105 mm

General

Single base one and seven perforated propellant cylindrical grain contains Nitrocellulose (NC), Diphenylamine (DPA), Dinitrotoluene (DNT), Dibutyl Phthalate (DBP) and Potassium Sulfate. The powder charge consists of seven charges. One perforated propellant is used for charges NO.1-2 and seven perforated propellants for charges NO.3-7. This powder charge is used for 105mm HE ammunition.

TECHNICAL SPECIFICATIONS

	one perforated	seven perforated
Length (mm)	6 ± 1	9 ± 1
Diameter (mm)	1.2 ± 0.1	4 ± 0.2
Hole diameter (mm)	0.4 ± 0.05	0.6 ± 0.1
Web thickness (mm)	0.40 ± 0.05	0.56 ± 0.1
Total volatiles (%)	≤ 1.6	≤ 1.8
Moisture (%)	0.6 ± 0.2	0.6 ± 0.2
Residual solvent (%)	≤ 0.8	≤ 1.0
Stability at 134.5 °C (min)	≥ 40	≥ 40

BALLISTIC SPECIFICATIONS

	one perforated	seven perforated
Total charge (gr)	~ 280	~ 960
Average Velocity (m/s)	216 ± 5	471 ± 5 (Full Charge)
Std. dev. of Velocity (m/s)	≤ 1.8.	≤ 1.8
Average Pressure at 15°C (bar)	-	≤ 2450 (Full Charge)

105 mm HEPT

General

Single base seven perforated cylindrical grain contains Nitrocellulose (NC), Diphenylamine (DPA) and additives. It is used in 105mm HEPT anti-armor ammunition.

TECHNICAL SPECIFICATIONS

Length	10.5 ± 1.5 mm
Diameter	4.3 ± 0.4 mm
Hole diameter	0.4 ± 0.1 mm
Web thickness	0.7-0.95 mm
Diphenylamine	1-2 %
Heat of explosion	≤ 800 cal/gr
Total volatiles	≤ 1.25 %
moisture	0.6 ± 0.2 %
Stability at 134.5 °C	≥ 40 min

BALLISTIC SPECIFICATIONS

Total charge	2500 gr
Average Velocity	731.5 ± 8 m/s
Std. dev. of Velocity	≤ 3.0 m/s
Average Pressure	≤ 1862 bar
Max. Pressure at +63°C	≤ 2145 bar