



9 ×19 mm



PROPELLANT AND HIGH EXPLOSIVES

### General

**Application:** propellant for 9mm pistol cartridge for Parabelum SIG ‘S&W ‘CZ 99 ‘Beretta and equivalent pistol and tommy gun.

**Packaging:** Ball powder (9 ×19mm) is packed in seal metal drum or fiber drum and packages are placed on pallet in Shrinkage form. Net weight of each drum is 40 kg.

**Storage:** Ball powder (9 ×19mm) should be stored in -10°C up to +30°C.

**Shelf life:** 20 years

### TECHNICAL SPECIFICATIONS

Charge	0.37-0.4 gr
Projectile mass	8 ± 0.1 gr
Muzzle velocity	385 ± 6 m/s
Standard Deviation of velocity	8 m/s
Average pressure	Max. 2350 bar
Average Grain Diameter	0.45 ± 0.05
Appearance density	960-970 g/lit
Stability at 120 °C	Min. 60 min
Moisture & Volatile	Max. 1.25 %



12.7×77 mm

### General

**Application:** Propellant for 12.7×77mm cartridges for M8C spotting rifle (or equivalent) of 106mm guns.

**Packaging:** Ball powder (12.7×77mm) is packed in seal metal drum or fiber drum and packages are placed on pallet in Shrinkage form. Net weight of each drum is 40 kg.

**Storage:** Ball powder (12.7×77mm) should be stored in -10°C up to +30°C.

**Shelf life:** 20 years

### TECHNICAL SPECIFICATIONS

Charge	7-7.7 gr
Projectile mass	53 ± 0.2 gr
Muzzle velocity	538 ± 7 m/s
Standard Deviation of velocity	Max. 6 m/s
Average Pressure	Max. 2500 bar
Average Grain Diameter	0.7 ± 0.05
Appearance density	Min 900 g/lit
Stability at 120 °C	60 min
Moisture & Volatile	Max. 1.25 %

