

**AZƏRBAYCAN RESPUBLİKASI  
MÜDAFİƏ SƏNAYESİ NAZİRLİYİ**



**MINISTRY OF DEFENCE INDUSTRY  
OF AZERBAIJAN REPUBLIC**



# **5.45X39 MM AMMUNITION**

## **5.45 mm CARTRIDGE WITH ENHANCED PENETRATING ACTION BULLET (DESIGNATION 7N10)**

This cartridge is designed to engage unsheltred targets at ranges of up to 1.200 m, flak vest-clad manpower at ranges of up to 100 m, personnel located behind lightly armored barriers at ranges of up to 1.000 m and aerial targets at up to 900 m. It is used for firing all types of organic weapons chambered for the 5.45 mm cartridge.

The bullet is not painted.

### **BASIC CHARACTERISTICS**

Caliber, mm	5.45x39
Weight, g	10.7
cartridge	3.62
bullet	1.44
powder charge	57-0,8
Cartridge length, mm	SSNf-30/3.69
Grade powder	870 - 890
Muzzle velocity, V25, m/s	≤ 294.2 (3000)
Max powder gas pressure, MPa (kgf/sm <sup>2</sup> )	3.5
Fire consistency at 100-m range (R50), sm, max	
Effective penetration distance, m:	
St3 steel plate, 16 mm thick	300
armor plate, 5 mm thick	150
6Zh85T armor vest	200
Cartridge case material	steel



# **5.45X39 MM AMMUNITION**

## **5.45 mm BLANK CARTRIDGE WITH A DUMMY BULLET (DESIGNATION 7Kh3)**

This cartridge is designed to produce the sound effect of firing. It is used in firing all types of organic, weapons chambered for the 5.45 mm cartridge.

To the blank cartridges, a special blank firing attachment is screwed on the weapon muzzle. The attachment builds up the gas pressure required to operate the weapon machinery and to powder the simulated bullet.

The dummy bullet is painted white.

### **BASIC CHARACTERISTICS**

Caliber, mm	5.45x39
Weight, g	6.6
cartridge	0.24
bullet	1.0
powder charge	57-0,8
Cartridge length, mm	Sf 033fl
Grade powder	steel
Cartridge case material	



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# **5.45X39 MM AMMUNITION**

## **5.45 mm CARTRIDGE WITH A TRACER BULLET (DESIGNATION 7T2)**

The cartridge is used for target designation and arbitrary correction. Compatible with the AK74, AKS74, AKS74U assault rifles and RPK74, RPKS74 light machine guns.

The tip of the bullet is painted green.

### **BASIC CHARACTERISTICS**

Caliber, mm	5.45x39
Weight, g cartridge	10.3
bullet	3.23
powder charge	1.44
Cartridge length, mm	57-0,8
Grade powder	SSNf-30/3.69
Muzzle velocity, V25, m/s	883
Max powder gas pressure, MPa (kgf/sm <sup>2</sup> )	≤ 294.2 (3000)
Fire consistency at 300-m range (R50), sm, max	14
Tracer action distance, m	800
Cartridge case material	steel





# 7.62X39 MM AMMUNITION

## 7.62 mm CARTRIDGE, MODEL 1943, WITH STEEL CORE BULLET (DESIGNATION 57-N-231S)

This cartridge is designed to engage hostile manpower and fire weapons at a range of up to 800 m when firing the assault rifle and 1,000 m when firing the light machine gun. It is fired from AKM and AKMS assault rifles as well as RPK and RPKS light machine guns. The bullet is not painted.

### BASIC CHARACTERISTICS

Caliber, mm	7.62x39
Weight, g cartridge	15.8 ... 16.8
bullet	7.75 ... 8.05
powder charge	1.56
Cartridge length, mm	56-1
Grade powder	SSNf-30/3.97
Muzzle velocity, V25, m/s	710 – 725
Max mean powder gas pressure, MPa (kgf/cm <sup>2</sup> )	≤ 274.6 (2800)
Fire consistency at 300-m range (R50), sm, max	7.5
Effective penetration range, m: steel helmet	1.000
St3 steel plate, 6 mm thick	300
6Zh85T flak vest	60
Cartridge case material	steel



# **7.62X51 AMMUNITION**

## **7.62x51 mm NATO CARTRIDGE WITH LEAD CORE BULLET**

The cartridge is designed for firing weapons chambered for the 7.62 mm NATO cartridge.

The bullet is not painted.

### **BASIC CHARACTERISTICS**

Caliber, mm	7.62x51
Weight, g cartridge	23.8
bullet	9.46
Cartridge length, mm	71
Muzzle velocity, m/s	840
Max mean powder gas pressure, MPa	2900
Fire consistency at 300-m range (R100), sm	8 max
Penetration range for St3 steel plate, 6 mm thick, m	400
Cartridge case material	brass



# **7.62X54R AMMUNITION**

## **7.62x54R mm RIFLE CARTRIDGE WITH STEEL CORE BULLET (DESIGNATION 57-N-323S)**

The cartridge is designed to engage hostile manpower and fire weapons. It is fired from PK, PKM, PKMS, PKMB, PKT, SGM and GShG-7,62 machine guns, as well as SVD and SVDS snipers rifles.

The bullet is not painted.

### **BASIC CHARACTERISTICS**

Caliber, mm	7.62x54
Weight, g	21.8
cartridge	9.6
bullet	3.1
powder charge	76.5
Cartridge length, mm	VT
Grade powder	825 – 855
Muzzle velocity, m/s	2900
Max mean powder gas pressure, MPa	9 max
Fire consistency at 300-m range (R50), sm	
Effective penetration distance, m:	
St3 steel plate, 6 mm thick	520
6Zh85T flak vest	110
Cartridge case material	brass or steel



# **BELTS & BOXES FOR** **7.62X54 MM** **RIFLE CARTRIDGES**

**7.62 mm BLANK CARTRIDGE (DESIGNATION 57-Kh-231)**

Metal 7,62 x54 mm rifle cartridge belt string is designed for universal and tank machine guns.

The belt consists of separate metal links interconnected with special springs. Depending on type of application the belts are produced in several capacities: 25 (index 6L7M) 100 (index 6L5M) and 200 (index 6L6M). The belt fractions are joined with a cartridge.

The belts are fed with cartridges by using a special machine or manually.

The life time of a cartridge belt ensures its no less than 40 times passing through the weapon's automatic system.

The belts are designed for 7,62x54 Kalashnikov (PK, PKM, PKT) as well as SGM and RP-46 machine guns.

They are packed in boxes with capacity of 100, 200 and 250 cartridges.

The armored personnel carriers (BTR, BRDM) use special boxes with capacity of 250 (BTR, BRDM) and 1000 (BMP-1, BMP-2 and etc.) cartridges.





# **7.62X54 MM AMMUNITION**

## **7.62 mm BLANK RIFLE CARTRIDGE (DESIGNATION 57-Kh-340)**

This cartridge is used to imitate the sound of shooting. Compatible with all operational 7.62x54-mm weapons. Firing blank cartridges requires a special plug screwed onto the muzzle to ensure gas pressure sufficient to power gas-operated weapons and disintegrate the dummy bullet, and other special devices according to relevant regulations.

### **BASIC CHARACTERISTICS**

Caliber, mm	7.62x54R
Cartridge weight, g	10.8
Powder charge weight	1.6
Cartridge length, mm	53.7
Grade powder	Xqr
Cartridge case material	steel



# 7.62X39 MM AMMUNITION

## 7.62 mm CARTRIDGE WITH LOW VELOCITY BULLET (DESIGNATION 57-N-231U)

The cartridge is designed for engagement of unsheltered manpower at firing ranges of up to 400 m in special operations.

It is fired from the AKM (AKMS) assault rifle fitted with the PBS-1 device.

The bullet point is painted black and green.

### BASIC CHARACTERISTICS

Caliber, mm	7.62x39
Weight, g	
cartridge	20.2
bullet	12.55
powder charge	1.0
Cartridge length, mm	56-1
Grade powder	P-45
Muzzle velocity, V25, m/s	293
Max mean powder gas pressure, kgf/cm <sup>2</sup>	2000
Fire consistency at 100-m range (R50), sm, max	3.5
Cartridge case material	steel



# SILENCER

The device is a sound moderator and is intended for soundless and flameless firing from AKM machine gun by chambering low velocity 7.62x39 mm cartridges at ranges up to 400m.

## BASIC CHARACTERISTICS

Sound level, Db, max	114
Length, mm	205
Diameter, mm	53
Service life of the device, shots	15 000
Service life of the obturator, shots	150
Weight, kg	0.7



# **7.62X39 MM AMMUNITION**

## **7.62 mm BLANK CARTRIDGE (DESIGNATION 57-Kh-231)**

This cartridge is used to imitate the sound of shooting. Compatible with all operational 7.62x39-mm weapons. Firing blank cartridges requires a special plug screwed onto the muzzle to ensure gas pressure sufficient to power gas-operated weapons and disintegrate the dummy bullet.

### **BASIC CHARACTERISTICS**

Caliber, mm	7.62x39
Cartridge weight, g	10.8
Powder charge weight, g	0.77
Cartridge length, mm	57-0,8
Grade powder	P-125
Cartridge case material	steel

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# 9 MM PISTOL CARTRIDGE WITH RUBBER BULLET

9 mm pistol cartridge is designed for chambering special weapons. It is an effective antiriot and personal defence means with a rubber less-than-lethal bullet.

## **BASIC CHARACTERISTICS**

Cartridge mass, g	4,2
Bullet mass, g	0,6±0,05
Cartridge length, mm	23±1,0
Effective range of fire, m	5÷10
Operating temperature range, °C	from -15 to +40



# **9X18 MM AMMUNITION**

## **9x18 mm PISTOL CARTRIDGE WITH STEEL CORE BULLET (DESIGNATION 57-N-181S)**

This cartridge is designed to engage manpower at a range of up to 50 m.

It is fired from the PM Makarov pistol and submachine guns.

The bullet is not painted.

### **BASIC CHARACTERISTICS**

Caliber, mm	9x18
Weight, g cartridge bullet	9.26 ... 10.07 5.75 ... 6.15
powder charge	0.25
Cartridge length, mm	25-0.52
Grade powder	P-125
Muzzle velocity, V10, m/s	290 – 315
Max mean powder gas pressure, MPa (kgf/cm <sup>2</sup> )	≤ 117.7 (1200)
Fire consistency at 25-m range (R50), sm (max)	3.2
Penetration range St3 steel sheet, 1.3 mm thick, m	20
Cartridge case material	steel



# **9X18 MM AMMUNITION**

## **9 mm BLANK CARTRIDGE**

This cartridge is used to imitate the sound of shooting. It is fired from the 9x18 mm pistole.

### **BASIC CHARACTERISTICS**

Caliber, mm	9x18
Cartridge weight, g	4.2
Cartridge length, mm	23±1.0
Cartridge case material	steel
Operating temperature range	-15° to +40°C

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# 9X19 MM AMMUNITION

## 9x19 mm PISTOL CARTRIDGE (PARABELLUM)

The cartridge is designed to engage manpower at ranges of up to 50 – 150 m.

Cartridge can be used in pistols, submachine guns and carbines.

The bullet is unpainted.

### BASIC CHARACTERISTICS

Caliber, mm	9x19
Weight, g cartridge	12.0 ± 0,4
bullet	7.9 ± 0,1
powder charge	0.34
Cartridge length, mm	29,7-0,52
Case length, mm	19,15
Muzzle velocity, V10, m/s	350 ± 10
Max mean powder gas pressure, MPa	≤ 215
Fire consistency at 25 m range (R50), cm (max)	3,0
Cartridge case material	steel





# **12.7X108 MM AMMUNITION**

## **12.7 mm BLANK CARTRIDGE (DESIGNATION 7Kh1)**

This cartridge is used to imitate the sound of shooting. Compatible with the NSV-12.7 "Utyos" heavy machine gun. Firing blank cartridges requires a muzzle plug and special liners put into the receiver and into the ammunition box.

### **BASIC CHARACTERISTICS**

Caliber, mm	12.7x108
Cartridge weight, g	80.1
Powder charge weight, g	10
Grade powder	4/7
Length, mm	
cartridge	112
cartridge case	108
Cartridge case material	steel



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# **12.7X108 MM AMMUNITION**

## **12.7x108 mm CARTRIDGE WITH THE BZT-44 ARMOR-PIERCING/ INCENDIARY/TRACER BULLET (DESIGNATION 57-BZT-542)**

The cartridge is used for target designation and arbitrary correction, and ignition of flammable targets. Compatible with heavy machine guns.

The bullet effectively penetrates 15-mm perpendicular armor at up to 100 m and ignites the B-70 petrol. Compatible with the NSV-12.7, NSVT-12.7, DShKM, A-12,7 machine guns.

The tip of the bullet is painted red and violet.

### **BASIC CHARACTERISTICS**

Caliber, mm	12.7x108
Muzzle velocity, V25, m/s	818
Fire consistency at 300 m range (R50), max	18
Max mean gas powder pressure, MPa (kgf/cm <sup>2</sup> )	≤ 303.8 (3100)
Bullet weight, g	44
Cartridge weight, g	128
Powder charge weight, g	17
Cartridge length, mm	147-1.5
Grade powder	4/7
Tracer action time, sec.	minimum 2,9
Cartridge case material	steel



# **12.7X108 MM AMMUNITION**

## **12.7x108 mm CARTRIDGE WITH THE B-32 ARMOR-PIERCING INCENDIARY BULLET (DESIGNATION 57-BZ-542)**

The cartridge is designed to engage lightly armored ground targets (armored personnel carriers) weapon emplacements and targets behind light barriers at ranges of up to 1.000 m, concentrated infantry and motor transport at ranges of up to 1.500 m and low flying targets at altitudes of up to 1.500 m.

It ignites the B-70 gasoline

It is fired from NSV-12.7, NSVT-12.7 and DShKM machine guns.

The bullet point is painted black with the red tip.

### **BASIC CHARACTERISTICS**

Caliber, mm	12.7x108
Muzzle velocity, V25, m/s	810 ... 825
Fire consistency at 300 m range (R50), max	18
Max mean gas powder pressure, MPa (kgf/cm <sup>2</sup> )	≤ 303.8 (3100)
Bullet weight, g	47.4 ... 49
Cartridge weight, g	130 ... 137
Powder charge weight, g	17
Cartridge length, mm	147-1.5
Grade powder	4/7
Cartridge case material	steel
Armor-piercing action (penetration probability 90%)	
range, m	100
perpendicular armour plate, mm	20



# **BELTS & BOXES FOR 12.7X108 MM CARTRIDGES**

Metal 12,7x108 mm cartridge belt string is designed for large caliber machine guns.

The belt (index 56-JL-542M) designed for DSHKM machine guns consists of 10 or 50 interconnected metal links of "crab" type. The belt fractions are joined with a cartridge.

The belt (index 6L19) designed for NSV-12,7 (NSVT-12,7) machine gun consists of 10 interconnected metal links of "crab" type. The belt fractions are joined with a cartridge.

The cartridge belts are not interchangeable.

The belts are fed with cartridges by using a special machine (index 6429) or manually.

The life time of a cartridge belt ensures its no less than 25 times passing through the weapon's automatic system.

The belts are packed in boxes with capacity of 50 and 70 cartridges.

Boxes for 50 cartridges (index 56-JL-542M) are designed for large caliber 12.7x108mm DSHK (DSHKM) and NSV-12,7 (NSVT-12,7) machine guns.

Boxes for 70 cartridges are intended for NSVU-12,7 machine guns.





# **14.5X114 MM AMMUNITION**

## **14.5x114 mm CARTRIDGE WITH THE B-32 ARMOR-PIERCING INCENDIARY BULLET (DESIGNATION 57-BZ-561S)**

The cartridge is designed to engage lightly armored ground targets (armored personnel carriers) weapon emplacements and targets behind light barriers at ranges of up to 1.000 m, concentrated infantry and motor transport at ranges of up to 1.500 m and low flying targets at altitudes of up to 2.000 m. Ignites the B-70 gasoline

It is fired from KPV, KPVT machine guns and IST-14.5 anti-materiel rifle.

The bullet point is painted black with the red tip.

### **BASIC CHARACTERISTICS**

Caliber, mm	14.5x114
Muzzle velocity, V25, m/s	980 ... 995
Fire consistency at 300 m range (R50), max	20
Max mean gas powder pressure, MPa (kgf/cm <sup>2</sup> )	≤ 323.6 (3300)
Bullet weight, g	63 ... 64.8
Powder charge weight, g	31
Grade powder	5/7
Cartridge weight, g	192
Cartridge length, mm	156-1.5
Cartridge case material	steel
Penetration range for 20 mm armor at 20 deg. m, max	300



# **14.5 MM BLANK CARTRIDGE** **(DESIGNATION 57-KH-561)**

## **14.5 mm BLANK CARTRIDGE (DESIGNATION 57-Kh-561)**

This cartridge is used to imitate the sound of shooting. Compatible with all operational 14.5x114-mm weapons. Firing blank cartridges requires a muzzle plug and special liners put into the receiver, and adjusted cartridge extractors.

### **BASIC CHARACTERISTICS**

Caliber, mm	14.5x114
Cartridge weight, g	114.5
Powder charge weight, g	18
Lenght, mm cartridge	117.2
cartridge case	114
Grade powder	VTJ
Cartridge case material	steel



# **14.5X114 MM AMMUNITION**

## **14.5x114 mm CARTRIDGE WITH THE B-32 ARMOR-PIERCING/ INCENDIARY/TRACER BULLET (DESIGNATION 57-BZT-561S)**

The cartridge is used for target designation and arbitrary correction, and ignition of flammable targets. Compatible with heavy machine guns.

Compatible with the Vladimirov heavy machine gun (KPVT), the 14,5-mm PKP, SKP heavy machine guns, the ZPU-1, ZPU-2, ZU-2, and ZPU-4 anti-aircraft machine guns and IST-14.5 anti-materiel rifle.

Effectively ignites the B-70 petrol.

The tip of the bullet is painted red and violet.

### **BASIC CHARACTERISTICS**

Caliber, mm	14.5x114
Muzzle velocity, V25, m/s	995 ... 1005
Fire consistency at 300 m range (R50), max	20
Max mean gas powder pressure, MPa (kgf/cm <sup>2</sup> )	≤ 323.6 (3300)
Bullet weight, g	60,5
Powder charge weight, g	31
Grade powder	5/7
Effective tracer distance, m	2200
Effective armor penetration distance (20-mm armor plate set at 20°), m	100
Cartridge weight, g	185
Cartridge length, mm	156-1.5
Cartridge case material	steel



# 12 MM CARTRIDGE WITH RUBBER SHOT

12 mm cartridge with less-than-lethal rubber shot is designed for chambering 12 mm smooth bore weapon and is an effective antiriot and personal defence means.

## BASIC CHARACTERISTICS

Effective range of fire, m	3,5±15
Rubber shot mass, g	7,8±0,4
Cartridge length, mm	65±1,8
Operating temperature range,	from -15 to +40 °C

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# 12 MM CARTRIDGE WITH RUBBER BULLET

12 mm cartridge with less-than-lethal rubber bullet is designed for chambering 12 mm smooth bore weapon and is an effective antiriot and personal defence means.

## BASIC CHARACTERISTICS

Bullet mass, g	7,8±0,4
Cartridge length, mm	65±1,8
Operating temperature range,	from -15 to +40 °C
Effective range of fire, m	12÷35

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# HUNTING CARTRIDGES

## 12 & 16 CAL. HUNTING CARTRIDGES

The hunting cartridges, manufactured in compliance with military standards are ideal for professional and hobby hunting. The reliability and performance of the cartridges meet the levels of the best foreign samples.

Caliber	Case		Wad	Shot size, mm	Shot weight	Muzzle velocity, $V_{10}$ , m/s	Max pressure, Bar (kg/sm <sup>2</sup> ) Gram
	Type	Length, mm (inch)					
12	Plastic	70 (2.756)	Plastic	2,21-3,63	30-36	320	740 (755)
16	Plastic	70 (2.756)	Plastic	2,21-3,63	30-36		780 (795)



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# SMALL ARMS AMMUNITION

