



PRODUCT INFORMATION BROCHURE

1.1D

DC CAST BOOSTERS



Austin Powder's **DC Cast Boosters** are a versatile high-density molecular explosives designed to produce high detonation pressures for optimum initiation of blasting agents. The DC family of cast boosters are sensitive to a 450mg PETN base charge detonator or a 15 grain per foot or greater detonating cord.

ADVANTAGES

- Detonate in excess of 24,000 ft/sec (7,380 m/sec)
- Feature a detonation pressure greater than 200kb of pressure which ensures steady state velocity of blasting agents
- Leave behind no plastic waste when initiated
- Highly resistant to water and oil
- Feature excellent shelf life when correctly stored

PRODUCT OVERVIEW

TECHNICAL DESCRIPTION

Austin Powder DC Cast Boosters are manufactured with molecular explosives consisting of PETN, RDX, HMX, and TNT, all of which are sensitive to severe impact, heat or friction. As with all explosives, DC Cast Boosters must be transported, stored, and handled with care. Avoid any impact with solid surfaces or other Cast Boosters, as the potential for a premature detonation or misfire is possible.

APPLICATION RECOMMENDATIONS

DC BOOSTER

- Austin Powder DC Cast Boosters are ideal for priming boreholes that are 2" or larger in diameter.

90 GRAM BOOSTER

- Generally used for Priming of Seismic Charges.
- Also used for Secondary up-hole blasting in small diameter holes

PRIMING RECOMMENDATIONS

- DC Cast Boosters can be initiated by a minimum of a 450mg PETN base charge detonator or a 15 grain per foot or greater detonating cord
- 90 Gram Boosters can be initiated by a minimum of a 450mg PETN base charge detonator, or 50 grain per foot or greater detonating cord

PROPERTIES

Properties	Value	
Nominal Density [g/cm ³]	1.65	
Detonation Pressure [kb]	222	
Relative Weight Strength [ANFO=100] ⁽¹⁾	179	
Relative Bulk Strength [ANFO=0.85 g/cm ³] ⁽¹⁾	361	
Velocity of detonation ⁽²⁾	[ft/s]	24,184
	[m/s]	7,371

Notes:

(1) Theoretical values based on Austin modeling, which assumes ideal detonation. Values calculated with other codes may differ.

(2) The velocity of detonation will depend on application, diameter, and confinement.

‡ Energy values are calculated using Explo 5, a thermo-dynamic computer code employed by Austin Powder Company. Other computer codes may give different values. ANFO = 100 @ 0.82 g/cc.

STANDARD PACKAGING

Product Name	Weight		Outside Diameter		Length		Case Count	Minimum Hole Diameter	
	[oz]	[g]	[in]	[mm]	[in]	[mm]	Outer Case	[in]	[mm]
90 Gram	3.2	90	1.06	27	4.50	114	120	1.5	38
Green Cap DC	5.3	151	1.43	36	4.50	114	64	2	50
Brown Cap DC	8	227	1.70	43	4.50	114	64	2.5	63
Red Cap	12	340	3.00	76	2.10	53	60	4	101
Black Cap DC	12	340	2.05	52	4.60	117	49	3	76
Purple Cap	16	454	3.06	78	2.60	66	60	4	101
Orange Cap DC	16	454	2.33	59	4.50	114	36	3	76
White Cap DC	32	900	3.06	78	5.10	130	18	4	101

Notes: All dimensions and weights are nominal. Other sizes are available upon request

SHELF LIFE, STORAGE & DISPOSAL

- Shelf life is five years from date of manufacture, under good storage conditions.
- Store in accordance with all applicable local, state, provincial and federal laws.
- Disposal of explosive materials can be hazardous. Methods of safe disposal of explosives may vary depending on the user's situation. Please contact an Austin Powder Technical Representative for information on safe practices.

TRANSPORT – UN CLASSIFICATION

Shipping Name: Boosters
 Class & Division: 1.1D
 ID Number: UN 0042

US DOT REFERENCE NUMBER

EX-1993030285

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AUSTIN POWDER

Our Mission is to improve the world we live in through the safe and responsible use of explosives.

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