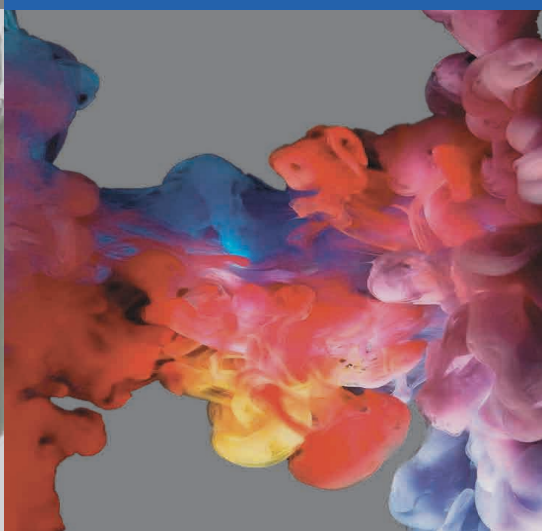




ALMADK

SPECIAL MILITARY PRODUCTS MANUFACTURER



REPUBLIC OF KAZAKHSTAN, ALMATY, 050046, 199 TURKEBAYEV STR.
TEL.: +7 727 392 95 55
WWW.ALMADK.KZ

ABOUT US

AlmaDK is manufacturer and supplier of special military products. We closely work with law enforcement and military customers since our first day. AlmaDK started in 1998, designing, developing and manufacturing our products and serving customers from various government organizations, departments and institutions.

AlmaDK obtained its first license for purchasing and manufacturing of weapons, ammunition, military equipment, components and parts, issued by the Ministry of Industry and New Technology in 2004.

Every year we participate in a number of international exhibitions and trade shows in different countries to keep up with innovation as well as the rapidly changing military products trends. AlmaDK already works with international and domestic clients; at the exhibitions we present the latest line of products to demonstrate our achievements and develop new business relationship.

In 2009, after obtaining license for development, production, repair and purchasing of ammunition, armament and military equipment, spare parts and accessories we started the production of military imitation products.

In 2010 the President of Republic of Kazakhstan N. Nazarbayev and Minister of Defense of Republic of Kazakhstan A. Dzhaksybekov announced special program calling for production and development of Kazakhstan content in all products supplied to national armed forces. Since then, AlmaDK started the production of military imitation products at its factories in Kazakhstan leading to further increase of the made in Kazakhstan goods. We hire a lot of Kazakhstan specialists, greatly experienced and knowledgeable in the field of military imitation products. Our products are proudly made in Kazakhstan according to the highest quality standards from the best parts and components available on the market.



ALMADK, LLP



AlmaDK main focus is design and manufacturing of various products for military and law enforcement customers, as well as export of military equipment, armament and ammunition produced by trusted and reputable companies.

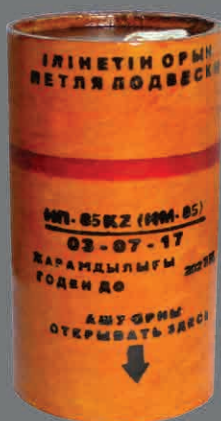
Good relationship established with Research Institute Academy of Science resulted in long-lasting, mutually beneficial cooperation. Creations and inventions owned by the Kazakhstan Academy of Science were adapted and used by AlmaDK R&D Department in order to design new military products.

Today the company employed the best Kazakhstan specialists, from various fields included, but not limited to chemistry, physics, engineering and explosive materials. We have benefited from collaboration with foreign engineers, scientists and other specialists whom we cooperated in the past and continue working until now. Years of result oriented teamwork brought us production technologies provided by our international partners. Nowadays AlmaDK comprises of a team of professionals who are able to accomplish even the hardest mission.

AlmaDK created, designed and patented numerous production methods, procedures and practices. All our products conform to all applicable Kazakhstan and international quality standards.



IMITATION CARTRIDGE IM-85 (IP-85)



The cartridge is designed for 85-mm gunshot imitation or a howitzer on the fourth charge imitation.

TECHNICAL CHARACTERISTICS

Diameter	85 ± 2
Height, mm	160 ± 10
Weight, g	1000 ± 70
Weight of pyrotechnical charge, g	700 ± 50
Fuse	ED
Time of fuse activation	Instantly
Safe radius, m	50

IMITATION CARTRIDGE IM-100 (IP-100)

The cartridge is designed for a 100-mm gunshot imitation or 122-mm howitzer on a total charge imitation, as well as ruptures of artillery shells of min. caliber of 100 mm.

TECHNICAL CHARACTERISTICS

Doameter	97 ± 2
Height, mm	170 ± 10
Weight, g	1400 ± 70
Weight of pyrotechnical charge, g	1000 ± 30
Fuse	ED
Time of fuse activation	Instantly
Safe radius, m	50



IMITATION CARTRIDGE IM-120 (IP-120)

Imitating cartridge IM-120 is used in military exercises and maneuvers to simulate a shot from a 120-mm mortar.

TECHNICAL CHARACTERISTICS

Diameter	75 ± 2
Height, mm	145 ± 10
Weight, g	620 ± 50
Weight of pyrotechnical charge, g	400 ± 20
Fuse	ED
Time of fuse activation	Instantly
Safe radius, m	50





SMOKE-PUFF CHARGE (AP)



Smoke-puff charge is designed for staff training. It imitates grenade explosion. There is an incendiary knot on the end of a cord which is initiated by the flame or granting method.



FLASH-SOUND PUFF CHARGE (APJ)

TECHNICAL CHARACTERISTICS

Diameter, mm	30 ± 2
Height, mm	80 ± 5
Weight of thunder flash, g	50 ± 2,5
Weight of pyrotechnic mixture, g	25 ± 1
Time of burning fuse, s	7 - 8,5
Safe radius, m	10
Sound pressure, dB (AP/APJ)	130/150
Light output power, cd (APJ)	3x10 ⁵



SOUND SIMULATOR OF ARTILLERY SHELL EXPLOSION (SHIRAS SMOKE POT)

SHIRAS smoke pot is designed for artillery shell explosion imitation. White, grey or black colors are available.

Grating detonator: The end of slow-match is equipped with ignition knot which is initiated by burning or grating method.

Fragments may reach distance up to 30 meters. Safe radius, m: 40-50.

TECHNICAL CHARACTERISTICS

Height, mm	170 ± 10
Weight, g	1000 ± 70
Weight of pyrotechnical charge, g	700 ± 30
Diameter	97 ± 2
Fuse	Electric detonator (ED) or grating detonator
Time of fuse activation	Instantly
Safe radius, m	50



81 MM SMOKE GRENADE DQ6



81 mm smoke grenade DQ6 was designed to make camouflage smoke screen around armor by shooting smoke grenades from launcher system 902 "Tucha".

TECHNICAL CHARACTERISTICS

Diameter, mm	81 ± 1
Height, mm	220 ± 5
Weight, kg	1300-2100 (depending on the modification)
Smoke color	Black, grey, white, yellow, red, blue, orange, green
Time of smoke emission, min	1,5 - 3
Delay time, s	7 - 12



HAND GAS AND SMOKE GRENADE OF IRRITANT ACTION



Antiterrorist gas and smoke grenade DQ-250 is designed for indoor terrorists neutralization. The grenade provides irritation gas and smoke discharge. The grenade does not make any damage by fragments to neutralized person.

Hand gas and smoke grenade are filled with various smoke irritants (CS, CN etc.)

The tear effect provides optimal results in room of 120m²

TECHNICAL CHARACTERISTICS

Height, mm*	175 ± 10
Diameter, mm*	50 ± 5
Weight, g*	260 ± 40
Weight of pyrotechnical charge, g	200 ± 10
Fuse	ADQ-02
Delay time, s	1,5 - 3,5
Storage temperature, C	-40 + 50

*without fuse



SMOKE GRENADES



AlmaDK manufactures smoke grenades from the year 2011 and has already supplied over 80 000 pieces to the Government Customers in the Republic of Kazakhstan as well as to various international customers. Company operates technical laboratory specializing in military and civil pyrotechnical products research and development. AlmaDK is able to design and manufacture any smoke colors as well as grenade body shape according to customer technical requirements.

Smoke grenade is a pyrotechnical device used for smoke formation, landing area indicating, objects camouflage during maneuvering (including mass riots).

Smoke grenade of long-lasting action (no less than 45 +/-5 sec.) is made of plastic (body) with several holes for smoke release. Burning time depends on color of smoke. Operation procedure - fuse. On customer demand the grenade may be equipped with grating igniter.



HAND SMOKE GRENADES/SMOKE CANDLE



TECHNICAL CHARACTERISTICS

Designation	Handheld smoke grenade	Small smoke grenade
Diameter, mm	53-55	53-55
Height, mm	220	120
Weight, kg	0,6 ± 0,1	0,3 ± 0,1
Signal color	Black, grey, white, yellow, red, blue, orange, green	
Ignition	Grating	
Response, s	Up to 15	
Smoke formation	45-90	20-60
Coverage, m	Not less than 125	Not less than 75

TECHNICAL CHARACTERISTICS OF SMOKE CANDLE

Designation	TQ-11 A	TQ-11 K
Diameter, mm	155 ± 5	
Height, mm	120 ± 20 (depending on the modification)	
Weight, kg	2,6 ± 0,5 (depending on the modification)	
Signal color	Black, grey, white, yellow	
Ignition	Fuse-match, electric fuse	
Response, s	20 ± 5	
Smoke formation, s	200	
Coverage, m	Not less than 250	Not less than 200



DQ-130 SOUND AND LIGHT GRENADE



Sound and light one and multi-chamber grenades with different effects is equipped with ADQ-01 fuse. The body is made of polymer material with low glass transition and blistering temperature that excludes fragments formation during grenade usage. Typically the body material fragments into straps and bands of random shape with no lethal effect during pyrotechnical charge explosion.

Flexible body of the grenade at real mechanical weight deforms without destruction in comparison with firm polymer materials, pyrotechnical charge is in free state and does not activates or influences somehow on primer. The edge in the middle of the grenade body works as welding element of two halves, as well as orienting element for the palm increasing reliability and accuracy of grenade throwing.

TECHNICAL CHARACTERISTICS

Action	Sound and light grenade
Diameter, mm*	60 ± 5
Height, mm*	95 ± 5
Weight, g*	75 ± 10
Weight of pyrotechnical charge, g	40 ± 10
Fuse	ADQ-01
Delay time, s	2,5 - 3,5
Sound pressure. dB	150
luminous intensity, mln Cd	3

*without fuse



DQ-130G SOUND AND LIGHT TEAR GRENADE



Sound and light grenade with irritant (CS/CN) one and multi-chamber with different effects is equipped with ADQ-01 fuse. The body is made of polymer material with low glass transition and blistering temperature that excludes fragments formation during grenade usage. Typically the body material fragments into straps and bands of random shape with no lethal effect during pyrotechnical charge explosion.

Flexible body of the grenade deforms at real mechanical weight without destruction in comparison with firm polymer materials, Pyrotechnical charge is in free state and does not activate or influences somehow on primer. The edge in the middle of the grenade body works as welding element of two halves, as well as orienting element for the palm increasing reliability and accuracy of grenade throwing.

TECHNICAL CHARACTERISTICS

Action	Sound and light grenade with irritant(CS/CN)
Diameter , mm*	60 ± 5
Height, mm*	95 ± 5
Weight, g*	90 ± 10
Weight of pyrotechnical charge, g	40 ± 10
Fuse	ADQ-01
Delay time, s	2,5 - 3,5
Sound pressure. dB	150
luminous intensity, mln Cd	3

*without fuse



HAND RUBBER FRAGMENTS GRENADE (NON-LETHAL)



This grenade consists of 24-28 elements made of soft rubber. Grenade body is made of plastic with no fragments after grenade explosion.

The grenade is designed for disperse of misconducting individuals by causing pain effect.

Grenade gives stunning effect as well as releasing rubber fragments that helps to destabilize target during law enforcement special operations. This grenade is ideal for riot and crowd control as well as fleeing crowd. It should not be used near highly explosive materials. Effective radius is 5 meters around grenade explosion.

TECHNICAL CHARACTERISTICS

Diameter, mm	55 ± 5
Height, mm*	95 ± 5
Weight, g*	260 ± 10
Delay time, s	2,5 - 3,5
Sound effect, dB	155
Average speed of soft rubber fragments, m/s	95

*without fuse



«ADQ-01», «ADQ-02» HAND GRENADE FUSES



The primer is activated and gives explosion impulse to pyrotechnical composition when the ring (pin) is pulled out.

TECHNICAL CHARACTERISTICS

Delay time, s	2,5 - 3,5
Length, mm	100 ± 5
Weight, g	50 ± 5
Coupling sleeve diameter, mm	20
Pin extrusion force, kg	3 - 11



26-MM INCENDIARY CARTRIDGE TP-26



The 26mm incendiary cartridge is designed to ignite solid and liquid materials on the surface.

Cartridge is encapsulated in plastic containers, located in a shatter-proof cartridge case. It has no influence from external physical and chemical effects.

TECHNICAL CHARACTERISTICS

Diameter, mm	26
Height, mm	74 ± 5
Weight, g	45 ± 5
Weight of incendiary charge, g	35 ± 5
Range of application, m	200
Burning time, s	15



DAY TIME GROUND SIGNAL CARTRIDGE (RED, YELLOW, GREEN FLAMES)



Ground signal cartridge SPJ is designed for illumination, notification and signalization during day and night time. It is activated without any firing equipment.

TECHNICAL CHARACTERISTICS

Diameter, mm	40 ± 2
Height, mm	110 ± 5
Weight, g	110 ± 20
Burning time, s	2 - 3
Smoke formation time, s	30 - 45
Luminous intensity, cD	30000 - 50000
During day/night time, s	3-5/5-8

DAY TIME GROUND SIGNAL CARTRIDGE (WITH ORANGE SMOKE)

Ground signal cartridge SPJ-O is designed for illumination, warning and signaling during day time. It is activated without any firing equipment.

TECHNICAL CHARACTERISTICS

Diameter, mm	40 ± 2
Height, mm	110 ± 5
Weight, g	130 ± 20
Burning time, s	2 - 3
Smoke formation time, s	30 - 45



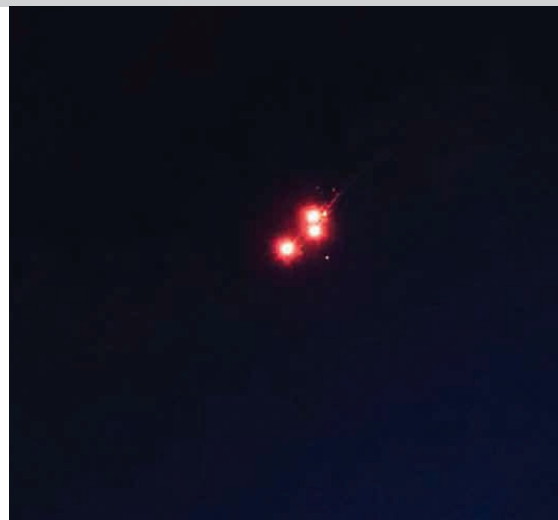
26-MM SIGNAL CARTRIDGE SP-26



These cartridges are used to create a signal during emergency at training or combat situations. They are designed for military personnel, marine search and rescue, search and rescue rafts, boats and vessels, as well as for aircraft emergency kits. The cartridge may also be used by helicopters and airplane crews.

TECHNICAL CHARACTERISTICS

Diameter, mm	26
Height, mm	74 ± 5
Weight, g	35 - 50
Range of application, m	70 and above
Duration, s	7 - 10
Colors	Red, yellow, green, white



SIGNAL MINE CM-QZ



Signal mine is a repository device. It is designed for sound and light signaling. When the enemy soldier or machine runs over it, the wire is stretching, then pin is pulled off.

Mine is set manually in the ground or on the ground (in this case mine is fixed with a stick). It is possible to fix mine to any other objects like tree, pole etc. The time of mine in action is not limited. The mine is not equipped with self-distraction element. It does not include any non-extracted or non-neutralized elements.

Mine is consisted of metal thin-wall body; powder charge of sound signal, 9-15 signal stars of RED flame with powder charges between them, The mine is equipped with percussion igniter of own design, that is similar to igniter series MUV with P-type pin. Various color stars available.

TECHNICAL CHARACTERISTICS

Various color star quantity, pcs	10
Body	Steel
Diameter, mm	25
Length, mm	280
length of target detector	Not limited
Sensitivity, kg	6-15
Working temperature range, C	-60 + 60
Complete weight, kg	0,6 - 0,7



GRENADE LAUNCHER ROUND



Round **40JA** for grenade launcher of 40x46mm caliber is intended for use during antiterrorist missions, riots, as well as during suspects arrest and release of hostages. The explosion of grenade results in light and sound shock. This grenade does not cause any fragmentation injuries.

Tear grenade round **40GA** of 40x46mm caliber is intended for use during antiterrorist missions, riots, as well as during suspect arrests and release of hostages. Grenade action causes heavy lacrimation.

Smoke grenade Round **40TA** of 40x46mm caliber causes heavy smoke creation. Additionally this grenade can be used for land marking during search and rescue operations as well as for smoke screen creation during evacuation and regrouping.

Parameter	40JA round for grenade launcher	40GA round for grenade launcher	40TA round for grenade launcher
Caliber, mm	40x46		
Diameter, mm	40		
Action	Light and sound	Smoke and gas	Smoke
Cartridge case	Plastic PE		
Length, mm	100 ± 10		
Weight, g	150 ± 10	155 ± 10	
Active agent	light and sound pyrotechnical composition	Pyrotechnical smoke composition with CS component	Pyrotechnical smoke composition
Action time, s	Instantly	30 ± 5	
Effective range	10 - 100		
Use	Activated manually (1,5 and 2,5 delay fuse) or by standard 40x46 mm launchers (50-100 delay fuses)		
Action	dB - 160, luminous intensity, mln Cd -4	Smoke volume ~ 20 - 50 m³, 3 - 5 m height	
Working temperature, C	-35 to +50	-20 to +50	
Storage temperature, C	-40 to +50, with 55% humidity		
Shelf life	5 years		
Storage	Temperatures and conditions as for live ammunition		
Danger class	UN 0301, 93.06.90.90.00		

GP-40 GRENADE LAUNCHER ROUND

40 mm GP-40 is a smoke or irritatant gas action round. It is intended for use during antiterrorist missions, riots, as well as during suspects arrest and release of hostages.

TECHNICAL CHARACTERISTICS

Diameter, mm	40
Height, mm	102,5 ± 0,5
Weight, g	140 ± 15



TRAUMATIC CARTRIDGES

Traumatic cartridge is intended for service use during riot control missions, public order control, as well as during suspect arrests.

Current available calibers: 9x18mm, 9x19mm, 5,45x39mm, 7,62x39mm, 7,62x54.



Parameter	9x18	9x19	5,45x39	5,56x45	7,62x54
Armament caliber, mm	9		5,45	5,56	7,62
Cartridge case	Plastic PE - or according to customer request				
Bullet	Rubber ~60 - 85, ShA, Plastic PE, according to customer request				
Bullet weight, g	Rubber bullet 1,0 ± 0,5 Plastic bullet 1,0 ± 0,2		Rubber bullet 2,0 ± 0,5 Plastic bullet 1,0 ± 0,2		
Base	PE or Zn alloy				
Charge	NC powder (nitrocellulose powder)				
Primer	SP boxer, non-toxic and non corrosive				
Weight, g	3 - 4		5 - 7		6 - 10
Energy	<40 joule		<50 joule		
Hit statistic 60cm diameter target hit %	>65 % (10 m)		> 92 % (20 m)		
Working temperature, C	- 20 to + 50				
Shelf life	5 years				
Storage	Temperatures and conditions as for live ammunition				
Danger class	1.4S, UN0012				

9X19 MM, 7,62X39 MM CARTRIDGES

Item	Length mm	Weight g	Bullet weight g	Velocity m/s	Chamber pressure Mpa	Spread accuracy cm	Match- ing fire- arms	Package	Volume of packing
9x19	26,69	12,5	7,45	$V_z=375-385$	≤ 215	50m:MR $\leq 3,8$	automatic pistol	50/1050/2100rds 50/2500/2500rds 32/35kg wooden case	0,47x0,34x0,15
7,62x39	56	16,4	7,9	$V_z=710-725$	≤ 275	200m:R ≤ 5	Semi- automatic sub/light machine gun	25/750/1500rds 40/600/1200rds 20/75/1500rds 30/25/29kg wooden case	



SPECIAL 12 CAL. GAS CARTRIDGE



The cartridges are designed for defense from armed attack using containers with CN agent gas. The sub ammunition is a polymer and paraffin capsule that has low penetrating ability. After hitting the target the sub ammunition breaks and releases outside CN irritating agent. Attention! The automatics of the semiautomatic guns is not activated during shot; reloading should be done manually.

Caliber 12x70
Effective radius 0,5 - 1 m

SPECIAL 12 CAL. MARKING CARTRIDGE

The cartridges are designed for marking the suspect with paint. The sub ammunition is a polymer and paraffin capsule that has low penetrating ability

After hitting the target the sub ammunition breaks and marks a target with paint.

Caliber 12x70
Effective range - 10 to 25 meters



TRAUMATIC CARTRIDGE (RUBBER BULLET) FOR 12 CALIBER SPECIAL GUN

Traumatic cartridges (with spherical or cylindrical rubber bullet) are designed for special tasks performed by law enforcement personnel.

TECHNICAL CHARACTERISTICS

Caliber	12x70
Bullet diameter, mm	18 ± 0,6
Bullet weight spherical/cylindrical g	3,45-4,8 / 9,5-10,5
Range, m	~40
Cartridges per box, pcs	10
Boxes per case, pcs	25



12 CALIBER CARTRIDGE (BLANK CARTRIDGE)

This cartridge is designed for sound signal as well as for blank shot with sound pressure around 130dB. Used for training of personnel.

Caliber 12x70
Bullet weight 14 ± 4g



Our clients appreciate our attractive prices due to high percentage of local content while benefiting from the highest quality standards and service.

AlmaDK has gone the long way establishing R&D, production and manufacturing at our own factories in Kazakhstan and distribution of our products around the Globe. We are ready, willing and capable to fulfill any R&D and production projects in the field of special military products.





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