



UBX

155mm Artillery Propelling Charge

ENERGETICS

PROPELLANTS

OVERVIEW

Reliable Zone 7 performance in a new unitary bag charge

UBX Charge	Muzzle velocity	Demonstrated Range*
UB-40	Similar to M4A2	7-15km
UB-60	Similar to M119A2	10-18km

*M107/39cal system

Utilizing advanced General Dynamics Ordnance and Tactical Systems (GDOTS) propellant blending technology

- » Battle-proven propellants, now in a new patent-pending propelling charge
- » Base ignition system for reliable performance under extreme conditions, without black powder
- » De-coppering propellant additive minimizes buildup in cannon after combustion
- » Wear-reducing agents extend cannon life
- » Flash eliminating agent reduces 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
- » Safety and suitability for service (S3)
 - + UB-40 qualified per AAS3P-20
 - + UB-60 qualification on-going per AAS3P-20



UB-40 and UB-60



SAFETY & SUITABILITY FOR SERVICE

Qualified life cycle, performed at extreme temperatures

- » 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

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 meet evolving needs
 - + Extended Range
- » Support for 52 cal. testing and development
- » Technical data and technology exchange is subject to U.S. export regulations and may require authorization for export

Temperature Limits	Firing	Lower Limit	-46°C
		Upper Limit	52°C
	Storage	Lower Limit	-46°C
		Upper Limit	58°C
Packaging	Performance Oriented Packaging, bulk or individual option available		

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