



Storage & Handling Guidelines for CTS Munitions

Proper storage of CTS chemical and pyrotechnic munitions is critical to maintaining safety, reliability, and service life. Inadequate storage conditions can significantly shorten shelf life, increase replacement costs, or result in unsafe or defective performance.

Key Storage Factors

- **Temperature & Humidity:**
 - Store munitions in a controlled environment between **15°C and 23°C (59°F to 73°F)** with **relative humidity below 60%**.
 - Avoid exposure to excessive heat and moisture, as both accelerate deterioration.
- **Packaging:**
 - Keep munitions sealed in their original shipping containers until they are issued for operational use or placed in a call-out box.
- **Vehicle Storage:**
 - Do not store grenades or projectiles in vehicle trunks for extended periods. Elevated temperatures may cause chemical agents to melt and obstruct ports, potentially transforming the device into a hazardous fragmentation risk.
- **Temperature Extremes:**
 - Repeated transitions between extreme hot and cold environments are particularly damaging.
 - Storage at temperatures below **-28°C (-18°F)** for 24 hours or longer, especially in high humidity, is not recommended. Munitions may still function but with reduced effectiveness.
 - Black powder-based rounds are more sensitive to cold than smokeless rounds.
 - Pyrotechnic grenades are generally less affected by low temperatures due to their chemical composition.

Inspection and Service Life

- All stored munitions should undergo semi-annual inspections to verify physical integrity.
- A representative sample should be function-tested twice per year to confirm performance.
- Munitions that exceed their five-year shelf life must either be used or replaced to ensure operational reliability.

Disposal

Expired, damaged, or unserviceable munitions must be disposed of in strict accordance with Federal, State, and Local environmental regulations. Proper disposal not only ensures safety but also prevents environmental contamination and legal liability.