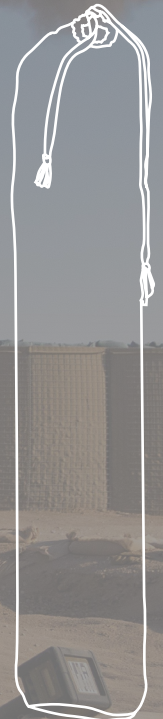




# UBX

## 155mm Artillery Propelling Charge



ENERGETICS

PROPELLANTS

### OVERVIEW

#### Reliable Zone 7 performance in a new bag charge

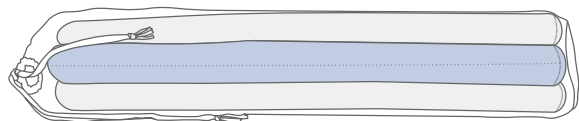
- » Unitary propelling charge with demonstrated 15+ km range (M107/39cal)
  - + UB-40 muzzle velocity similar to M4A2

#### Utilizing advanced General Dynamics Ordnance and Tactical Systems (GD-OTS) propellant blending technology

- » Battle-proven propellants, now in a new format
- » Base ignition system for reliable performance under extreme conditions, without black powder
- » De-coppering propellant additive leaves no residue in cannon after combustion
- » Wear-reducing agent to extend cannon life
- » Flash eliminating agent to reduce signature
- » Designed in accordance with NATO Joint Ballistics Memorandum of Understanding (JBMOU) principles
- » Made in the USA

#### Safety and performance excellence

- » Demonstrated cannon compatibility: M185, M284, M776
- » Demonstrated projectile compatibility: M107, M795
- » U.S. DOD and/or NATO qualified propellants
- » High chemical stability for a minimum of five years of expected shelf life
- » Ongoing Safety and Suitability for Service (S3) Assessment according to NATO AAS3P-20



**SAFETY & SUITABILITY FOR SERVICE**

**Planned Life Cycle Sequential Testing**

- » Logistic Vibration (AECTP 400 Method 401)
  - + 5,000km wheeled common carrier
- » Temperature Cycling (AECTP 230)
  - + C1 Cold / A2 Hot
- » Loose Cargo (AECTP 400 Method 406)
  - + 240km unsecured package
- » Packaged Drop (AECTP 400 Method 403)
  - + 2.1m transport drop
- » Tactical Vibration (AECTP 400 Method 401)
  - + 2500 / 1000km on/off road vehicle
  - + 500km two-wheeled trailer
  - + 1000km tracked vehicle
- » Unpackaged Drop (AECTP 400 Method 403)
  - + 1.5m bare handling drop
- » Fire & UFT (52°C) and LFT (-46°C)
  - + Handling tests also performed at extreme temperatures

**Tests to be performed in partner system, by request**

- » Charge Establishment, Charge Verification, and/or Lot Acceptance Tests in partner-owned weapon system (cannon, projectile, etc.)
- » Development of specialized Firing Tables
- » Additional Safety & Suitability for Service tests of interest to partner, such as Parachute Resupply, Gun Interface Tests, or expanded Temperature Limits

**Enduring General Dynamics Technical Support Services**

- » Additional product improvements to exceed expectations and evolving needs
  - + Demonstrated higher performance version (UB-60) tested to 18+ km. range in 39 cal for higher pressure systems
- » Support for 52 cal. testing and development
- » Technical Data exchange subject to ITAR and will require the establishment of a DSP-5

Temperature Limits	Firing	Lower Limit	-46°C
		Upper Limit	52°C
	Storage	Lower Limit	-46°C
		Upper Limit	58°C
Packaging	Single 1.3C propelling charge in polycarbonate container C137		



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