

BASIC MUZZLELOADER MANUAL



















AT HODGDON, WE ARE DEDICATED TO THE AMERICAN TRADITION OF MUZZLELOADING. WE PROUDLY OFFER THIS GUIDE TO BETTER SERVE THOSE WHO ARE AS PASSIONATE ABOUT MUZZLELOADING AS WE ARE.

# **HODGDON MISSION STATEMENT**

Hodgdon Powder Company operates following Biblical principles to honor God. Our mission is to provide quality products and services in a manner which enhances the lives of our employees, families, customers, suppliers, and our communities. In doing so, we deal with integrity and honesty, reflecting that people are more important than dollars, and that our purpose is to bring credit to our Lord Jesus Christ.



# **BLACKHORN 209°**

**BLACKHORN 209 FFATURES / BENEFITS** 

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**NEW** IN THE HODGDON MUZZLELOADING FAMILY

# TAKE CHARGE OF YOUR ACCURACY.

Formulated specifically for in-line muzzleloaders with 209 shotshell primer ignitions, Blackhorn 209 also serves as an excellent cartridge propellent. Its proprietary composition virtually eliminates build up and the need for swabbing between shots – all while delivering superior accuracy and velocity, round-after-hair-splitting-round.



# INDUSTRY-LEADING BALLISTICS AND ACCURACY

At volume equivalents, Blackhorn 209 meets or beats other muzzleloading propellants. It consistently delivers higher velocities and remarkable accuracy serious hunters and marksmen depend on. And with the industry's lowest standard deviations, you can count on it too.

### **NO SWABBING BETWEEN SHOTS**

Tight-fitting sabot/bullet combinations are key to achieving the highest levels of performance. Many shooters avoid these projectiles due to difficulty in loading a second or third shot due to excess residue. With Blackhorn 209, there's no swabbing between shots and no worry.

### **EASY BREECH PLUG REMOVAL**

Another benefit of Blackhorn 209's low residue composition is ease in breech plug removal. While it's not necessary to remove and clean the breech plug immediately after use, keeping primer fouling at bay and maintaining clean, consistent ignition is easier than ever.

### PROPER BREECH PLUG USE

Please ensure that you are using the correct breech plug when using Blackhorn 209. Hodgdon data is not applicable if the improper breech plug is used. The user may experience ignition issues with the incorrect breech plug. Please contact the gun manufacture for information on compatibility of guns or breech plugs.

# **NO SPECIAL PRIMERS REQUIRED**

As its name implies, Blackhorn 209 is designed for use in modern muzzleloading applications using 209 shotshell primers. Best results can be obtained using CCI209M or Federal 209A primers. Muzzleloading-type primers such as Winchester Triple Seven and Remington Clean Bore are not recommended

# NOT AFFECTED BY TEMPERATURE AND HUMIDITY

Blackhorn 209 is virtually non-hygroscopic. Changes in temperature or humidity do not affect performance. It will not set up or degrade like some propellants.

# **UNIFORM GRANULAR SIZE**

Its uniform granular size ensures consistent performance for the first shot to the last.

# **EXTENDED SHELF LIFE**

Blackhorn 209 remains consistent and reliable over extended periods of time, provided it is properly stored.

# **CLEANUP WITH REGULAR SOLVENTS**

Blackhorn 209 is virtually free of solid residue. After use, your barrel can easily be cleaned up with standard oil-based solvent. Using water or other muzzleloading solvents is not recommended.

# **CORRECT USAGE**

Blackhorn and Triple Seven are not designed for use in guns originally proofed for black powder use.



\*It is recommended that Blackhorn 209 should be measured volumertic, not by weight

# **50 CAL BLACKHORN 209 BLACK POWDER DATA**

VOLUMETRIC UNITS (\	OLUMETRIC POWDER N	80	100	120		
MANUFACTURER & BULLET	STYLE	DIA./ SABOT	VELOCITY (FPS)			
Precision Rifle 200 GR	Dead Center	.40/.50	1,727	1,933	2,168	
Barnes 250 GR	Expander	.45/.50	1,682	1,923	2,121	
Hornady 250 GR	Low Drag Mono Flex	.45/.50	1,738	1,943	2,145	
PowerBelt 250 GR	Aerolite Aerotip	.50/NA	1,644	1,886	2,106	
Harvester 260 GR	Scorpion PT Gold	.45/.50	1,662	1,891	2,107	
Federal 270 GR	BOR Lock Copper	.50/NA	1,640	1,890	2,118	
Harvester 270 GR	Belted Saber Tooth	.50/NA	1,613	1,822	2,029	
Fury 285 GR	Star Tip 2 MZ	.50/NA	1,593	1,774	2,046	
Barnes 290 GR	Spitfire TEZ	.45/.50	1,610	1,835	2,043	
Hornady 290 GR	Bore Driver FTX	.50/NA	1,600	1,817	2,039	
Nosler 300 GR	Ballistic Tip	.45/.50	1,624	1,836	2,063	
Harvester 300 GR	Scorpion PT Gold	.45/.50	1,634	1,815	2,032	
Fury 320 GR	Universal Fit	.50/NA	1,561	1,754	1,994	
PowerBelt 325 GR	Aerotip ELR	.50/NA	1,558	1,759	1,983	
Federal 350 GR	BOR Lock Lead	.50/NA	1,530	1,760	1,973	
Hornady 385 GR	HB-HP	.50/NA	1,519	1,709	1,940	

# **45 CAL BLACKHORN 209 BLACK POWDER DATA**

VOLUMETRIC UNITS (VOLUMETRIC POWDER MEASURE)			80	100	120	
MANUFACTURER & BULLET	STYLE	DIA./ Sabot	VELOCITY (FPS)			
Precision Rifle 175 GR	Dead Center	.357/.45	1,944	2,189	2,359	
Parker 200 GR	Hydra-Con	.40/.45	1,893	2,129	2,338	
Fury 250 GR	Star Tip MZ	.45/	1,825	2,118	N/A	
PowerBelt 285 GR	ELR	.45/	1,709	1,989	N/A	
Fury 300 GR	Star Tip MZ 2P	.45/	1,774	2,012	N/A	

# **40 CAL BLACKHORN 209 BLACK POWDER DATA**

VOLUMETRI	100	110		
MANUFACTURER & BULLET	STYLE	DIA./SABOT	VELOCIT	Y (FPS)
PowerBelt 225 GR	ELR	.40	2,204	2,312

NR = Not Recommended



<sup>1 -</sup> Volumetric Units = Measured with a standard black powder measure, or Blackhorn 209 graduated charge tube This IS NOT equal to weight in grains



# **BLACKHORN 209 METALLIC CARTRIDGE LOADS**

CALIBER	WEIGHT/ TYPE	PRIMER	CHARGE WEIGHT GR	VELOCITY	PRESSURE (PSI)
32 H&R Mag	78 RN LC	WSPM	9.4	1,029	11,950
	115 FP LC	WSPM	6.9	797	14,500
32-20 Win	115 FP LC	WSPM	11.1	1,023	16,000
38 Long Colt	125 FP LC	WSPM	10.3	844	12,100
	158 RN LC	WSPM	9.2	756	13,370
38 Spl	125 FP LC	WSPM	11.7	926	13,050
	158 RN LC	WSPM	10.7	833	14,120
357 Mag	125 FP LC	WSPM	15.0	1,101	13,141
	158 RN LC	WSPM	13.8	1,019	14,671
38-40 Win <sup>1</sup>	180 RN LC	CCI 350	20.2	1,041	13,470
44 Russian	200 RNFP LC	CCI 350	11.6	764	13,640
44 Colt	180 FP LC	CCI 350	18.5	912	10,570
	200 RNFP LC	CCI 350	18.5	904	12,300
44 S&W SpI	180 FP LC	CCI 350	19.9	1,023	13,810
	200 RNFP LC	CCI 350	18.5	960	14,430
44-40 WCF <sup>1</sup>	200 RNFP LC	CCI 350	20.0	987	12,450
1	225 RNFP LC	CCI 350	19.0	937	12,970
44 Rem Mag <sup>1</sup>	180 FP LC	CCI 350	23.4	1,098	13,492
1	240 RNFP LC	CCI 350	19.6	934	15,552
45 Schofield	200 RNFP LC	CCI 350	20.1	961	12,570
	255 SWC LC	CCI 350	16.2	797	12,410
45 Colt	200 RNFP LC	CCI 350	24.4	972	11,582
	255 SWC LC	CCI 350	22.2	869	12,582
30-30 Win	170 TC MCB	Fed 215	27.0	1,823	34,125
	200 RNGC LC	Fed 215	27.0	1,703	34,705
38-55 Win <sup>3</sup>	240 RNFP LC	Fed 215	27.3	1,481	25,750
3	320 RN MCB	Fed 215	23.0	1,231	29,510
40-65 WCF 13	410 SS MCB	Fed 215	31.0	1,290	27,700

<sup>1</sup> Indicates Maximum Load	<sup>2</sup> Dacron filler used	<sup>3</sup> Over Powder Wad Recommended
Indicates Maximum Load	Daci uli liller useu	Over Fowder Wad Necommended

CALIDED		WETOUT/TVDF	DOTAGED	OUADOE WEIGHT OD	VELOCITY	DDEGGUDE (DGT)
CALIBER		WEIGHT/ TYPE	PRIMER	CHARGE WEIGHT GR	VELOCITY	PRESSURE (PSI)
45-70 Govt.	3	350 FP LC	Fed 215	44.8	1,565	23,383
	23	405 FPBB LC	Fed 215	30.4	1,205	17,775
	3	405 FPBB LC	Fed 215	38.0	1,381	21,905
	23	500 FP LC	Fed 215	27.0	1,050	18,065
	3	500 FP LC	Fed 215	32.9	1,198	22,085
45-90 WCF	3	300 FP LC	Fed 215	52.0	1,787	21,340
	3	350 FP LC	Fed 215	50.0	1,718	24,170
	1	405 FPBB MCB	Fed 215	45.7	1,579	26,390
	13	500 RNFP MCB	Fed 215	42.6	1,376	27,940
	123	570 RN MCB	Fed 215	39.0	1,279	27,490
45-100 SS	3	300 FP LC	Fed 215	60.0	1,936	23,460
	3	350 FP LC	Fed 215	56.8	1,824	25,710
	13	405 FPBB LC	Fed 215	52.1	1,671	27,610
	123	500 RNFP MCB	Fed 215	46.0	1,451	28,000
	123	570 RN MCB	Fed 215	41.5	1,321	27,540
45-110 SS	3	300 FP LC	Fed 215	66.1	1,979	22,260
	3	350 FP LC	Fed 215	63.3	1,865	23,280
	13	405 FPBB LC	Fed 215	60.4	1,780	27,240
	123	500 RNFP MCB	Fed 215	50.0	1,495	26,660
	123	570 RN MCB	Fed 215	49.0	1,367	25,593
45-120 SS	123	300 FP LC	Fed 215	71.0	2,075	27,970
	123	350 FP LC	Fed 215	67.0	1,938	28,690
	123	405 FPBB LC	Fed 215	64.0	1,797	28,770
	123	500 RNFP MCB	Fed 215	53.0	1,508	28,420
	123	570 RN MCB	Fed 215	51.0	1,413	27,600
50-70 Govt.	13	475 RNFP MCB	Fed 215	37.0	1,230	19,360
50-90	13	475 RNFP MCB	Fed 215	71.0	1,762	27,610

 $<sup>^1</sup> Indicates\, Maximum\, Load$   $^2\, Dacron\, filler\, used$   $^3\, Over\, Powder\, Wad\, Recommended$ 

# triple sezenº

# THE TRIPLE SEVEN® FAMILY, IN ALL ITS HIGH-PERFORMANCE FORMS.

The original Triple Seven® propellent set the standard as the high-performance black powder substitute that cleans up with plain water. Triple Seven® Pellets then combined that same performance with easy-loading convenience for 50-caliber in-line muzzleloaders. Then came Triple Seven® FireStar™ Pellets – optimized for even quicker, more complete ignition and unmatched downrange precision. Only from Hodgdon.

# TRIPLE SEVEN° FIRESTAR™ USAGE

Triple Seven® FireStar™ Pellets were designed to deliver better ignition, reduced fouling, easy loading and more uniform velocities. Three (3) FireStar™ Pellets produce 100-grain volume equivalent velocities or higher, at lower pressures than two (2) Triple Seven® Pellets, so the maximum recommended charge weight by Hodgdon® Powder Company is, therefore, three (3) pellets.

With Triple Seven® Pellets, some manufacturers recommend more than the two-pellet limit listed by Hodgdon®, and similarly, you will find them recommending four (4) or five (5) FireStar™ Pellets. Five (5) pellets operate at slightly higher velocities (30-90 fps), depending on components than three Triple Seven® Pellets, but at slightly lower pressures. Wherever muzzleloader manufacturers recommend three (3) Triple Seven® Pellets, four (4) or five (5) FireStar™ Pellets they are safe to use.

Blackhorn and Triple Seven are not designed for use in guns originally proofed for black powder use. However, Pyrodex is intended to be used on a volume to volume basis the same as the appropriate granulation of black powder and will give approximately the same velocity and pressure as black when used in this manner.

NOTE: Pyrodex® and Triple Seven® Pellets were developed to give the same pressure and velocity with the volume equivalent measure. Our data was developed using 26" barrels.

# WARNING

When using IMR\* White Hots, NEVER exceed a total of two (2) preformed charges. The three (3) and four (4) preformed charge load data shown here was developed for use only in firearms whose manufacturer's instructions recommend three (3) and four (4) preformed charges in their specific firearm only.

# HODGDON® TRIPLE SEVEN® MUZZLELOADING PROPELLANT

Nothing makes clean up easier than Hodgdon® Triple Seven®. Both your rifle and hands wash up with plain water, and the place where you did the cleaning can be easily wiped down using just a damp paper towel. Fast. Clean. Done.



# FIRESTAR™ PELLETS

Designed for use in 50-caliber muzzleloaders with a 209-primer, FireStar features a revolutionary, star-shaped design with longitudinal grooves that enable more efficient burning and higher velocities. Available in a 60-pellet clamshell.



# FFFG GRANULAR POWDER

The same great powder as FFG with smaller grain size engineered for use in pistols and rifles of 45 caliber and under. Easy clean-up just like standard Triple Seven.



# FFG GRANULAR POWDER

The revolutionary granulated muzzle loading propellant that cleans up with water alone. Contains no sulfur, so there are no strong smells and clean-up is a breeze. Triple Seven granulated powder is intended for use in shotguns and rifles, 40 caliber and larger, and in cartridges.



Two of these pellets gives you a 120-grain "magnum" load. With two Triple Seven Magnums you can achieve an additional 200-250 fps. Designed for use with 209 shotshell primers only.



# **50 CALIBER** 50 GRAIN PELLETS

Designed for use in 50 caliber in-line rifles. A single pellet may be used for target or small game and two 50/50 pellets may be used to create the 100-grain equivalent for big game. Packed 100 pellets to the box or 24 pellets to the card. Easy clean-up, just like Triple Seven granular powder. Designed for use with 209 shotshell primers only.



The 50/30 Pellets are designed for use in conjunction with 50/50 Pellets to tailor loads specific to a given rifle. The 50/30 Pellets may be used in any combination with 50/50 or other 50/30 Pellets in charges up to a 100-grain maximum. Packed 100 pellets to the box. Easy clean-up, just like Triple Seven granular powder. Designed for use with 209 shotshell primers only.



# **45 CALIBER** 50 GRAIN PELLETS

These 45/50 Pellets are designed for in-line 45-caliber rifles. As with all Triple Seven products, clean-up is quick and easy with plain water. These pellets may be used in 45-caliber rifles for game from squirrel to deer. Designed for use with 209 shotshelll primers only.

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# **50 CAL TRIPLE SEVEN FIRESTAR PELLET LOADS**

VOLUMETRIC UNITS (VOLUMETRIC POWDER MEASURE)			3-PELLET	4-PELLET	5-PELLET
MANUFACTURER & BULLET	STYLE	DIA./SABOT		VELOCITY (FPS)	
Precision Rifle 200 GR	Dead Center	.40/.50	1,774	1,884	2,138
Barnes 250 GR	Expander	.45/.50	1,799	2,020	2,247
Hornady 250 GR	Low Drag Mono Flex	.45/.50	1,780	2,028	2,212
PowerBelt 250 GR	Aerolite Aerotip	.50/NA	1,662	1,931	2,087
Harvester 260 GR	Scorpion PT Gold	.45/.50	1,736	1,968	2,142
Federal 270 GR	BOR Lock Copper	.50/NA	1,642	1,875	2,092
Harvester 270 GR	Belted Saber Tooth	.50/NA	1,598	1,785	1,919
Fury 285 GR	Star Tip 2 MZ	.50/NA	1,530	1,783	1,847
Barnes 290 GR	Spitfire TEZ	.45/.50	1,715	1,942	2,111
Hornady 290 GR	Bore Driver FTX	.50/NA	1,518	1,741	1,866
Nosler 300 GR	Ballistic Tip	.45/.50	1,686	1,901	2,078
Harvester 300 GR	Scorpion PT Gold	.45/.50	1,681	1,876	2,072
Fury 320 GR	Universal Fit	.50/NA	1,443	1,701	1,824
PowerBelt 325 GR	Aerotip ELR	.50/NA	1,538	1,766	1,965
Federal 350 GR	BOR Lock Lead	.50/NA	1,539	1,753	N/A
Hornady 385 GR	HB-HP	.50/NA	1,453	1,605	1,838

# PATCHED ROUND BALL DATA

VOLUMETRIC UNITS (VOLUMETRIC POWDER MEASURE)			40 GR	50 GR	60 GR	70 GR
CALIBER	ROUND BALL	POWDER	VELOCITY (FPS)			
45 Cal.	.440 RB	T7-FFG	1,534	1,682	1,926	N/A
			70 GR	80 GR	90 GR	100 GR
50 Cal.	.490 RB	T7-FFG	1,744	1,842	1,925	1,988
			80 GR	90 GR	100 GR	120 GR
54 Cal.	.530 RB	T7-FFG	1,667	1,775	1,846	1,943

# **CAP AND BALL REVOLVER DATA**

VOLUMETRIC UNITS (VOLUMETRIC POWDER MEASURE)			15 GR	20 GR	25 GR	30 GR
CALIBER	ROUND BALL	POWDER	VELOCITY (FPS)			
36 Cal. 1851 Navy	.375 RB	T7-FFFG	662	832	N/A	N/A
44 Cal. 1858 Rem	.454 RB	T7-FFFG	N/A	536	763	N/A
44 Cal. 1860 Army	.451 RB	T7-FFFG	N/A	524	592	N/A

# 45 CALIBER TRIPLE 7 45/50 PELLET LOADS

VOLUMETRIC UNITS (VOLUMETRIC POWDER MEASURE)			2-PELLET	3-PELLET	
MANUFACTURER & BULLET	STYLE	DIA./SABOT	VELOCITY (FPS)		
Precision Rifle 175 GR	Dead Center	.357/.45	2,004	2,362	
Parker 200 GR	Hydra-Con	.40/.45	1,902	2,294	
Fury 250 GR	Star Tip MZ	.45/	1,664	N/A	
PowerBelt 285 GR	ELR	.45/	1,746	2,147	
Fury 300 GR	Star Tip MZ 2P	.45/	1,619	1,968	

# **50 CALIBER 50 GRAIN/2-4 PELLET LOADS**

VOLUMETRIC UNITS (	VOLUMETRIC POWDER MEA	2-PELLET	3-PELLET	4-PELLET	
MANUFACTURER & BULLET	STYLE	DIA./SABOT		VELOCITY (FPS)	
Precision Rifle 200 GR	Precision Rifle 200 GR	.40/.50	1,743	2,193	2,355
Barnes 250 GR	Barnes 250 GR	.45/.50	1,732	2,105	2,357
Hornady 250 GR	Hornady 250 GR	.45/.50	1,746	2,098	2,214
PowerBelt 250 GR	PowerBelt 250 GR	.50/NA	1,605	1,920	2,192
Harvester 260 GR	Harvester 260 GR	.45/.50	1,650	2,024	2,218
Federal 270 GR	Federal 270 GR	.50/NA	1,636	1,970	2,159
Harvester 270 GR	Harvester 270 GR	.50/NA	1,574	1,960	2,192
Fury 285 GR	Fury 285 GR	.50/NA	1,567	1,858	2,116
Barnes 290 GR	Barnes 290 GR	.45/.50	1,621	1,997	N/A
Hornady 290 GR	Hornady 290 GR	.50/NA	1,538	1,928	2,141
Nosler 300 GR	Nosler 300 GR	.45/.50	1,632	1,976	2,187
Harvester 300 GR	Harvester 300 GR	.45/.50	1,582	1,904	2,143
Fury 320 GR	Fury 320 GR	.50/NA	1,527	1,813	2,061
PowerBelt 325 GR	PowerBelt 325 GR	.50/NA	1,520	1,819	2,046
Federal 350 GR	Federal 350 GR	.50/NA	1,459	1,781	1,981
Hornady 385 GR	Hornady 385 GR	.50/NA	1,415	1,758	N/A

# **50 CALIBER 2 MAGNUM PELLET LOADS**

# MAGNUM PELLETS ARE 60GR EQUIVALENT

VOLUMETRIC UNITS (V	2-PELLET		
MANUFACTURER & BULLET	STYLE	DIA./SABOT	VELOCITY (FPS)
Precision Rifle 200 GR	Precision Rifle 200 GR	.40/.50	1,836
Barnes 250 GR	Barnes 250 GR	.45/.50	2,004
Hornady 250 GR	Hornady 250 GR	.45/.50	1,868
PowerBelt 250 GR	PowerBelt 250 GR	.50/NA	1,686
Harvester 260 GR	Harvester 260 GR	.45/.50	1,734
Federal 270 GR	Federal 270 GR	.50/NA	1,762
Harvester 270 GR	Harvester 270 GR	.50/NA	1,870
Fury 285 GR	Fury 285 GR	.50/NA	1,695
Barnes 290 GR	Barnes 290 GR	.45/.50	1,670
Hornady 290 GR	Hornady 290 GR	.50/NA	1,628
Nosler 300 GR	Nosler 300 GR	.45/.50	1,719
Harvester 300 GR	Harvester 300 GR	.45/.50	1,656
Fury 320 GR	Fury 320 GR	.50/NA	1,642
PowerBelt 325 GR	PowerBelt 325 GR	.50/NA	1,586
Federal 350 GR	Federal 350 GR	.50/NA	1,684
Hornady 385 GR	Hornady 385 GR	.50/NA	1,671



# TRIPLE SEVEN° 2F & 3F DATA

# **40 CALIBER TRIPLE SEVEN® DATA**

VOLUMETRIC UNITS (VOLUMETRIC POWDER MEASURE)			60 GR 2F	55 GR 3F
MANUFACTURER & BULLET	STYLE	DIA./SABOT	VELOCIT	Y (FPS)
PowerBelt 225 GR	ELR	.40/	1,647	1,568

# **45 CALIBER TRIPLE SEVEN® DATA**

VOLUMETRIC UNITS (VOLUMETRIC POWDER MEASURE)		80 GR 2F	100 GR 2F	80 GR 3F	100 GR 3F	
MANUFACTURER & BULLET	STYLE	DIA./SABOT				
Precision Rifle 175 GR	Dead Center	.375/.45	2,003	2,166	2,033	2,204
Parker 200 GR	Hydra-Con	.40/.45	1,901	2,089	1,937	N/A
Fury 250 GR	Star Tip MZ	.45/	1,721	1,883	1,782	N/A
PowerBelt 285 GR	ELR	.45/	1,630	1,751	1,652	N/A
Fury 300 GR	Star Tip MZ 2P	.45/	1,652	N/A	N/A	N/A

# **50 CALIBER TRIPLE SEVEN® DATA**

VOLUMETRIC UNITS (VOLUMETRIC POWDER MEASURE)		80 GR 2F	100 GR 2F	120 GR 2F	80 GR 3F	100 GR 3F	
MANUFACTURER & BULLET	STYLE	DIA./SABOT			VELOCITY (FPS		
Precision Rifle 200 GR	Dead Center	.40/.50	1,802	1,961	2,163	1,848	2,012
Barnes 250 GR	Expander	.45/.50	1,802	1,949	2,014	1,818	1,965
Hornady 250 GR	Low Drag Mono Flex	.45/.50	1,797	1,928	2,086	1,806	1,915
PowerBelt 250 GR	Aerolite Aerotip	.50/NA	1,676	1,843	N/A	1,731	1,951
Harvester 260 GR	Scorpion PT Gold	.45/.50	1,724	1,907	N/A	1,788	N/A
Federal 270 GR	BOR Lock Copper	.50/NA	1,784	1,949	N/A	1,814	N/A
Harvester 270 GR	Belted Saber Tooth	.50/NA	1,704	1,800	N/A	1,715	N/A
Fury 285 GR	Star Tip 2 MZ	.50/NA	1,696	1,808	N/A	1,709	1,862
Barnes 290 GR	Spitfire TEZ	.45/.50	1,669	1,839	N/A	1,699	N/A
Hornady 290 GR	Bore Driver FTX	.50/NA	1,635	1,792	N/A	1,681	N/A
Nosler 300 GR	Ballistic Tip	.45/.50	1,692	1,850	N/A	1,710	N/A
Harvester 300 GR	Scorpion PT Gold	.45/.50	1,664	1,820	N/A	1,723	N/A
Fury 320 GR	Universal Fit	.50/NA	1,624	1,770	N/A	1,680	N/A
PowerBelt 325 GR	Aerotip ELR	.50/NA	1,600	1,768	N/A	1,608	N/A
Federal 350 GR	BOR Lock Lead	.50/NA	1,610	1,744	N/A	1,627	N/A
Hornady 385 GR	HB-HP	.50/NA	1,499	N/A	N/A	1,519	N/A

# **54 CALIBER TRIPLE SEVEN® DATA**

VOLUMETRIC UNITS (VOLUMETRIC POWDER MEASURE)	100 GR 2F	120 GR 2F
MANUFACTURER & BULLET	VELOCI	TY (FPS)
Parker 250 GR Jacketed H.C	1689	1858
Nosler 250 GR Shots 54/45	1789	1884
Harvester 260 GR Scorpion F.P.	1711	1853
Swift 265 GR AF/HP	1711	1853
Barnes 275 GR Expander MZ	1713	1859
T/C 300 GR Mag Express	1741	1841
Barnes 325 GR Expander MZ	1625	1773
CVA 348 GR Power Belt	1623	1728
Spr/Blk 352 GR Sabot 54/45	1692	1775
T/C 360 GR Maxi-Hunter	1604	1691
Hornady 425 GR HB-HP	1496	1631
T/C 435 GR Maxi-Hunter	1459	1588

# **58 CALIBER TRIPLE SEVEN® DATA**

VOLUMETRIC UNITS (VOLUMETRIC POWDER MEASURE)	100 GR 2F	120 GR 2F
	VELOCI	TY (FPS)
Hodgdon 410 GR Mold	1380	1542
Hornady 525 GR HB-HP	1294	1428
T/C 560 GR Maxi-Hunter	1247	1395

# TRIPLE SEVEN® 2F CARTRIDGE DATA FOR PISTOL AND RIFLE

CARTRIDGE	BULLET	POWDER MEASURE	VELOCITY SETTING
38 Special	125 GR LRNFP	20 GR	931
38 Special	158 GR LSWC	15 GR	785
38-40 WCF	180 GR Cast LRNFP	30 GR	887
44 Special	200 GR Cast LRNFP	25 GR	907
44 Special	240 GR Cast LSWC	20 GR	778
44-40 WCF	200 GR Cast LRNFP	30 GR	830
44 Rem Mag	200 GR Cast LRNFP	30 GR	984
44 Rem Mag	240 GR Cast LSWC	25 GR	868
45 Colt	200 GR Cast LRNFP	35 GR	959
45 Colt	250 GR Cast LRNFP	30 GR	838
38-55 Win	Lyman 250 GR Cast	35 GR	1261
40-65 Win	Buffalo Arms 400 GR LRNFP	50 GR	1152
45-70 Gov't	405 GR Cast LFP	60 GR	1260
45-70 Gov't	485 GR Cast LFP	60 GR	1161
45-120 Sharps	Lyman 500 GR #457193	95 GR	1511
45-120 Sharps	Lyman 500 GR #457125	95 GR	1375

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# THE ONLY WHITE GUNPOWDER.

The first and only white gunpowder, White Hots pellets are clean burning, extremely accurate and deliver velocities exceeding 2,300 fps. These 50-grain pellets are designed for modern .50 caliber in-line 209 muzzleloaders and come in a field-ready box of 72 pellets, ready to shoot with any 209 primer.

# **PURE POWER, ALL PERFORMANCE**

Along with velocities exceeding 2,300 fps, White Hots pack up to 2,600 foot-pounds of knockdown energy giving your gun maximum long-range reach. White Hots are not nitrocellulose based, it is a true black powder substitute.

# **PURE POWER, HIGHLY ACCURATE**

White Hots are flat shooting, dependable in extreme weather, and deliver unmatched shotto-shot consistency. Deer don't mind the cold, neither should your powder.



# **PURE POWER, EASY LOADING**

These patented preformed charges are designed to reload fast; they drop freely down barrels; no fuss, no bothering with measures and funnels in the woods.

For added convenience, White Hots come in easy-to-carry hunt packs – one pack covers a full day of hunting.

# **PURE POWER, CLEAN BURNING**

White Hots are clean burning, allowing immediate second shot reloading with easy clean-up; a water-wet patch removes all residue with no strong smells.

# **PURE POWER, SURE IGNITION**

White Hots® are not primer-specific; they work with all 209 primers, nor are they breech specific; they're ready for use in your 209-ignition rifle.

# **50 CALIBER 50 GRAIN 2, 3 & 4 PREFORMED CHARGE DATA**

BULLET	STYLE	DIA./SABOT	2 CHARGES Velocity (FPS)	3 CHARGES Velocity (FPS)	4 CHARGES Velocity (FPS)
Precision Rifle 200 GR	Dead Center	.40/.50	1,800	2,180	2,446
Barnes 250 GR	Expander	.45/.50	1,798	2,119	2,316
Hornady 250 GR	Low Drag MonoFlex	.45/.50	1,754	2,116	2,320
PowerBelt 250 GR	Aerolite Aerotip	.50/NA	1,651	2,040	2,265
Harvester 260 GR	Scorpion PT Gold	.45/.50	1,675	2,043	N/A
Federal 270 GR	BOR Lock Copper	.50/NA	1,656	2,035	2,237
Harvester 270 GR	Belted Saber Tooth	.50/NA	1,613	1,963	2,180
Fury 285 GR	Star Tip 2 MZ	.50/NA	1,644	1,980	2,212
Barnes 290 GR	Spitfire TEZ	.45/.50	1,648	1,967	N/A
Hornady 290 GR	Bore Driver FTX	.50/NA	1,621	1,940	2,160
Nosler 300 GR	Ballistic Tip	.45/.50	1,647	1,990	N/A
Harvester 300 GR	Scorpion PT Gold	.45/.50	1,589	1,950	N/A
Fury 320 GR	Universal Fit	.50/NA	1,600	1,919	N/A
PowerBelt 325 GR	Aerotip ELR	.50/NA	1,572	1,880	2,072
Federal 350 GR	BOR Lock Lead	.50/NA	1,529	1,848	2,020
Hornady 385 GR	НВ-НР	.50/NA	1,451	1,784	N/A

### WARNING

When using IMR® White Hots, NEVER exceed a total of two (2) preformed charges. The three (3) and four (4) preformed charge load data shown here was developed for use only in firearms whose manufacturer's instructions recommend three (3) and four (4) preformed charges in their specific firearm only.

The user assumes all risk of assuring that the rifle manufacturer specifically recommends a three (3) or four (4) preformed charge load for users firearm. IMR® specifically disclaims any and all liability arising out of the use of any data that exceeds the White Hots® maximum load of two (2) preformed charges, and the user assumes all risk in doing so.

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# THE ORIGINAL BLACK POWDER SUBSTITUTE.

More hunters put their trust in Pyrodex® powders and pellets than in black powder. From the original black powder substitute (Pyrodex® RS) to quick-loading Pyrodex Pellets® – designed for today's modern in-line muzzleloaders – Hodgdon® has all of the tools you need. Pyrodex® products are safer and cleaner burning than common black powder. So when it comes to muzzleloading, your propellant choice is easy. Pyrodex®.



Pyrodex® is available in three loose grades and two different sized pellets. Pyrodex Pellets® give the modern muzzleloader speed and safety in a preformed charge. They offer quick, safe, no-spill loading, instant ignition, and faster second shots. Available in 44-caliber pistol, 50 caliber.

Funnel/pouring cap fits all Hodgdon® 1 lb cans, doubling as a funnel.

It eliminates the mess and danger from spilled powder. Ideal for transferring powder from the can to a measure or other containers.

# PYRODEX° IS THE ORIGINAL BLACK POWDER SUBSTITUTE AND STILL THE VALUE STANDARD.



# PYRODEX® P PISTOL POWDER

Designed for use pistols and in smaller-bore rifles, 45 caliber and under, Pyrodex® P is also useful as a priming charge in guns which have a tortuous or fouled ignition channel or other ignition issues. Its particle size is comparable to 3F black powder.



# PYRODEX® RS RIFLE/SHOTGUN POWDER

Pyrodex RS can be used in all calibers of percussion muzzleloading rifles and shotguns. It serves a wide number of applications and is the most versatile powder in the Pyrodex line. Like all grades of Pyrodex, it burns cleaner and produces less fouling than black powder. RS compares to 2F black powder on a particle size basis.



# PYRODEX® SELECT RIFLE/SHOTGUN POWDER

Select is an enhancement of Pyrodex® RS.
Using RS or 2F data in a volumetric measure, Select can significantly reduce group size. Wonderful news to the deer hunter is that Select performs well with sabots and conical bullets. Select has also become a favorite among many black powder cartridge shooters because of its exceptional consistency. For target use it is the "best of the best".



# **50 CALIBER** 50 GRAIN PELLETS

The original Pyrodex® Pellet designed for use in 50 caliber, in-line rifles. A single 50/50 pellet may be used for a light target or small game load while two 50/50 pellets may be combined to provide a potent 100 GR equivalent load for big game. They are packed 100 pellets to the box and 24 pellets to the card. May be used with standard caps, musket caps or 209 ignition systems.



# 44/45 CALIBER 30 GRAIN PISTOL PELLETS

Cap and Ball revolvers just entered the modern age! No flask or spout, no loose powder mess; loading has never been cleaner or easier. These 30-grain volume pellets are intended for use in 44 or 45 caliber cap and ball revolvers. Packed 100 pellets to the box. May be used in 45 caliber in-line muzzleloading rifles in conjunction with 50 grain pellets in combinations not exceeding 100 grains.

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# 50 CALIBER 50 GRAIN/ 2, 3 & 4 PELLET LOADS

BULLET OR BULLET W/ SABOT	STYLE	DIA./SABOT	2 PELLET	3 PELLET	4 PELLET
•		,	V	ELOCITY (FP	S)
Precision Rifle 200 GR	Dead Center	.40/.50	1,765	2,169	2,424
Barnes 250 GR	Expander	.45/.50	1,780	2,147	2,353
Hornady 250 GR	Low Drag Mono Flex	.45/.50	1,758	2,116	2,332
PowerBelt 250 GR	Aerolite Aerotip	.50/NA	1,633	1,993	2,254
Harvester 260 GR	Scorpion PT Gold	.45/.50	1,655	2,002	2,224
Federal 270 GR	BOR Lock Copper	.50/NA	1,655	2,001	2,167
Harvester 270 GR	Belted Saber Tooth	.50/NA	1,597	1,961	2,124
Fury 285 GR	Star Tip 2 MZ	.50/NA	1,606	2,003	2,131
Barnes 290 GR	Spitfire TEZ	.45/.50	1,630	1,988	N/A
Hornady 290 GR	Bore Driver FTX	.50/NA	1,543	1,929	2,141
Nosler 300 GR	Ballistic Tip	.45/.50	1,668	1,986	N/A
Harvester 300 GR	Scorpion PT Gold	.45/.50	1,576	1,919	2,160
Fury 320 GR	Universal Fit	.50/NA	1,544	1,888	2,082
PowerBelt 325 GR	Aerotip ELR	.50/NA	1,555	1,872	2,088
Federal 350 GR	BOR Lock Lead	.50/NA	1,485	1,827	2,016
Hornady 385 GR	НВ-НР	.50/NA	1,462	1,782	N/A





# **40 CALIBER PYRODEX® DATA**

VOLUMETRIC UNITS (VOLUMETRIC POWDER MEASURE)			PXRS 60	PXP 60
MANUFACTURER & BULLET	STYLE	DIA./SABOT	VELOCI	TY (FPS)
PowerBelt 225	ELR	.40/	1,512	1,600

# **45 CALIBER PYRODEX® DATA**

VOLUMETRIC UNITS (VOLUMETRIC POWDER MEASURE)		80 GR RS	100 GR RS	80 GR Pistol	100 GR Pistol		
MANUFACTURER & BULLET	STYLE	DIA./SABOT	VELOCITY (FPS)				
Precision Rifle 175 GR	Dead Center	.357/.45	1,859	2014	1,938	2,033	
Parker 200 GR	Hydra-Con	.40/.45	1,785	1948	1,807	N/A	
Fury 250 GR	Star Tip MZ	.45/	1,624	N/A	1,659	N/A	
PowerBelt 285 GR	ELR	.45/	1,500	N/A	1,595	N/A	
Fury 300 GR	Star Tip MZ 2P	.45/	1,527	N/A	N/A	N/A	

# **50 CALIBER PYRODEX® DATA**

VOLUMETRIC UNITS (VOLUMETRIC POWDER MEASURE)		80 GR RS	100 GR RS	120 GR RS	80 GR Pistol	100 GR Pistol	
MANUFACTURER & BULLET	STYLE	DIA./SABOT			VELOCITY (FPS)		
Precision Rifle 200 GR	Dead Center	.40/.50	1,740	1,907	2,093	1,762	1,937
Barnes 250 GR	Expander	.45/.50	1,654	1,826	1,969	1,693	1,847
Hornady 250 GR	Low Drag Mono Flex	.45/.50	1,656	1,843	1,949	1,678	1,853
PowerBelt 250 GR	Aerolite Aerotip	.50/NA	1,641	1,817	N/A	1,645	1,833
Harvester 260 GR	Scorpion PT Gold	.45/.50	1,571	1,771	N/A	1,634	1,799
Federal 270 GR	BOR Lock Copper	.50/NA	1,662	1,825	N/A	1,718	N/A
Harvester 270 GR	Belted Saber Tooth	.50/NA	1,552	1,742	N/A	1,576	N/A
Fury 285 GR	Star Tip 2 MZ	.50/NA	1,555	1,730	N/A	1,581	1,744
Barnes 290 GR	Spitfire TEZ	.45/.50	1,541	1,696	N/A	1,584	N/A
Hornady 290 GR	Bore Driver FTX	.50/NA	1,535	1,685	N/A	1,569	1,719
Nosler 300 GR	Ballistic Tip	.45/.50	1,549	1,724	N/A	1,581	1,728
Harvester 300 GR	Scorpion PT Gold	.45/.50	1,518	1,676	N/A	1,581	1,730
Fury 320 GR	Universal Fit	.50/NA	1,512	1,667	N/A	1,521	1,666
PowerBelt 325 GR	Aerotip ELR	.50/NA	1,469	1,637	N/A	1,507	N/A
Federal 350 GR	BOR Lock Lead	.50/NA	1,438	1,613	N/A	1,515	N/A
Hornady 385 GR	HB-HP	.50/NA	1,388	1,565	N/A	1,439	1,581

# **MUZZLE LOADING PISTOLS 45 CALIBER PYRODEX® DATA**

CALIBER	ROUND BALL	POWDER	POWDER SETTING	VELOCITY
40 Cal.	395	Pyrodex P	30 GR	840
45 Cal.	440	Pyrodex P	35 GR	820
50 Cal.	490	Pyrodex P	45 GR	790

# **PATCHED ROUND BALL DATA**

VOLUMETRIC UNITS (VOLUMETRIC POWDER MEASURE)			40 GR	50 GR	60 GR	70 GR
CALIBER	ROUND BALL	POWDER		VELOCIT	Y (FPS)	
45 Cal.	.440 RB	Pyrodex RS/Select	1,426	1,574	1,772	N/A
			70 GR	80 GR	90 GR	100 GR
50 Cal.	.490 RB	Pyrodex RS/Select	1,594	1,701	1,787	1,851
			80 GR	90 GR	100 GR	120 GR
54 Cal.	.530 RB	Pyrodex RS/Select	1,559	1,659	1,729	1,812

# **CAP AND BALL REVOLVER DATA**

VOLUMETRIC UNITS (	(VOLUMETRIC POWI	DER MEASURE)	15 GR	20 GR	25 GR	30 GR	35 GR
CALIBER	ROUND BALL	POWDER			VELOCITY (FPS)		
36 Cal. 1851 Navy	.375 RB	Pyrodex P	662	832	935	N/A	N/A
44 Cal. 1858 Rem	.454 RB	Pyrodex P	N/A	N/A	N/A	N/A	910
44 Cal. 1860 Army	.451 RB	1RP 44/30 Pellet	N/A	N/A	N/A	800	N/A



# **WARNINGS - MUZZLELOADER**

### **BEFORE USING**

Read and understand all warnings and instructions contained on the product label, this book and the Hodgdon®, IMR® or Blackhorn 209® websites. Failure to comply with all warnings and instructions herein, or misuse of these products in any way, while using Pyrodex®, Triple Seven®, IMR White Hots® or Blackhorn 209 may result in severe personal injury or death to the user and/or bystanders, as well as damage to the firearm and other property.

Muzzleloading powders, Pellets and Preformed Charges are extremely flammable. Keep away from heat, open flame and sparks. Avoid impact and friction. Store in a cool, dry place.

Before loading place gun on safety as per firearm manufacturer's instructions. Be certain the firearm is unloaded and that the barrel and flash channel are clean, dry and free of oil or lubricant. Place muzzle away from body and insert correct charge of muzzleloading powder, Blackhorn 209, Pellets or Preformed Charges into the gun muzzle.

# **INTENDED USE**

Pyrodex granular powder is intended solely to be used in modern inline, flintlock, percussion and cartridge firearms which have been found by a competent gunsmith to be in safe, shootable condition. Triple Seven granular powder is intended solely to be used in modern inline and cartridge firearms which have been found by a competent gunsmith to be in safe, shootable condition.

Blackhorn 209 was specifically designed for modern inline muzzleloaders with sealed ignition systems using CCI209M or Federal 209A primers. Blackhorn 209 should not be used with #11 percussion caps or musket caps, as these do not have sufficient strength to ignite Blackhorn 209.

Pellets and Preformed Charges are intended to be used in place of granular powder. Do not combine Pellets or Preformed Charges with loose, granular powder. Pyrodex, Triple Seven or Triple Seven Firestar® Pellets, as well as IMR White Hots Preformed Charges are designed for use in newly manufactured muzzleloading, inline rifles in calibers 54 and 50. Triple Seven and Pyrodex Pellets are also available for 45 caliber. Pyrodex may be used with standard cap, musket cap or 209 primer ignition systems, while Triple Seven and IMR White Hots use only a 209 primer ignition system. Use only the correct caliber Pellets or Preformed Charges designated

for a specific caliber rifle or pistol. Do not combine Pellets or Preformed Charges of different caliber sizes.

Hodgdon does NOT recommend the use of Triple Seven Pellets, Pyrodex Pellets or White Hots Preformed Charges in sidelock muzzleloading rifles, in flintlock muzzleloading rifles, using a patched round ball, or the use of conical lead bullets without a fiber wad is NOT recommended. Due to variations in the size and type of flash channels of such rifles, as well as different rifle bore diameters, and conical bullet sizes, hangfires (a delayed ignition of the propellant) or an improper gas seal of the projectile may occur. These conditions could cause the projectile or a burning Pellet to exit the barrel in a hazardous manner, which could cause personal injury or death to the user or bystander, as well as damage to the firearm.

Pistol pellets are designed and intended for use only in newly manufactured, modern replica 44 or 45 caliber cap and ball revolvers. They may also be used in 45 caliber inline rifles. Any other use of rifle or pistol pellets are not recommended. Pellets and preformed charges are designed to be used with saboted bullets or conical bullets together with a fiber wad. Any other use of the Pellets and Preformed Charges is not recommended. Triple Seven Pellets and White Hots Preformed Charges are not for use in cartridges, or with patched round ball. Pyrodex Pellets may be used in cartridges.

# **GENERAL WARNINGS**

- · Do not ingest internally.
- Use Pellets and Preformed Charges only in strict accordance with loading instructions.
- Never exceed the loads listed in this information or on the packaging label.
- Do not contaminate propellants, Pellets or Preformed Charges with dirt or moisture.
- Keep powder, Pellets or Preformed Charges in original tubes or closed container until used. Be sure container, tubes or box is closed while shooting. Only store powder, Pellets or Preformed Charges in original container.
- Do not place Pellets or Preformed Charges loose in clothing.
- Do not smoke when handling muzzleloader propellants, Pellets or Preformed Charges.

- Always wear ear and eye protection when handling, loading and discharging firearms.
- Do not dispense Pyrodex, Triple Seven or Blackhorn 209 granular powders directly from original container into firearm. Be certain no ember is smoldering in barrel before pouring powder:
- Never mix powders or use nitrocellulose-based smokeless powder in muzzleloading firearms.
- Do not ignite Pellet or Preformed Charges in hand or outside of firearm.
- Do not break, cut or modify Pellets or Preformed Charges by any means. Do not modify muzzleloader powder by any means.
- Keep away from heat, open flame and sparks. Avoid impact and friction.
- Store pellets, preformed charges or powder in a cool, dry place. Do not store with combustibles.
- · Keep out of reach of children. Handle with care.
- Discharging firearms in poorly ventilated areas, cleaning firearms or handling lead bullets may result in exposure to lead and other substances known to cause birth defects, reproductive harm and other serious physical injury. Have adequate ventilation at all times. Wash hands after exposure.
- Do not pound on ramrod or seat projectile with excessive force as this may crush a Pellet or Preformed charge.
   However, be certain that no air space exists between the projectile and Pellet or Preformed charge. If an air space

- exists, the projectile becomes an obstruction in the barrel, which upon firing the gun, may cause personal injury or death to the user or bystander as well as damage to the firearm.
- Do not load and fire a Pellet or Preformed charge without a
  projectile in the barrel, sealed on the pellet or preformed
  charge. To do so may cause a burning pellet or preformed
  charge to exit the barrel causing personal injury or property
  damage to the user or bystander.
- When loading any projectile, be certain the projectile fits
  the bore snugly and forms a proper gas seal. Make sure
  projectile is seated all the way down the bore on top of
  the propellant. Failure to do so may result in decreased
  performance, poor accuracy or the possibility of a burning
  pellet or preformed charge particle exiting the barrel,
  which may cause personal injury or property damage to the
  user or bystander.
- The mechanics of loading metallic cartridges must be done with care and safety, remembering black powder, black powder substitutes and muzzleloader propellants are inefficient compared to smokeless powders.
- Each Pyrodex Pellet contains an ignitor end. When loading the Pellet, for best ignition, place the ignitor end of the Pellet into the barrel first. No orientation is necessary for Triple Seven Pellets and White Hots Preformed Charges.
- Never leave a firearm loaded. Always clean firearm promptly after use.
- Clean up any spilled powder. Do not use vacuum cleaner.

# For Pellets or Preformed Charges, the maximum load per shot should never exceed:

Pyrodex Pellets (Rifle)	Maximum Two (2) Pellets
Triple Seven Pellets	Maximum Two (2) Pellets
Triple Seven Magnums	Maximum Two (2) Pellets
Triple Seven Firestar	Maximum Five (5) Pellets
IMR White Hots	Maximum Two (2) Pellets
Pyrodex Pellets (Pistol)	Maximum One (1) Pellet

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# **WARNINGS AND USAGE STATEMENTS**

# MAXIMUM PELLET AND PREFORMED CHARGE LOAD WARNING

Some manufacturers may recommend the use of more Pellets or Preformed Charges in their firearms which exceed the number shown by Hodgdon and IMR. The Hodgdon Powder Company specifically disclaims any and all liability arising out of the use of any data that exceeds our data, and the user assumes all risk in doing so. If there is a question concerning the firearm maximum load, please contact the firearm manufacturer for guidance.

# PYRODEX, TRIPLE SEVEN AND BLACKHORN 209 GRANULAR POWDERS

- Pyrodex weighs approximately 70% as much as black powder. However, because Pyrodex yields more energy per
  pound than black powder, the same volume of Pyrodex gives similar performance to black powder. An adjustable
  black powder volumetric measure is the correct tool for measuring muzzleloader loads. All Pyrodex loads shown in
  this book for muzzleloading guns and cartridge guns are measured by volume and not weight.
- Triple Seven is a high-energy powder designed to provide the muzzleloading hunter serious knockdown power. To
  duplicate a black powder load velocity using Triple Seven, set the volumetric charge 15% lower than recommended for
  black powder. Triple Seven is loaded by volumetric measure, NOT by weight.
- Blackhorn 209 is loaded volumetrically, just like black powder. For loads above 120 volumetric units of Blackhorn 209 for use in modern high-performance muzzleloaders check with your gun manufacturer for load recommendations.
   Blackhorn 209 is loaded by volumetric measure, NOT by weight.
- Cartridge loads should be used exactly as listed in this book. Allow no airspace between the base of the bullet and powder. Do not compress powder charges. The use of filler wads, inert fillers or heavy compression may cause a dangerous situation, which could cause injury or death to the shooter or bystanders, or property damage.
- · Cartridge data with Triple Seven was specifically developed with FFG only.
- Do not create loads for cartridges not listed. Contact Hodgdon Powder Company for recommendations concerning other loads.





# HOW ACCURACY & VELOCITY GET IN-LINE.



# BLACKHORN 209 CHARGE TUBES

Each Charge Tube comes marked, graduated and ready to fill with Blackhorn 209, the low-residue, high-performance propellant specially formulated for in-line muzzleloaders with 209 shotshell primer ignition.

Built to load fast and clean up fast with regular solvent. So you can take charge of accuracy. Every time.