



Plastic Bonded Explosives (PBX' S)



Description

Plastic Bounded Explosives (PBXs) are the new class of explosives which have been widely used in modern ammunitions due to their low sensitivity to accidental explosions, applicable chemical and physical properties and high mechanical strength.

Cast-cure and pressed are two types of PBXs. In cast-cure type, explosive powder is bound together in a polymer matrix to make the PBX very insensitive to accidental detonation. In pressed type, explosive powder are coated with plastic materials and then pressed into ammunitions.

Due to high pressing density, better mechanical strength, more thermal stability, processing and transportation safety, PBXs have performance than common explosives.

We offer various compositions of HMX and RDX that coated with binder (PBXs). These compounds are used as booster or main charge, in different application such as OCFOL, LX14, PBXN-5, ECH-310, etc.

× The ECH-310 compound is used as main charge in perforator gun in oil drilling industry.

Packaging

- Polyethylene bags, 25 kg net in wooden box.



TECHNICAL SPECIFICATIONS

Parameter	OCFOL	LX-14	PBXN-5	ECH-310
HMX (%)	96 ± 0.5	95.5 ± 0.5	95 ± 0.5	99 ± 0.3
Binder (%)	4 ± 0.5 (Wax)	4.5 ± 0.5 (Estane 5703)	5 ± 0.5 (Viton)	1 ± 0.3 (Viton) With or without graphite

PBXN-109

Description

It has been used as main explosive charge in Krasnopol (Basir) warhead, Bina Warhead (YZ9), Kheybar Grenade breach through doors (Simon)

Packaging

Warhead shells contain of PBXN-109 is packaged into wooden boxes or wooden support and handled on the wooden pallet. The transportation of the product shall be done according to Iran Defence Standard-532.

Warhead shells containing PBXN-109 is stored in area with temperature less than 300C and ambient humidity condition.

Shelf life: Min. 20 years Hazard class: 1.1D

TECHNICAL SPECIFICATIONS

Density	1.6-1.7 gr/cm³
Vacuum stability	≤ 0.5 ml/gr
Auto-ignition	≥ 200 °C
Impact sensitivity	≥ 15
Friction sensitivity	≥ 250 n
Hardness (Shore A)	≥ 30
Tensile strength	≥ 60 psi
Elongation	12 %
Velocity of detonation	≥ 7100 m/s
Blast test (as TNT)	1.4 %

