and is supplied in 8 metre coils sealed in a bag. 10off coils are packaged in an H83 steel ammunition container.





The information in this brochure should not be used as a technical specification, for engineering calculations, or for system design and integration. It is provided in good faith and is subject to change without notification. It is for the customer and/or System Design Authority to satisfy themselves of the safety and suitability for its own particular purpose.

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