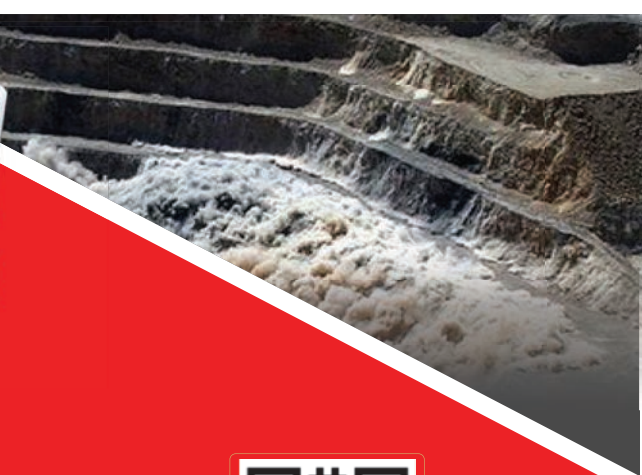


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CIVIL EXPLOSIVES

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CIVIL EXPLOSIVES

With 30 years of experience in the civil explosives industry, ANADOLU PATLAYICI is here as your solution partner.

Founded in 1996, Anadolu Civil Explosive Co. began its operations in Türkiye with a 200-ton explosives warehouse. Over time, it has evolved into a vast establishment with explosive storage facilities and production plants spanning 400 acres, serving both domestic and international markets.

Anadolu Civil Explosive Co. supplies high-quality explosive products and drilling and blasting services, securing its position in the global explosives market. Anadolu Civil Explosive Co. family, we continue to be the solution partner of choice for both domestic and international firms, exporting to three continents and meeting the needs of the civil explosives market with both finished products and raw materials.

Anadolu Civil Explosive Co. continues to produce Cap-Sensitive and Non-Cap Industrial Explosives, NONELs, and ANFO product groups with European standards at its facilities in Türkiye. With the global knowledge and expertise, it has gained in the civil explosives industry, Anadolu Civil Explosive Co. is committed to contributing to the overall knowledge base in this field and to supporting the Turkish civil explosives market.

Thanks to its extensive experience and solution partnerships in this field, Anadolu Civil Explosive Co. is able to offer its products and raw materials across a broad spectrum, from Africa to Europe and from South America to West Asia.

Our Mission:

Anadolu A.Ş. aspires to be a pioneering force in the civil explosives industry in Turkey, committed to providing customers with cutting-edge and high-quality products.

Some Specific Civil Explosive Product and Service Projects:

- Manufacturing of any kind of commercial civil explosive products and raw materials
- Seismic (Oil Exploration) Projects
- Perforated Explosives for the Oil Industry
- Explosive Warehouse Storage Services
- Drilling and Blasting Services for Solar Energy Investments
- Railway-Highway Construction Projects
- Hydro Electric Projects
- Rock Blasting Operations in Urban Areas
- Export-Import Operations of Civil Explosives

Sincerely,



KAR-ANFO

AREA OF USAGE

- Dams and Power Plants
- Mine and Quarries
- Canal Blasting
- Road and highway Construction
- Open Pits and Underground Mining

APPLICATION

To do ANFO more effective, cap sensitive booster should be used in needed quantity

USAGE

ANFO should be carefully handled, stored and used. ANFO should be keep away from flame and heat source.

ADVANTAGES

- Economic
- Insensitive to friction and impact
- Handling and bole charge is easy
- High safety
- Not usable for wet boreholes
- Not usable in underground projects if there is methane gas

PURIFICATION

Purification of explosive can be dangerous. You should obey to Material Safety Data Sheet.

STORAGE

Explosives should be stored in dry, cool and well ventilated warehouses.



TECHNICAL CHARACTERISTICS

Packing	Packing Weight
Plastic Bag	25
density g/cm ³	0,80 / 0,82 g/cm ³
Detonasyon hızı m/s	4000 m/s
Enerji	4,9 mj / kg
Gaz Hacmi	877 lt / kg
Suya Dayanıklığı	Tanecik halinde kuru deliklerde kullanılabilen bir patlayıcıdır.
Nakliye Sınıflandırması	Standart Ambalaj
Sınıf	1.1D
UN Numarası	0082

كيفية التغليف	وزن الحاوية
كيس بلاستيكي	25
الكثافة غ/سم ³	0,82 / 0,80 غ/سم ³
سرعة التفجر م/س	4000 م/س
الطاقة	9, م جي/كغ 4
حجم الغاز	77 لتر/كغ 8
المقاومة ضد المياه	مادة مفجرة مستعملة في الأنقلاب جافة وحبيبية الشكل
تصنيف شكل النقل	تغليف مقياسي
الصف	1. د 1
رقم يو أن	0082



Andex SB

BOOSTER SENSITIVE

DESCRIPTION

Andex SB is the result of the most advanced developments in watergel technology.

Andex SB is a booster sensitive, cost effective watergel. The gel structure gives the product a rubber-like tough consistency and outstanding water resistance.

Andex SB is manufactured in medium to large diameters to satisfy the needs of a variety of applications.

APPLICATION

Andex SB is an ideal choice for hard rock blasting in quarries, mining and construction under wet conditions..

ADVANTAGES

- Good aging, no crystallisation.
- Highly water resistant.
- Wide variety of applications.
- Water and abrasion resistant.

RECOMMENDATIONS FOR USE

Water resistance allows its use in wet boreholes. Do not use in flammable or methane atmospheres. This product is booster sensitive. The temperature of this product should be within the range of -10°C and

STORAGE

To maintain the properties of Andex's explosives, we recommend they be stored in authorized deposits, in a cool dry place, with good ventilation.





TECHNICAL CHARACTERISTICS

Density (g/cm ³)	1,15
Velocity of Detonation* (m/s)	4400 – 6500
Relative Effective Energy	1 (%)
Relative Weight Strength	118
Relative Bulk Strength	170
Gas Volume (L)	1017

1) ANFO: Density 0,80 g/cm³ , effective energy 2260 kJ/kg

* VOD is dependent on application, diameter, confinement, and density. The maximum value within the range is the ideal VOD

الخواص الفنية

فواصل الكثافة (غ/سم ³)	1,15
سرعة التفجير * (م/س) (فود)	4.400 - 6.500
الطاقة الحيوية النسبية 1 (%)	1
الجهود الوزني النسبي	118
جهد الكتلة النسبية	170
حجم الغاز (ل)	1017

1 أنفو : الكثافة 0,80 غ/سم³ ، الطاقة الحيوية 2260 كج/كغ

* خاص بتطبيقات سرعة التفجير ، القطر ، الساحة المغلفة والكثافة. القيمة الأعظمية الموجودة في الفواصل هي السرعة المثالية

** نتيجة التجارب والفحوصات الجارية داخل الماسورة الحديدية ذات قطر 45 ملم.

*** نتيجة التجارب والفحوصات الجارية داخل الماسورة الحديدية ذات قطر 125 ملم.

Standard Packaging (Nominal values)

التعليب المقياسي 1.1 د (القيم الإعتيادية)

القطر × الطول (ملم)	وزن الخرطوشة (غرام)	عدد الخرطوشات/العلبة	الوزن/ العلبة (كغ)	نوعية الغلق
Diameter x Length (mm)	Cartridge Weight (g)	Cartridges/Box	Net Weight/box (kg)	Type of Encasing
50x520	1176	17	20	Plastik film kartuş (HDPE)**
65x520	2000	10	20	Plastik film kartuş (HDPE)**
75x560	2857	7	20	Plastik film kartuş (HDPE)**
90x550	4000	5	20	Plastik film kartuş (HDPE)**
125x590	8500	2	17	Plastik film kartuş (HDPE)**
140x560	10000	2	20	Plastik film kartuş (HDPE)**

** خرطوشة فلمية بلاستيكية

* عبارة عن قائمة مقياسية يمكن القيام بالإنتاجات بأقطار وبأبعاد مختلفة

Transport Classification	Standard Packaging	تصنيف شكل الشحن والنقل	التعليب المقياسي
Class	1.1D	الصف	1.1 د
UN Number	0241	رقم يو أن	0241
Contact your local Andex representative for further information		يرجى الإتصال بممثل شركة ماكسام المحلية لغاية الحصول على معلومات وافرة	



Andex Black

High Energy Cartridged Cap Sensitive Explosive

DESCRIPTION

Andex Black is the result of the most advanced developments in watergel technology. Andex Black is a high strength, high density cap sensitive watergel. The gel structure gives the product a rubber-like tough consistency and outstanding water resistance.

Andex Black is manufactured in a variety of cartridge sizes to satisfy the needs of all blasting applications

APPLICATION

Andex Black combines both sensitivity and high energy.

Its density makes it ideal for use in wet boreholes, and makes it a viable option for the use as a bottom charge for medium-hard rock and for column charges in wet boreholes.

ADVANTAGES

- Water and abrasion resistant.
- Combines both sensitivity and high energy.
- Provided in a variety of cartridge sizes.
- Higher bulk energy than emulsions.
- Good aging, no crystallisation.
- Wide variety of applications.

RECOMMENDATIONS FOR USE

Water resistance allows its use in wet boreholes. Do not use in flammable or methane atmospheres. This product is detonator and CORD 12 g/m sensitive. The temperature of this product should be within the range of -10°C and $+60^{\circ}\text{C}$. For further information consult the Use Recommendations Sheet included inside the boxes or packaging of the product and its respective Material Safety Data Sheet

SAFETY

USE: Andex Black should be used, handled and stored with care, ensuring the product is kept away from flames and excessive heat sources. DISPOSAL: The disposal of explosive material can be dangerous, ensure the appropriate safety measures have been applied according to the instructions on the MSDS

STORAGE

To maintain the properties of Andex's explosives, we recommend they be stored in authorized deposits, in a cool dry place, with good ventilation.



TECHNICAL CHARACTERISTICS

Density Range (g/cm ³)	1,25
Velocity of Detonation* (m/s)	2800 - 6800
Relative Effective Energy	1 (%)
Relative Weight Strength	108
Relative Bulk Strength	169
Gas Volume (L)	933

1) ANFO: Density 0,80 g/cm³, Effective energy 2.59 MJ/kg.

* VOD is dependent on application, diameter, confinement, and density the maximum value within the range is the Ideal VOD.



الخواص الفنية

فواصل الكثافة (غ/سم ³)	1,25
سرعة التفجر * (م/س) (فود)	2.800 6.800
الطاقة الحيوية النسبية 1 (%)	
الجهد الوزني النسبي	108
جهد الكتلة النسبية	169
حجم الغاز (ل)	933

1 أنفو : الكثافة 0,80 غ/سم³ ، الطاقة الحيوية 2.59 م جي/كغ

* خاص بتطبيقات سرعة التفجر ، القطر ، المساحة المغلفة والكثافة. القيمة الأعظمية الموجودة في الفواصل هي السرعة المثالية.

** نتيجة التجارب والفحوصات الجارية داخل الماسورة الحديدية ذات قطر 45 ملم.

*** نتيجة التجارب والفحوصات الجارية داخل الماسورة الحديدية ذات قطر 125 ملم.

Standard Packaging (Nominal values)

التعليب المقياسي 1.1 د (القيم الإعتيادية)

القطر × الطول (ملم) Diameter x Length (mm)	وزن الخرطوشة (غرام) Cartridge Weight (g)	عدد الخرطوشات / العلبة Cartridges/Box	الوزن / العلبة (كغ) Net Weight/box (kg)	نوعية الغلق Type of Encasing
26x320	165	145	24	Plastik film kartuş (HDPE)**
26x500	343	70	24	Plastik film kartuş (HDPE)**
28x200	143	140	20	Plastik film kartuş (HDPE)**
32x250	260	96	25	Plastik film kartuş (HDPE)**
38x500	714	35	25	Plastik film kartuş (HDPE)**
40x330	500	48	24	Plastik film kartuş (HDPE)**
50x250	615	39	24	Plastik film kartuş (HDPE)**
65x250	1000	21	21	Plastik film kartuş (HDPE)**
65x500	2000	12	24	

**خرطوشة فلمية بلاستيكية

* عبارة عن قائمة مقياسية يمكن القيام بالإنتاجات بأقطار وبأبعاد مختلفة.

Transport Classification
Class
UN Number

Standard Packaging
1.1D
0241

تصنيف شكل الشحن والنقل
الصف
رقم يو أن

التعليب المقياسي
1.1 د
0241

*Contact your local ANDEX representative for further information.

يرجى الإتصال بممثل شركة ماكسام المحلية لغاية الحصول على معلومات وافرة



Andex DET

Non-Elektrical Detonator

DESCRIPTION

Andex Det is Andex's non electric initiation system. The down-the-hole detonators are strong enough to initiate all Andex's boosters and primers. The surface connectors have a plastic connector and a low-charged detonator of high precision that minimises noise and shrapnel.

All Andex Det items are manufactured using the highest quality last generation shock tube. This is made of three different layers of polymers and contain a thin and uniformly distributed internal layer of shock transmission substance.

The Andex Det system is designed in a wide selection of materials and highly visual colours, making it safe, easy to identify and user friendly under the most difficult conditions.

Andex DET DDX

A combination of down-the-hole detonators and surface connectors designed to be used as complete singular initiation system for open cast mining applications. Each item contains a surface connector and a down-the-hole detonator (of the same delay period). The connector can initiate up to six shock tubes. Andex DDX assists with effortless hooking-up of blasts with a large numbers of boreholes

Andex DET MS

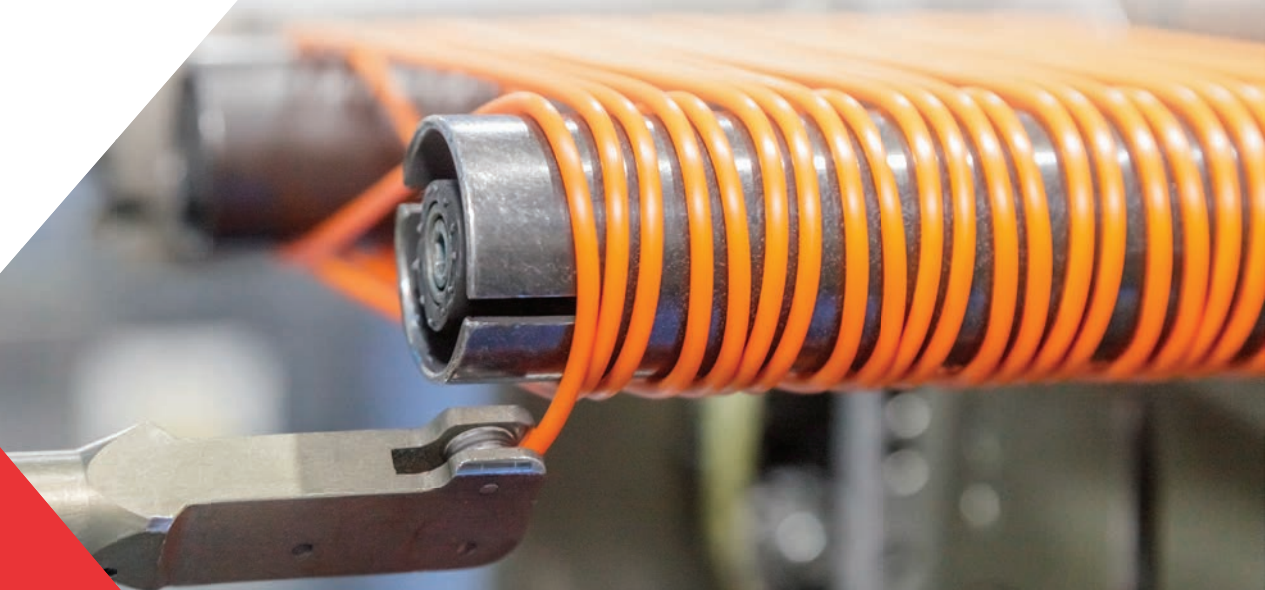
A series of down-the-hole detonators, designed for use mainly in open cast mining, quarrying and civil works blasting. Andex MS can be initiated by any NONEL, AndexDet, AndexCAP, AndexCORD (5g/m minimum) or a non-electric special initiator

Andex DET SCX

A series of surface connectors designed to initiate any Andex Det detonator, assisting in delay sequencing of non-electric detonators. Andex SCX can initiate up to 6 shock tubes. The connector contains a low charge detonator minimising the creation of noise and shrapnel.

Andex DET LP

A series of detonators for use mainly in underground mining, tunnelling and gallery excavations. Andex Det LP can be initiated by any NONEL, AndexDet, AndexCAP, AndexCORD (5g/m minimum) or a non electric special initiator.



Andex DET DDX Double

Surface time (ms) Hole-in-time (ms)*
وقت التسطیح (م س) * وقت داخل الثقب (م س)

17	425
25	450
42*	475
67	500*



* Standard production. الإنتاج القياسي.

Andex DET LP

ريونال ل ب (نفقي)

Delay times (nominal values)

أوقات التأجيل (القيم الإعتيادية)

Gecikme التأخر	Zaman (ms) الوقت (م س)	Gecikme التأخر	Zaman (ms) الوقت (م س)
1	100	16	1600
2	200	18	1800
3	300	20	2000
4	400	25	2500
5	500	30	3000
6	600	35	3500
7	700	40	4000
8	800	50	5000
9	900	60	6000
10	1000	70	7000
12	1200	80	8000
14	1400	90	9000

FEATURE First Feature List (m)

القائمة المترية الخاصة بالإنتاجات المترية (م)

2	14
2,4	15
3	16
4,2	18
5	19
6	21
8	24
9	27
10	30
12	

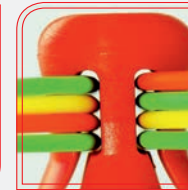
Andex DET SCX Surface Connector

ريونال س سي إكس (الوصل السطحي)

Delay times (nominal values)

أوقات التأجيل (القيم الإعتيادية)

Link Color لون الوصل	Time (ms) الوقت (م س)
	0
	9
	17
	25
	33
	42
	67



* Standard production. إنتاج قياسي.

SEISMIC EXPLOSIVES

Degradable Pentolite Seismic Booster

Gelatinous Seismic Explosive



Degradable Pentolite Seismic Booster

DESCRIPTION

Seismic Explosives degradable boosters consist of a degradable formulation and are specifically designed for the seismic exploration industry. The pentolite composition will degrade over time eliminating risks should the product not detonate at the time of use.

Seismic Explosives pentolite composition assures consistent VOD and maximum high frequency return. Double cap wells on both the top and bottom of the shell facilitate both top and bottom priming.

APPLICATIONS

Seismic Seismic Explosives attenuate low frequencies and strengthen high frequencies and reach peak speeds of several millimeters and are the optimal product for seismic applications.

RECOMMENDATIONS FOR USE

Seismic Explosives has been designed so that if extra energy is required they can also be coupled together.

Seismic Explosives must be initiated with a seismic detonator (Seismic Explosives HP, Seismic Explosives XP)

ADVANTAGES

- Degradable formulation without compromising energy
- Safe and reliable and user friendly
- Highly visible bright blue shell
- Available in three sizes
- High velocity of detonation
- High detonation pressure output
- Oil and water resistant
- Performs consistently regardless of hydrostatic pressure

Rigid plastic cartridges

Density (g/cm ³)	1,65	Cartridge diameter (mm)	57	57
Detonation Pressure (Kbar)	250	Cartridge length (mm)	251	368
Velocity of Detonation (m/s)	7.800	Cartridge weight (g)	500	1.000
		Cartridges / box (pcs)	40	20
		Net-mass / box (kg)	20	20



Gelatinous Seismic Explosive

DESCRIPTION

Seismic Explosives is part of the newest generation of gelatinous ammonium nitrate explosives. It is cap sensitive but nevertheless safe to handle. Basically it consists of sodium nitrate, mixtures of nitroglycol and nitroglycerine, nitrocellulose and other additives.

Seismic Explosives Plus doesn't contain any nitro aromatic bonds like DNT or TNT, which have been classified by the EU commission as carcinogenic substances by now and therefore meets the current requirements.

APPLICATIONS

Seismic Explosives Plus stands out due to its very high efficiency and its userfriendly handling in particular and therefore is predestined for use as a Seismik explosive where strong explosion impulses are presupposed.

RECOMMENDATIONS FOR USE

Seismic Explosives Plus is suitable for many application areas of the seismic blasting technology due to its very high energy density, its relatively high density as well as the high water resistance.

ADVANTAGES

- High frequency energy impulse
- Easy to assemble and through its soft texture, under low temperature it is easily punchable
- High density (easily sinking in water and mud)
- Oil and water resistant
- High velocity detonation
- High detonation pressure output

Rigid plastic cartridges

Density (g/cm ³)	1,60	Cartridge diameter (mm)	50	50
Gas volume (l/kg)	502	Cartridge length (mm)	190	370
Specific energy (kJ/kg)	703	Cartridge weight (g)	500	1.000
Pressure of explosion (MPa)	1.125	Cartridges / box (pcs)	50	24
Heat of explosion (kJ/kg)	4.591	Net-mass / box (kg)	25	24
Oxygen balance (%)	+0,03			
Velocity of detonation calibre 50 mm				
- unconfined (m/s)	5.800			

Note : The data for packaging and for the plastic pipe design (like diameter, weight etc.) can be changed according customers request.

SEISMIC DET

Electric Extreme Pressure
Seismic Detonator



TECHNICAL CHARACTERISTICS

Bridge Resistance (ohms) : 0,3 – 0,5
Firing Pulse (mW.s / ohm) : 8 – 16
Safety Current (A) : 0,45
Recommended minimum
firing current for response : 5
time of less than 1 ms



Standard Packaging (Nominal values)

Lenght (m)	4	11	7.5	14	17	20	26
Units / Box	250	200	100	100	80	80	50
Wire Diameters (mm)	0,8	0,8	0,8	0,8	0,8	0,8	0,8
Wire Resistance (ohms/m)	0,035	0,035	0,035	0,035	0,035	0,035	0,035
Net Weight (kg)	13	18	13	17	16	19	15
Gross Weight (kg)	15	20	15	19	18	21	17

DESCRIPTION

Seismic Explosives XP is a highly water resistant, strong and reliable detonator with excellent response time.

Seismic Explosives XP is manufactured in a wide range of lengths, with duplex wire 0.8 mm in diameter covered with polyethylene, making Seismic Explosives XP suitable for extreme conditions and able to withstand temperatures of up to -40°C.

Seismic Explosives XP is designed so that the short circuit device can be removed easily before use.

Seismic Explosives XP detonators also provide a high level of security against static electricity, extraneous electric currents, and electromagnetic radiation produced by radio transmitters.

Seismic Explosives XP detonators feature a special SBR-PVC water seal bushing, which has been proven to be optimal for this application.

Seismic Explosives XP detonators are rigorously tested under 20 kg/cm² for 72 hours and periodically with 200m water column pressure for 2 months, making it optimal for extreme difficult conditions.

ADVANTAGES

- Features under 1 millisecond response time.
- Proven to have a superior seal
- (SBR-PVC water seal)
- Safe against static electricity, electromagnetic inductions and extraneous electric currents
- Specifically designed for extreme difficult conditions.

Drilling - Blasting Services

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