



## 100 mm (Anti-Aircraft)



### General

Double base one perforated propellant tubular grain, category SF3-18/1-26 is a kind of double base propellant containing Nitrocellulose (NC), Nitroglycerine (NG), Dinitrotuloene (DNT), Dibutyl Phthalate (DBP), Centralite and wax.

This propellant is used in 100mm anti-aircraft and also 100mm anti-tank ammunition.



PROPELLANT AND  
HIGH EXPLOSIVES

### TECHNICAL SPECIFICATIONS

Type of propellant	SF3-18/1-26
Length	260 ± 8 mm
Hole diameter	2.1 -2.3 mm
Web thickness	1.75 -1.90 mm
Moisture	Max. 0.7 %
Heat of explosion	765 ± 10 cal/g
Stability at 120 °C	≥ 40 min.

### BALLISTIC SPECIFICATIONS

Total charge	5500 gr
Muzzle Velocity	900 ± 10 m/s
Average Pressure at 15°C	≤ 3000 bar
Std. Dev. of Velocity (m/s)	≤ 2.3 m/s

## 106 mm

### General

Double base seven perforated propellant cylindrical grain, category M26 is a kind of double base propellant containing Nitrocellulose (NC), Nitroglycerine (NG), Barium Nitrate, Potassium Nitrate, Centralite and Graphite (as glazing agent).

This propellant is used in 106mm anti-tank and anti-personnel ammunitions for M40 recoilless gun.



### TECHNICAL SPECIFICATIONS

Average length (L)	13 ± 1 mm
Diameter (D)	5.5 ± 0.5 mm
Web (W)	0.9 ± 0.1 mm
Perforation diameter (d)	0.55 ± 0.05 mm
Total volatiles	Max. 0.7 %
Chemical stability (120 °C )	40 min.
Heat of explosion (Max.)	1020 cal/gr

### BALLISTIC SPECIFICATIONS

Tested items	Antitank	Antipersonnel
Total charge (gr)	~3600	~3800
Mean Muzzle Velocity (m/s)	503 ± 15	485 ± 15
Average Pressure at 21°C (kg/cm <sup>2</sup> )	≤ 680	≤ 680
Std. Dev. of Velocity (m/s)	≤ 3.5	≤ 3.5