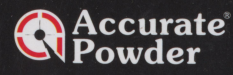


HODGDON®



2022 BASIC RELOADING MANUAL

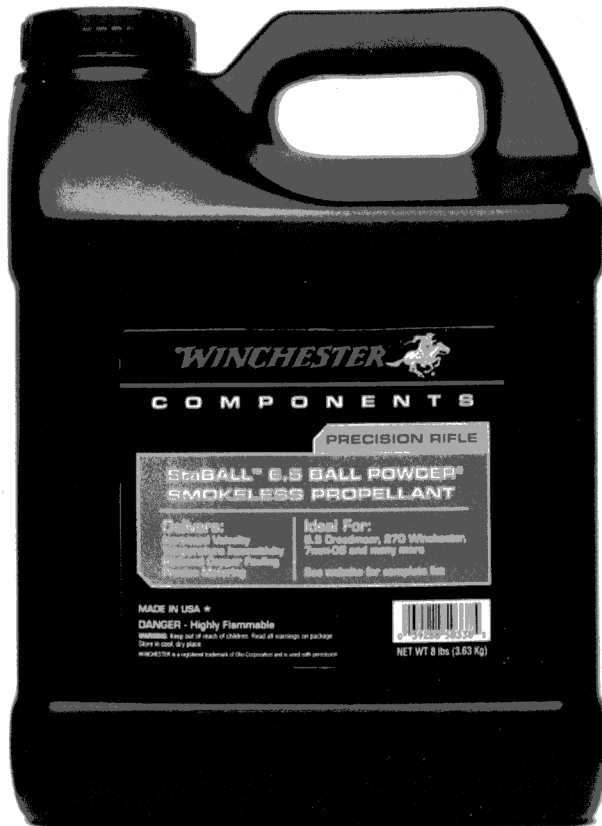




WINCHESTER.
SMOKELESS PROPELLANTS
FOR LOADING PROFESSIONALS

Winchester® StaBALL™ 6.5 Precision Rifle Propellant

- World's first temperature-insensitive BALL Powder®, stable in extreme hot or cold conditions
- Precise metering produces small velocity and pressure standard deviations
- Increased velocity
- Reduced copper fouling
- Environmentally "green"
- Available in 1-LB and 8-LB canisters



Ideal for 6 Creedmoor, 6 GT, 6.5 Creedmoor, 7MM-08, 270 Winchester and many more

winchesterpowder.com

Five Powder Reloading Manuals in One

Reloading data from FIVE – Hodgdon®, IMR®, Winchester®, RAMSHOT®, and Accurate® Smokeless Propellant – powder brands are included in this one reloading manual. Data is listed for many popular RIFLE, PISTOL and SHOTSHELL loads.

For the most comprehensive, up-to-date reloading data, including many new caliber introductions, please visit the Hodgdon Reloading Data Center at www.HodgdonReloading.com or call 913-362-9455 for technical service.



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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 will 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.

Shooters!

Guarantee the future of shooting by educating tomorrow's handloaders. Hodgdon Powder, Co. supports the NRA Foundation's Handloading Education Endowment Fund – you can too! Contact; Executive Director, The NRA Foundation, 11250 Waples Mill Road, Fairfax, VA 22030

About the Cover

The cover for our 75th Anniversary edition of our Basic Manual is a re-creation of a cover that was originally featured on the Hodgdon Shooters & Reloaders Catalog No. 10, published in 1969. This cover depicts our three founders – elder son J.B., father Bruce and younger son Bob – in our original ballistics lab located at 7710 West 50 Highway in Shawnee, KS.





Pistol & Shotgun Powders

In Order of Approximate Burning Rate

TITEWAD® Through advanced technology, Hodgdon Powder Co. has produced a superior flattened spherical shotgun powder. Unlike spherical propellants in the past, TITEWAD features low charge weights, mild muzzle report, minimum recoil and reduced residue for optimum ballistic performance. This outstanding propellant, designed for 12 gauge only, meters superbly and is ideal for 7/8, 1 and 1-1/18 ounce loads. As the name implies, "a little goes a long way!"

Hi-Skor 700-X® This extruded flake powder is ideally suited for shotshells in 12 and 16 gauge where clay target and light field loads are the norm. It doubles as an excellent pistol target powder for such cartridges as the 38 Special and 45 ACP and many more.

TRAIL BOSS® TRAIL BOSS was designed specifically for low velocity lead bullets suitable for Cowboy Action shooting. It is primarily a pistol powder but has some application in rifles. It is based on a whole new technology that allows very high loading density, good flow through powder measures, stability in severe temperature variation, and, most importantly, additional safety to the handloader.

CLAYS Introduced in January 1992, CLAYS has "taken the clay target world by storm." It is the most clean burning, consistent 12 gauge 7/8 oz., 1 oz. and 1-1/8 oz. powder available today. The superb burning characteristics of this powder produce soft, smooth recoil, ultra clean burning, mild muzzle report, and excellent patterns. These features transfer directly to handgun applications where target shooting is the main goal. 45 ACP and 38 Special are only two of the cartridges in which CLAYS provides "tack driving" target accuracy with flawless functioning.

INTERNATIONAL® INTERNATIONAL is the second in the "CLAYS" series of powders. Its burning speed accommodates 12 gauge, 2-3/4" light, medium and heavy 1-1/8 oz. loads, with some very nice 1 oz. listings. Also, it works splendidly in 20 gauge, 7/8 oz. target and light field loads. As with CLAYS, clean burning and flawless functioning is the rule.

TITEGROUP® As the name implies, this spherical propellant was designed for accuracy. Because of the unique design, this powder provides flawless ignition with all types of primers including the lead-free versions. Unlike pistol powders of the past, powder position in large cases (45 Colt, 357 Magnum and others) has virtually no effect on velocity and performance. Cowboy Action, Bullseye and Combat Shooters should love this one! TITEGROUP has it all

HP38® HP38 is a spherical pistol powder that is great for low velocity and mid-range target loads in 38 Special, 44 Special and 45 ACP. This high energy powder provides economy in loading.

UNIVERSAL® UNIVERSAL handles the broadest spectrum of cartridges for both pistol and shotgun. From the 25 ACP to the 44 Magnum, UNIVERSAL provides outstanding performance. In shotgun, it produces excellent loads in 28 gauge 3/4 oz., 20 gauge 7/8 oz., 16 gauge 1 oz., and even 12 gauge

CFE®PISTOL New for 2014, this excellent spherical pistol propellant utilizes our CFE formula, Copper Fouling Eraser, virtually eliminating copper fouling, plus providing top velocities with clean burning and minimal muzzle flash. For competitive shooters and handloaders seeking the perfect powder for target or self-defense loads, CFE Pistol provides optimum performance in cartridges like the 9mm Luger, 38 Super, 40 S&W, the venerable 45 ACP and many more.

HS-6® HS-6 is a fine spherical propellant that has wide application in pistol and shotshell.

In pistol, 9mm, 38 Super, 40 S&W and 10mm Auto are some of the cases where HS-6 provides top performance. In shotshell HS-6 yields excellent heavy field loadings in 10 gauge, 12 gauge, 16 gauge, 20 gauge, and even the efficient and effective 28 gauge HS-6 is truly an outstanding spherical propellant.

LONGSHOT® This new spherical shotshell powder is the most versatile heavy field propellant Hodgdon has ever produced. Great field loads in 10 gauge, 12 gauge, 16 gauge, 20 gauge, and 28 gauge are shown herein. This propellant provides true magnum velocities with superb patterns. In addition, LONGSHOT is the best choices for those competitors shooting "race" games such as "Buddy" shoots, "Annie Oakleys" and more.

H110® H110 is the spherical powder that screams "no wimps, please!" It delivers top velocities with top accuracy in the 44 Magnum, 454 Casull and 475 Linebaugh. Silhouette shooters claim it is the most accurate 44 powder they have ever used. In addition, H110 is "the" choice for the minuscule 410 bore shotgun. It handles all 2-1/2", 1/2 oz. loads as well as all 11/16 oz. loads for the 3" version.

LIL' GUN® The 410 bore has long been difficult to load due to shortcomings in powder fit, metering, along with poor burning characteristics. Not any more! LIL' GUN was designed to fit, meter and perform flawlessly in the 410 bore. No more spilled shot or bulged cases. In addition LIL' GUN has many magnum pistol applications and is superb in the 22 Hornet.

Rifle Powders

In Order of Approximate Burning Rate

CFE BLK® This new spherical propellant was designed expressly for the 300 Remington AAC Blackout cartridge. It provides full function of AR type rifles throughout the range of bullet weights, and is perfect for those sub-sonic reduced loads. In addition to being outstanding in the 300 Blackout, it performs beautifully in many smaller capacity cartridges, in particular, varmint specials such as the 17 Hornet, 17 Ackley Hornet, 218 Bee, 221 Fireball and many more. It also yields top performance in the 6.8 Remington SPC and the 7.62X39 MM Russian cartridge. This fine powder meters like a dream, and leaves no copper residue, extending accuracy for longer shooting periods, and making clean-up quick and easy. It is truly a remarkable new propellant!

H4198® This Extreme Extruded propellant has gone through some changes since its inception, all the time maintaining the same important burning speed of the past. The kernels were shortened for improved metering and necessary elements were added to make it extremely insensitive to hot/cold temperatures. H4198 is outstanding in cartridges like the 222 Remington, 444 Marlin and 7.62 x 39.

H322® This extreme powder has won more benchrest matches than all other propellants combined. It provides match grade accuracy in small and medium capacity cartridges like the 223 Remington, 6mm PPC and the 7mm TCU. As a fine extruded powder, it flows through powder measures with superb accuracy.

BENCHMARK® As the name implies, this Extreme Extruded propellant was developed for precision cartridges, such as benchrest and small varmint cartridges like the 6mm PPC, 22 PPC, 6mm BR, 22 BR, 223 Remington and 222 Remington. Additionally, it performs superbly in the 308 Winchester with light match bullets like the 147 gr. and 155 gr. versions. With small, easy metering granules, competitors will love how it flows through progressive presses.

H335® H335 originated as a military powder for the 5.56 NATO, or 223 Remington, as handloaders know it. Obviously, it sees endless use in the 222 Remington, 223 Remington and other small cartridges. In particular, prairie dog shooters will find this a favorite, as J.B. Hodgdon has for years!

H4895® H4895 is a most versatile rifle powder. This member of the Extreme Extruded line is great for 17 Remington, 250-3000 Savage, 308 Winchester and 458 Winchester, to name

Extreme Powders

just a few. It is amazingly accurate in every cartridge where it is listed in our data. It had its origin in the 30-06 as a military powder and was the first powder Bruce Hodgdon sold to the loading public.

VARGET® The first of Hodgdon's revolutionary Extreme Extruded Powders, VARGET features small extruded grains for uniform metering, insensitivity to hot/cold temperatures and higher energy for improved velocities over other powders in its burning speed class. Easy ignition and clean burning translate into superb accuracy, higher scores and more clean, one shot kills. Outstanding performance and velocity can be obtained in popular cartridges such as the 223 Remington, 22-250 Remington, 308 Winchester, 30-06, 375 H&H and many more.

BL-C(2) BL-C(2) is a spherical powder that began as a military powder used in the 7.62 NATO, commonly known as the 308 Winchester. When it was first introduced to the handloader, benchrest shooters and other target shooters made it an instant success. BL-C(2) works extremely well in the 223 Remington, 17 Remington, 22 PPC and of course, the 308 Winchester, plus many more.

CFE®223 Introduced in January 2012, this versatile, spherical rifle propellant incorporates in its formula CFE, Copper Fouling Eraser. This ingredient, originally used in military propellant, greatly deters copper fouling. It contributes to longer periods of top accuracy with less barrel cleaning time. Being a spherical powder, metering is superbly accurate. CFE 223 yields top velocities in many cartridges such as the 204 Ruger, 223 Remington/5.56mm NATO, 22-250 Remington and the 308 Winchester/7.62mm NATO, plus many, many more. Match, Varmint and AR shooters will love this one!

LEVEREVOLUTION® Hodgdon Powder Company and Hornady® Manufacturing have teamed together to answer the frequently asked reloading question; "Can I buy the powder used in Hornady LEVERevolution factory ammunition?" Yes, this is the same spherical propellant used in Hornady's innovative and award winning high performance factory ammunition. This fabulous propellant meters flawlessly and makes lever action cartridges like the 30-30 Winchester yield velocities in excess of 100 fps over any published handloads, with even greater gains over factory ammunition. Other cartridges include the 35 Remington, 308 Marlin Express, 338 Marlin Express and the 25-35 Winchester. The list of cartridges and bullets is limited with this highly specialized powder, but where it works, it really works!

H380® H380 was an unnamed spherical rifle propellant when the late Bruce Hodgdon first used it. When a 38.0 grain charge behind a 52 grain bullet gave one hole groups from his 22 caliber Wildcat (now called 22-250), he appropriately named the powder H380. H380 is also a superb performer in the 220 Swift, 243, 257 Roberts and other fine varmint cartridges.

H4350 The burning speed of this Extreme Extruded propellant has been known to shooters for decades. Over time, Hodgdon has modernized H4350 by shortening the grains for improved metering and making it insensitive to hot/cold temperatures. H4350 is great in cartridges such as the 243 Winchester, 6mm Remington, 270 Winchester, 338 Winchester Magnum and many more. For magnums with light to moderate weight bullets, it can't be beat!

HYBRID 100V This excellent new product is the result of combining the technologies of spherical powders and extruded propellants. The chemistry of a spherical powder is combined with the geometry of an extruded propellant, creating a smooth-metering, super short granule extruded shaped propellant with high energy. HYBRID 100V has a burn speed between H4350 and H4831, yielding superb performance in such popular calibers as 270 Winchester, 243 Winchester Super Short Magnum, 7mm Remington Magnum, 300 Winchester Magnum and dozens more.

H4831® It is probably safe to say more big game has been taken with H4831 than any other powder. Bruce Hodgdon was the first supplier to introduce this popular burning rate in 1950. Since that time, it has become a favorite for cartridges like the 270 Winchester, 25-06 Remington, 280 Remington and 300 Winchester Magnum. As an Extreme Extruded propellant it shares the fine quality of insensitivity to hot/cold temperatures, as well as superb

uniformity from lot to lot.

H4831SC® Ballistically, this Extreme Extruded powder is the exact copy of H4831. Physically, it has a shorter grain size, therefore, the designation SC, or short cut. The shorter, more compact kernels allow the powder to flow through powder measures more smoothly, helping to alleviate the constant cutting of granules. With the smoother flow characteristics comes more uniform charge weights while the individual grains orient more compactly, creating better loading density.

SUPERFORMANCE® This is another of the spherical powders Hodgdon® Powder Company and Hornady® Manufacturing introduced to answer the frequently asked reloading question: "Can I buy the powder used in Hornady Superformance factory ammunition?" Superformance delivers striking velocities in cartridges like the 22-250 Remington, 243 Winchester and 300 Winchester Short Magnum. Velocities well in excess of 100 fps over the best published handloads and even larger gains over factory ammunition! Because this propellant is tailored for specific applications, the number of cartridges and bullets is limited, but where it works, it really works!

H1000® This very slow-burning Extreme Extruded powder is perfect for highly over-bored magnums like the 7mm Remington Magnum, 7mm STW and the 30-378 Weatherby. In addition, with heavy bullets, H1000 gives top velocity and performance in such cartridges as the 6mm-284, 257 Weatherby, 270 Winchester, and 300 Winchester Magnum. In a short period of time this powder has achieved considerable notoriety among long range match shooters.

RETUMBO® This magnum powder was designed expressly for the really large over-bored cartridges such as the 7mm Remington Ultra Magnum, 300 Remington Ultra Magnum, 30-378 Weatherby Magnum, etc. RETUMBO adds 40-100 fps more velocity to these cartridges when compared with other normal magnum powders. In addition, it is an Extreme Powder, making it perfect for big game hunting under all types of conditions.

US869® This spherical powder is superb with heavy bullets in big, over-bore, magnum rifle cartridges. Because it is very dense, it allows the shooter to use enough powder to create true magnum loads. US869 is also used in the 50 caliber BMG, where it yields high velocity and great accuracy with 750 and 800 grain projectiles. A truly great 1000-yard competition propellant.



In the shooting world there are two kinds of people. Those who like to plink around, with little or no regard to accuracy and consistency. And then there are those who take the discipline of shooting to a whole new extreme. Shooters, not unlike yourself, who sense changes in performance with changes in the weather. People who recognize lot differences in certain powders with a single pull of the trigger. For those discriminating few, Hodgdon is proud to offer the Extreme Series. This exclusive line of extruded powders was developed with extreme conditions in mind. They're manufactured so you can't tell the difference in performance from one lot to the next. And whether you're hunting deer in the dead of winter or prairie dogs in the middle of July, you'll get the same consistent performance, load after load. Some would say our obsession with performance is a bit extreme. We couldn't agree more.

TEMPERATURE EXTREMES

You live in the "real" world, where 12-point bucks are rare and it's never 70° when you decide to fire your rifle. Where you shoot it's either freezing cold or burning hot. Not exactly ideal conditions for your rifle, or you for that matter. Fortunately, Hodgdon's Extreme powders perform just as well at 125° as they do at 0°. Using an exclusive extrusion process and exacting quality standards, Hodgdon has created a line of propellants that performs better at hot and cold temperatures than any other powder on the market. So when you sight in your rifle this summer, you can count on unbeatable accuracy this winter.

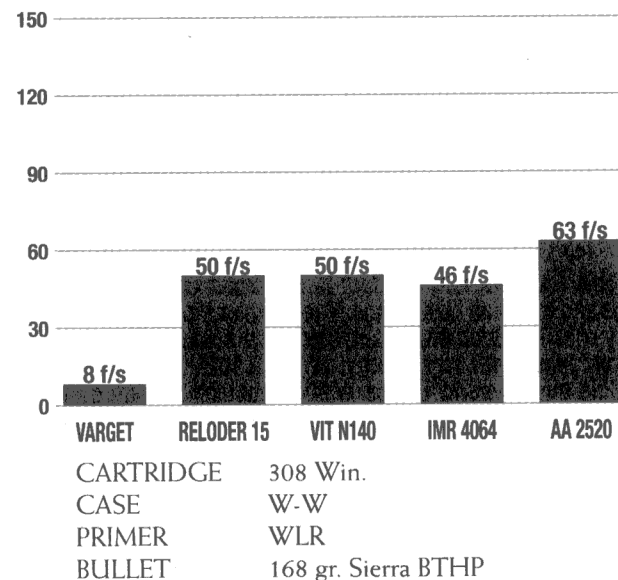
LOT CONSISTENCY

Hodgdon goes through painstaking measures to ensure that all powder is consistent from lot to lot. And while the casual user may never notice, you certainly will. No matter when you purchase Hodgdon powder, you can feel confident that the performance you receive from one lot will match that of another.

SHORT GRAIN METERING

With Hodgdon Extreme powders you get the best of both worlds. On one hand you get extruded performance that outperforms the best long grain powders on the market in any kind of weather. On the other, the shorter grains produced in the extrusion process meter extremely well. That means you can use Extreme powders in progressive loaders for high volume loading. Whether you're loading for targets, big game, plinking or varmints, Hodgdon has an extruded powder that will work for you.

**EXTREME VELOCITY SPREAD
FOR TEMPERATURES BETWEEN 0°-125°**





HODGDON
THE BRAND THAT'S TRUE

Rifle Usage

	TARGET	SILHOUETTE	LIGHT	MEDIUM	MAGNUM	50 CAL.
TRAIL BOSS	X		X			
Lil' Gun			X			
CFE BLK	X		X			
H4198	X		X			
H322	X	X	X	X		
BENCHMARK	X	X	X	X		
H335	X	X	X	X		
H4895	X	X	X	X		
VARGET	X	X	X	X		
BL-C(2)	X	X	X	X		
CFE 223	X	X	X	X		
LEVEREVOLUTION	X	X	X	X		
H380		X				
H4350		X		X	X	
HYBRID 100V		X		X	X	
H4831				X	X	
H4831 SC				X	X	
SUPERFORMANCE				X	X	
H1000				X	X	
RETUMBO					X	
US869					X	X

Shotgun Usage

	TARGET				LIGHT FIELD				HEAVY FIELD						
	12 GA	20 GA	28 GA	410 BORE	12 GA	16 GA	20 GA	28 GA	410 BORE	10 GA	12 GA	16 GA	20 GA	28 GA	410 BORE
CLAYS	X				X										
TITWAD	X				X										
Hi-SKOR 700X	X				X	X									
INTERNATIONAL	X	X			X		X								
TITEGROUP	X				X										
UNIVERSAL	X	X	X		X	X	X	X							
HS-6			X			X	X	X			X				
LONGSHOT	X	X	X							X	X	X	X	X	
Lil'Gun				X					X					X	X
H110				X					X						X

Pistol Usage

	TARGET	LIGHT DUTY	MEDIUM DUTY	MAGNUM
CLAYS	X	X		
Hi-SKOR 700X	X	X		
TITEGROUP	X	X		
TRAIL BOSS	X	X		
UNIVERSAL	X	X	X	
HP-38	X	X	X	
HS-6		X	X	
CFE PISTOL	X	X	X	X
Lil'Gun			X	X
H110			X	X



LEGENDARY POWDERS

Pistol & Shotgun Powders

In Order of Approximate Burning Rate

IMR 4227 This is the Magnum Pistol Powder in the IMR lineup. If it says Magnum, IMR 4227 is the choice for true magnum velocities and performance. In rifles this powder delivers excellent velocity and accuracy in such cartridges as the 22 Hornet and 221 Fireball.

Rifle Powders

In Order of Approximate Burning Rate

IMR 4198 This fast burning rifle powder gives outstanding performance in cartridges like the 222 Remington, 221 Fireball, 45-70, and 450 Marlin. Varmint shooters with small-bore cartridges love it.

IMR 3031 A propellant with many uses, IMR 3031 has long been a favorite of 308 Match shooters using 168-grain match bullets. It is equally effective in small-capacity varmint cartridges from 223 Remington to 22-250 Remington, and it's a great 30-30 Winchester powder.

IMR 8208 XBR® The latest in the versatile IMR line of fine propellants, this accurate metering, super short grained rifle powder was designed expressly for match, varmint, and AR sniper cartridges. Ideally suited for cartridges like the 223 Remington/5.56mm, 308 Winchester/7.62mm NATO and the 6mm PPC, shooters will find IMR 8208 XBR totally insensitive to changes in temperature, while yielding max velocities and "tack driving" accuracy. Clearly, the competitor's "choice" and the Varmint Hunter's "dream powder".

IMR 4895® Originally a military powder featured in the 30-06, IMR 4895 is extremely versatile. From the 17 Remington to the 243 Winchester to the 375 H&H Magnum, accuracy and performance are excellent. In addition, it is a longtime favorite of Match shooters.

IMR 4166 This fine, extruded propellant is the first in the series of Enduron Technology powders. The main features of the Enduron Technology series are copper fouling reducer, insensitivity to temperature changes, ideal loading density and being environmentally friendly. IMR 4166 is the perfect burn speed for cartridges like the 308 Win/7.62mm NATO, 22-250 Remington, 257 Roberts and dozens more. Positively, a versatile, match grade propellant.

IMR 4064® The most versatile propellant in the IMR line, used for 223 Remington, 22-250 Remington, 220 Swift, 6mm Remington, 243 Winchester Super Short Magnum, 308 Winchester, 338 Winchester Magnum, and the list goes on and on. Versatility with uniformity and accuracy.

IMR 4350 The number one choice for the new short magnums, both Remington and Winchester versions. For magnums with light to medium bullet weights, IMR 4350 is the best choice.

IMR 4451 Another new Enduron Technology extruded powder, IMR 4451, gives top performance in the venerable 30-06, 270 Winchester and 300 Winchester Short Magnum, to name just a few. This propellant is ideally suited for many, many mid-range burn speed cartridges. Simply scroll through the list of cartridges on the Hodgdon Reloading Data Center, and see how many of your favorite cartridges are covered with this fine powder. Once the shooter tries this one in that favorite cartridge, his search is over!

IMR 4831® Slightly slower in burn speed than IMR4350, IMR 4831 gives top velocities and performance with heavier bullets in medium-sized magnums.

IMR 4955 This new Enduron extruded powder is a top PERFORMER with such great cartridges as the 270 Winchester, 25-06 Remington, 280 Remington and 300 Winchester Magnum, and many, many more. It falls directly between IMR 4451 and IMR 7977 in burn speed, providing top performance for all cartridges used for big game. As with all Enduron powders, it is temperature insensitive, clean burning, minimizes copper fouling and is totally safe for the environment. Adding this propellant to the Enduron line filled in an important place in the chart. IMR 4955, plus the original three, provides top loading for cartridges from 223

Remington to the massive 500 Nitro Express Magnum.

IMR 7828 SSC® This magnum rifle powder has exactly the same burn rate as standard IMR 7828 and uses the same data. However, due to the super short kernels, its burning is virtually as good as a spherical powder. This allows up to 4% more powder space in the case and in many loads yields more velocity than standard 7828. Such loads are marked with an asterisk in the data to show where standard 7828 will not fit.

IMR 7977 The slowest burn rate Enduron Technology extruded powder and a true magnum cartridge propellant. Yields outstanding performance in such cartridges as the 300 Winchester Magnum, 7mm Remington Magnum, 338 Lapua and a host of others. Loading density is perfect for magnums, nicely filling the case at maximum charges, contributing to superb uniformity and accuracy.

IMR 8133 The latest IMR Legendary Powder, IMR 8133, is an Enduron Technology powder. It was designed to provide optimum performance in the large overbored cartridges like the 300 Remington Ultra Magnum, 6.5mm-300 Weatherby Magnum, 28 Nosler and a host of other fine magnum cartridges. It provides excellent loading density, copper fouling eliminator, insensitivity to extreme temperature changes and is environmentally friendly. It is, without equal, the consummate big game cartridge propellant.



LEGENDARY POWDERS

Rifle Usage

	TARGET	SILHOUETTE	LIGHT	MEDIUM	MAGNUM	50 CAL.
IMR 4227			X			
IMR 4198	X		X			
IMR 3031	X	X	X	X		
IMR 8208 XBR	X	X	X	X		
IMR 4895	X	X	X	X		
IMR 4166	X	X	X	X		
IMR 4064	X	X	X	X		
IMR 4350		X		X	X	
IMR 4451		X		X	X	
IMR 4831				X	X	
IMR 4955				X	X	
IMR 7828 SSC				X	X	
IMR 7977				X	X	
IMR 8133					X	

Shotgun Usage

	TARGET				LIGHT FIELD				HEAVY FIELD						
	12 GA	20 GA	28 GA	410 BORE	12 GA	16 GA	20 GA	28 GA	410 BORE	10 GA	12 GA	16 GA	20 GA	28 GA	410 BORE
IMR 4227				X					X						X

Pistol Usage

	TARGET	LIGHT DUTY	MEDIUM DUTY	MAGNUM
IMR 4227			X	X

WINCHESTER.

SMOKELESS PROPELLANTS

FOR LOADING PROFESSIONALS

Pistol & Shotgun Powders

In Order of Approximate Burning Rate

WST® The choice for 12 gauge AA duplicate handloads and standard velocity handgun loads. Ideal for use in 45 Auto match applications. Consistent, clean, low flash and smoke are benefits to the shooter.

244™ This new Winchester pistol powder has all the latest features for a mid-range, burn speed, propellant. Winchester 244 BALL Powder® Propellant is a WINCLEAN® product with a host of attributes, including reduced copper fouling, clean burning and precise metering. The versatility of this fine powder can be found in 9mm Luger, 45 ACP, 38 Special and many, many more pistol cartridges. From plinking rounds to top competitive target loads, 244 is a "Clean" winner!

231® One of the most popular reloading propellants, 231 is a pistol powder ideally suited to the 38 Special, 45 Auto, and 9mm standard loads. Consistency, clean burning, low flash, and a broad range of applications make this a powder of choice for any pistol cartridge reloader.

SUPER HANDICAP™ Super Handicap is the same propellant used in Winchester's Super Handicap ammunition. This slow-burning, high energy propellant gives the shooter great handicap or long range sporting clays loads at up to 1250 fps with a 1-1/8 ounce shot charge. Great velocity with excellent patterns!

AUTOCOMP™ AutoComp is a new high performance powder optimized for semi-auto pistol competition and self defense. It yields faster split times with improved compensator gas volume in calibers like 9mm Luger, 40 S&W, 38 Super and 45 ACP. All this with less muzzle flash and clean burning!

WSF® Super-Field propellant is the propellant of choice for Winchester 20 gauge AA Target loads. WSF is an ideal choice to maximize velocities in 12 gauge 1-1/8 ounce and 1-1/4 ounce loads. Super-Field also performs well in 38 Super, 9mm, and 40 S&W pistol loads. Excellent propellant for action pistol applications.

572™ This new Winchester powder is strategically designed to do a myriad of jobs. First it has the correct burn rate to create the famous 3-3/4 dram equivalent, 1-1/4 oz, 1330 fps 12 gauge load, originated by Winchester. And, it does it with any brand case! Back Fence competitors and pheasant hunters will be delighted. Now, that is just one application, and it goes on to provide clay target loads superb in 20 gauge and 28 gauge, top field loads in both, and, outstanding field loads for the wonderful 16 gauge. It even is used to duplicate the always popular 28 gauge WAAHS target load. In addition, 572 has a vast number of pistol applications, ranging from the 25 ACP to the 45 ACP, and all popular calibers in between. This is one positively versatile and useful propellant.

296® This propellant was developed for Winchester factory-loaded ammunition for 357 Magnum, 44 Magnum, and 410 bore. Its high loading density provides optimal velocity. 296 is recommended by Winchester for 410 bore AA loads.

Rifle Powders

In Order of Approximate Burning Rate

748® 748 is the powder of choice for 223 Remington ammunition. The low flame temperature of 748 extends barrel life compared to other similar speed powders. It is ideal for a wide variety of centerfire rifle loads, including 222 Remington, 30-30 Winchester, 308 Winchester, and up to 485 Winchester Magnum.

760® Combine Winchester components with 760 to duplicate 30-06 Springfield factory load ballistics. 760 has ideal flow characteristics that give it an advantage over other propellants with similar burn rates. 760 is recommended as an excellent choice for 22-250 Remington, 300 Winchester Magnum, as well as 300 WSM.

StaBall™ 6.5 Never before, has a BALL Powder propellant been temperature insensitive, but now, StaBALL 6.5 is stable in all conditions, hot or cold! Case fill/loading density is 93-100% in all cartridges appropriate for the burn speed, creating the perfect condition for small standard deviations in velocity and pressure, a key element in achieving bench rest accuracy. Like all spherical powders, it meters precisely. It provides speed that eclipses all powders in its burn speed class, (30-200 fps), along with a copper fouling reducing additive. Stability, precision and speed makes Winchester's new StaBALL 6.5 powder the "Best of the Best"!

Top performance is achieved in these cartridges, 6 Creedmoor, 6.5 Creedmoor, 270 Win., 7mm-08 Rem., 375 H&H, plus many, many more. Long Range competitive shooters and hunters will find this is THE powder for top performance at all ranges, and all conditions!.

WINCHESTER.
SMOKELESS PROPELLANTS
 FOR LOADING PROFESSIONALS

Rifle Usage

	TARGET	SILHOUETTE	LIGHT	MEDIUM	MAGNUM	50 CAL.
748	X	X	X	X		
760		X	X	X	X	
StABALL 6.5	X	X	X	X	X	

Shotgun Usage

	TARGET				LIGHT FIELD					HEAVY FIELD					
	12 GA	20 GA	28 GA	410 BORE	12 GA	16 GA	20 GA	28 GA	410 BORE	10 GA	12 GA	16 GA	20 GA	28 GA	410 BORE
WST	X				X										
SUPER HANDICAP	X				X										
WSF	X	X			X	X					X				
572	X	X	X		X	X	X	X			X	X	X	X	
296				X					X						X

Pistol Usage

	TARGET	LIGHT DUTY	MEDIUM DUTY	MAGNUM
WST	X	X		
231	X	X	X	
244	X	X	X	
AUTOCOMP	X	X	X	
WSF	X	X		
572	X	X	X	
296			X	X



Pistol & Shotgun Powders

In Order of Approximate Burning Rate

RAMSHOT COMPETITION is an extremely clean burning powder for 12 gauge target shooters. A double-base modified (flattened) spherical propellant, it is designed for the 12 gauge competitive clay target shooter who demands a clean burning powder with low recoil and consistent performance. It is a low bulk density powder that is also well suited for many low pressure, low velocity Cowboy Action loads. Made in USA.

RAMSHOT SILHOUETTE is the choice for competitive shooters in IPSC, IDPA and USPSA. A double base high performance spherical powder, its an excellent choice for 9mm Luger, 38 Super, 40 S&W and 45 ACP. Silhouette's low flash, high velocity and clean burning characteristics make it a perfect choice for indoor ranges and law enforcement applications. Made in the USA.

RAMSHOT TRUE BLUE® is the perfect powder for classic calibers such as the 38 Special, 44 Special, and 45 Long Colt. It's a double-base, spherical powder with great metering properties that make it an ideal choice for consistent results using high volume, progressive reloading equipment. It works well with cast bullets and is also an excellent choice for 9mm law enforcement rounds. Made in Belgium.

RAMSHOT ZIP® is a clean burning, double-base propellant designed for a wide range of handgun calibers. Low charge weights make it the most economical and versatile choice for high volume shooters with the added benefit of low recoil, low flash and minimum residue. 9mm, 40 S&W, and 45 ACP are just a few of the cartridges that are well-matched with this powder. Made in Belgium.

RAMSHOT ENFORCER® is the best choice for high performance, full power loads in magnum handgun cartridges. It is ideally suited for the 44 Magnum, 454 Casull, 460 S&W, and the 500 S&W. It's a double-base spherical powder with excellent metering qualities that meets the performance expectations of serious magnum handgun shooters. Made in Belgium.

Rifle Powders

In Order of Approximate Burning Rate

X-TERMINATOR® is a double-base spherical powder designed for the high volume 223 varmint hunter who demands a clean burning, accurate powder. Excellent flow characteristics and small grain size allow trouble-free loading in small diameter case necks. It performs extremely well with light to medium weight bullets in the 223 Remington. It is also an excellent choice for 17 Remington, 20 caliber cartridges, 222 Remington and the 45-70 Government. Made in Belgium.

TAC® is a double-base spherical propellant that sets the standard for extreme accuracy and reliability with heavy bullets in the 223 Remington and match applications in 308 Winchester. Excellent flow characteristics ensure consistent metering and charge weights for repeatable results with progressive loading equipment. It is the choice for shooters who demand precision and accuracy. Made in Belgium.

RAMSHOT BIG GAME® is the ultimate 30-06 Springfield powder. Outstanding velocities and optimum case-fill result in excellent shot to shot consistency. These properties also allow it to outperform the competition in the popular 22-250 Remington and other calibers in this range.

It's an extremely clean burning, double-base spherical powder with outstanding metering properties. Made in Belgium.

RAMSHOT HUNTER is a double-base, clean burning, high performance propellant that is perfect for elk country cartridges such as the 270 Winchester, 300 WSM and 338 Win Mag. It's the only spherical powder in the popular 4350 burn range making it an ideal powder for a wide range of cartridges. The excellent flow characteristics allow accurate metering and consistent shot-to-shot results. Made in Belgium.

RAMSHOT MAGNUM is the ultimate high performance magnum rifle powder. It provides outstanding performance from the popular 7mm Rem Mag and 300 Win Mag through the Remington Ultra Mags and 338 Lapua. It is a double-base spherical propellant that is the number one choice for high performance "overbore" magnum cartridges. Made in Belgium.

RAMSHOT LRT® is one of the slowest spherical powders ever developed and was created for high performance at extreme ranges. Designed specifically for the 338 Lapua Magnum using heavy, high ballistic coefficient bullets. LRT offers high load densities and low standard deviations for superior accuracy. Hunters who prefer the advantages of overbore magnums like the 257 Weatherby or 30 Nosler will find that LRT meters more easily and produces flatter trajectories than rival propellants.



Rifle Usage

	TARGET	SILHOUETTE	LIGHT	MEDIUM	MAGNUM	50 CAL.
X-TERMINATOR	X	X	X	X		
TAC	X	X	X	X		
BIG GAME		X		X	X	
Hunter				X	X	
MAGNUM			X	X		
LRT					X	X

Shotgun Usage

	TARGET				LIGHT FIELD				HEAVY FIELD						
	12 GA	20 GA	28 GA	410 BORE	12 GA	16 GA	20 GA	28 GA	410 BORE	10 GA	12 GA	16 GA	20 GA	28 GA	410 BORE
COMPETITION	X				X										

Pistol Usage

	TARGET	LIGHT DUTY	MEDIUM DUTY	MAGNUM
SILHOUETTE	X	X		
TRUE BLUE	X	X		
ZIP	X	X	X	
ENFORCER			X	X



Pistol & Shotgun Powders

ACCURATE Nitro 100 NF® is a fast burning, flattened spherical, double-base shotshell powder that is a clean burning, cost-effective choice for all 12 gauge target applications.

ACCURATE No. 2® is an extremely fast burning, double-base, spherical handgun powder suitable for use in a wide range of handgun calibers. Low recoil and low flash make No. 2 well suited for use in short barrel, concealed carry applications. No. 2 is a non-position sensitive powder and low charge weights make it an economical and versatile choice for high volume handgun shooters. Made in the USA.

ACCURATE No. 5® is a fast burning, double-base, spherical handgun propellant. This powder is extremely versatile and can be used in many handgun calibers. No. 5 offers a wide performance range from target and Cowboy Action applications to full power defense loads. This powder meters well and strikes a good balance between ballistics and cost efficiency. Made in the USA.

ACCURATE No. 7® is an intermediate burning, double-base, spherical powder suitable for a wide range of handgun calibers. No. 7 is an excellent choice for high performance semi-auto handguns such as the 357 Sig, 38 Super, and 40 S&W. No. 7 is also a cost effective solution in larger magnum handgun calibers. Made in the USA.

ACCURATE TCM® was created in 2017, when Western Powders partnered with Armscor International to provide a canister-grade propellant for their innovative .22 TCM cartridge. Producing 2,000 fps at the muzzle with virtually no recoil, this accurate and fun little cartridge brings handgun performance to a new level for small game hunting and plinking. Accurate TCM also has a place with old favorites, with data for hunting loads in .357 Magnum, .41 Magnum and high-pressure .45 Colt cartridges. Made in the USA.

ACCURATE No. 9® is a double-base, spherical powder that is ideal for high power loads in traditional magnums such as the 357 Mag, 41 Rem Mag and 44 Rem Mag. It is particularly well suited to the 357 Sig and 10mm Auto, providing high velocities and excellent case-fill. No. 9 can also be used with large magnums such as the 460 S&W and 500 S&W for economical target loads. Made in the USA.

ACCURATE 4100 is a double-base, slow burning spherical powder with exceptional metering characteristics. 4100 is an excellent choice for high performance, full power loads in magnum handgun cartridges. It is ideally suited for the 357 Mag, 41 Mag, 44 Mag, 454 Casull, 460 S&W and the 500 S&W. Made in Belgium.

Rifle Powders

ACCURATE 5744® is an extremely fast burning, double-base, extruded powder. This unique powder can be used in a wide range of rifle calibers and magnum handguns. 5744 is characterized by excellent ignition and consistency over a very wide performance range. Low bulk density and superior ignition characteristics make 5744 an excellent choice for reduced loads in many rifle calibers and in large capacity black powder cartridges such as the 45-70 through 45-120 and 50-90 through 50-120. Made in Canada.

ACCURATE 1680 is an extremely fast burning, double-base, spherical rifle powder that is well suited for large capacity, high performance handgun cartridges such as the 454 Casull, 460 S&W and 500 S&W. 1680 is also an excellent choice for the 22 Hornet and 7.62 x 39, as well as other low-capacity rifle cartridges. Made in the USA.

ACCURATE LT-30 is the second powder in Accurate's line of benchrest-grade Light Target powders and is optimized for use in the .30 BR cartridge. While still in its development phase, LT-30 was used to win numerous matches, even claiming a world record along the way. With a burn rate similar to 4198, this single-base fine grained powder is at home in many smaller capacity cartridges from the 6.5 Grendel to the .222 Remington.

ACCURATE 2200, a varmint hunting favorite, is an excellent choice for many cartridges including the .223 Remington, 6.5 Grendel and 6.8 SPC. Spherical granules allow precise metering and easy flow through small cartridge necks, making Accurate 2200® ideal for use in progressive loaders.

ACCURATE LT-32® is a fine-grained extruded powder that was developed for 6mm PPC benchrest competitors. Already a proven match winner, LT-32's excellent shot-to-shot consistency and low standard deviations provide the ultimate competitive edge. Due to its small grain size, LT-32 flows like a spherical powder and allows for very precise handloading. It also offers outstanding accuracy in varmint and tactical cartridges, including the .223 Rem and .308 Win. LT-32 is the perfect choice for extreme accuracy.

ACCURATE 2015® is a fast burning, single-base, extruded rifle powder that performs very well in small to medium varmint calibers (223 Rem, 204 Ruger). 2015 is a popular choice for first-class performance in benchrest calibers and is also recommended for use in large bore straight wall cartridges (45-70, 458 Win Mag). 2015 offers excellent ignition characteristics and shot-to-shot consistency. Made in Canada.

ACCURATE 2230® is a fast burning, double-base, spherical rifle propellant. This versatile powder was designed around the 223 Remington, but can be used in many small and medium caliber cartridges including the 308 Winchester. 2230 also works well in big bore straight wall cartridges such as the 458 Winchester. The excellent flow characteristics and grain size of 2230 make it ideal for progressive loading. Made in Belgium.

ACCURATE 2460 is a fast burning, double-base, spherical rifle powder that is a slower derivative of the AA2230 powder. It is suitable for small and medium sized caliber applications but with slightly higher loading densities than AA2230. It provides an additional option for shooters to fine tune and optimize loads and combinations with calibers ranging from the 223 Rem, 308 Win and for light bullets in the 30-06 Springfield. 2460 is within the threshold limit for M14 systems. Made in the USA.

ACCURATE 2495 is a single-base, extruded rifle powder that was developed for the 308 Win and can be used over a wide range of rifle calibers. It is a very popular powder for 308 Win. NRA High Power shooting disciplines, as well as heavy bullet 223 Rem target applications. 2495 is a versatile powder with excellent ignition characteristics that provides excellent shot-to-shot consistency. Made in Canada.

ACCURATE 4064® is an intermediate burning, single-base, short cut extruded rifle powder designed around the 30-06 Springfield. This versatile powder works extremely well in calibers such as 22-250, 220 Swift, 243 WSM, 7x57 Mauser and the 325 WSM. 4064 is a popular choice for High Power shooters using the M1 Garand. Made in Canada.

ACCURATE 2520 is a medium burning, double-base, spherical rifle propellant designed around the 308 Winchester. 2520 is our "Camp Perry" powder and is extremely popular with many service shooters. 2520 also performs extremely well in 223 Remington with heavy match bullets (62 to 80 grain). This versatile powder has superb flow characteristics and is well within the threshold limit for the M14 systems. Made in Belgium.

ACCURATE 2700 is a medium burning, double-base, spherical rifle powder that is ideally suited for the 30-06 Springfield and other medium capacity calibers such as the 22-250 Remington, 220 Swift, and the 243 Winchester. 2700 provides excellent velocities and performance in the Winchester Super Short Magnum cartridges. Made in the USA.

ACCURATE 4350® is a short cut, single-base, extruded rifle powder in the extremely popular 4350 burn range. A highly versatile powder, 4350 can be used in a wide range of cartridges from the popular 243 Win to the 338 Win Mag with excellent results. Accurate 4350® is an exceptional choice for the 6mm Rem, 270 Win, 280 Rem and 300 WSM. This short cut extruded powder meters accurately, resulting in excellent shot-to-shot consistency. Made in Canada.

ACCURATE MAGPRO is a slow burning, double-base, spherical rifle powder developed specifically for the Short magnums of both Winchester (WSM) and Remington (SAUM). This powder excels in the 6.5 x 284, 270 WSM and the 7mm WSM. MAGPRO is an excellent choice for belted cartridges such as the 300 Win Mag. Consistent performance can be expected from the excellent metering properties of MAGPRO. Made in the USA.



Rifle Usage

	TARGET	SILHOUETTE	LIGHT	MEDIUM	MAGNUM	50 CAL.
ACCURATE 5744	X		X	X		
ACCURATE 1680	X		X			
ACCURATE LT-30	X	X	X			
ACCURATE 2200	X		X			
ACCURATE LT-32	X	X	X			
ACCURATE 2015	X	X	X	X		
ACCURATE 2230	X	X	X	X		
ACCURATE 2460	X	X	X	X		
ACCURATE 2495	X	X	X	X		
ACCURATE 4064	X	X	X	X		
ACCURATE 2520	X	X	X	X		
ACCURATE 2700		X		X	X	
ACCURATE 4350		X		X	X	
ACCURATE MagPro				X	X	

Shotgun Usage

	TARGET				LIGHT FIELD					HEAVY FIELD					
	12 GA	20 GA	28 GA	410 BORE	12 GA	16 GA	20 GA	28 GA	410 BORE	10 GA	12 GA	16 GA	20 GA	28 GA	410 BORE
NITRO 100 NF	X														

Pistol Usage

	TARGET	LIGHT DUTY	MEDIUM DUTY	MAGNUM
ACCURATE NO.2	X	X	X	
ACCURATE NO.5		X	X	
ACCURATE NO.7	X	X	X	
ACCURATE TCM		X	X	X
ACCURATE NO.9			X	X
ACCURATE NO.11 FS			X	X

Smokeless Propellant Properties

Smokeless powders, or propellants, are essentially mixtures of chemicals designed to burn under controlled conditions at the proper rate to propel a projectile from a gun.

Smokeless powders are made in three forms:

1. Thin, circular flakes or wafers
2. Small cylinders
3. Small spheres

Single-base smokeless powders derive their main source of energy from nitrocellulose.

The energy released from double-base smokeless powders is derived from both nitrocellulose and nitroglycerin.

All smokeless powders are extremely flammable; by design, they are intended to burn rapidly and vigorously when ignited.

Oxygen from the air is not necessary for the combustion of smokeless powders since they contain sufficient built-in oxygen to burn completely, even in an enclosed space such as the chamber of a firearm.

In effect, ignition occurs when the powder granules are heated above their ignition temperature. This can occur by exposing powder to:

1. A flame such as a match or primer flash.
2. An electrical spark or the sparks from welding, grinding, etc.
3. Heat from an electric hot plate or a fire directed against or near a closed container even if the powder itself is not exposed to the flame.

When smokeless powder burns, a great deal of gas at high temperature is formed. If the powder is confined, this gas will create pressure in the surrounding structure. The rate of gas generation is such, however, that the pressure can be kept at a low level if sufficient space is available or if the gas can escape.

In this respect smokeless powder differs from blasting agents or high explosives such as dynamite or blasting gelatin, although smokeless powder may contain chemical ingredients common to some of these products.

High explosives such as dynamite are made to detonate, that is, to change from solid state to gaseous state with evolution of intense heat at such a rapid rate that shock waves are propagated through any medium in contact with them. Such shock waves exert pressure on anything they contact, and, as a matter of practical consideration, it is almost impossible to satisfactorily vent away the effects of a detonation involving any appreciable quantity of dynamite.

Smokeless powder differs considerably in its burning characteristics from common "black powder."

Black powder burns essentially at the same rate out in the open (unconfined) as when in a gun.

When ignited in an unconfined state, smokeless powder burns inefficiently with an orange-colored flame. It produces a considerable amount of light brown noxious smelling smoke. It leaves a residue of ash and partially burned powder. The flame is hot enough to cause severe burns.

The opposite is true when it burns under pressure as in a cartridge fired in a gun. Then it produces very little smoke, a small glow, and leaves very little or no residue. The burning rate of smokeless powder increases with increased pressure.

If burning smokeless powder is confined, gas pressure will rise and eventually can cause the container to burst. Under such circumstances, the bursting of a strong container creates effects similar to an explosion.

How to Check for Deterioration

Although modern smokeless powders are basically free from deterioration under proper storage conditions, safe practices require a recognition of the signs of deterioration and its possible effects.

Powder deterioration can be checked by opening the cap on the container and smelling the contents. Powder undergoing deterioration has an irritating acidic odor. (Don't confuse this with common solvent odors such as alcohol, ether and acetone.)

Check to make certain that powder is not exposed to extreme heat as this may cause deterioration. Such exposure produces an acidity which accelerates further reaction and has been known, because of the heat generated by the reaction, to cause spontaneous combustion.

Never salvage powder from old cartridges and do not attempt to blend salvaged powder with new powder. Don't accumulate old powder stocks.

The best way to dispose of deteriorated smokeless powder is to burn it out in the open at an isolated location in small shallow piles (not over 1" deep). The quantity burned in any one pile should never exceed one pound. Use an ignition train of slow burning combustible material so that the person may retreat to a safe distance before powder is ignited. For more instructions call Hodgdon Powder.

Consideration for Storage

Smokeless powder is intended to function by burning, so it must be protected against accidental exposure to flame, sparks or high temperatures.

For these reasons, it is desirable that storage enclosures be made of insulating materials to protect the powder from external heat sources.

Once smokeless powder begins to burn, it will normally continue to burn (and generate gas pressure) until it is consumed.

D.O.T. approved containers are constructed to open up at low internal pressures to avoid the effects normally produced by the rupture or bursting of a strong container.

Storage enclosures for smokeless powder should be constructed in a similar manner:

1. Of fire-resistant and heat-insulating materials to protect contents from external heat.
2. Sufficiently large to satisfactorily vent the gaseous products of combustion which would result if the quantity of smokeless powder within the enclosure accidentally ignited.

If a small, tightly enclosed storage enclosure is loaded to capacity with containers of smokeless powder, the walls of the enclosure will expand or move outwards to release the gas pressure – if the powder in storage is accidentally ignited.

Under such conditions, the effects of the release of gas pressure are similar or identical to the effects produced by an explosion.

Hence only the smallest practical quantities of smokeless powder should be kept in storage, and then in strict compliance with all applicable regulations and recommendations of the National Fire Protection Association.

Shipping and Storage of Smokeless Propellants

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14.3 Smokeless Propellants

14.3.1 Quantities of smokeless propellants not exceeding 11.3 kg (25 lb) in shipping containers approved by the U.S. Department of Transportation shall be permitted to be transported in a private vehicle.

14.3.2 Quantities of smokeless propellants exceeding 11.3 kg (25 lb), but not exceeding 22.7 kg (50 lb), transported in a private vehicle shall be transported in a portable magazine having wood walls of at least 25.4 mm (1 in.) nominal thickness.

14.3.3 Transportation of more than 22.7 kg (50 lb) of smokeless propellants in a private vehicle shall be prohibited.

14.3.4 Commercial shipments of smokeless propellants for small arms that has been classed in Division 1.3 shall be permitted to be re-classed as Division 4.1 flammable solid for transportation purposes for shipment by motor vehicle, rail car, vessel, or cargo-only aircraft, subject to the conditions stated in the U.S. Department of Transportation 49 CFR 173.171.

14.3.5 Commercial shipments of smokeless propellants exceeding 45.4 kg (100 lb) or not packaged in accordance with the regulations cited in 14.3.4 shall be transported in accordance with the U.S. Department of Transportation regulations for Division 1.1 or 1.3 explosives.

14.3.6 Smokeless propellants shall be stored in shipping containers specified by U.S. Department of Transportation "Hazardous Materials Regulations."

14.3.7 Quan

14.3.7.1 Smokeless propellants intended for personal use in quantities not exceeding 9.1 kg (20 lb) shall be permitted to be stored in original containers in residences.

14.3.7.2 Quantities exceeding 9.1 kg (20 lb), but not exceeding 22.7 kg (50 lb), shall be permitted to be stored in residences where kept in a wooden box or cabinet having walls of at least 25.4 mm (1 in.) nominal thickness.

14.3.8 Not more than 22.7 kg (50 lb) of smokeless propellants, in containers of a 0.45 kg (1 lb) maximum capacity, shall be displayed in commercial establishments.

14.3.9 Commercial stocks of smokeless propellants shall be stored as follows:

- (1) Quantities exceeding 22.7 kg (50 lb), but not exceeding 45.4 kg (100 lb), shall be stored in portable wooden boxes having walls of at least a 25.4 mm (1 in) thickness.
- (2) Quantities exceeding 45.4 kg (100 lb), but not exceeding 363 kg (800 lb), shall be stored in non-portable storage cabinets having walls of at least 25.4 mm (1 in) thickness.
- (3) Not more than 181 kg (400 lb) shall be permitted to be stored in any one cabinet, and cabinets shall be separated by a distance of at least 7.63 m (25 ft) or by a fire partition having a fire resistance of at least 1 hour.
- (4) Quantities exceeding 363 kg (800 lb) but not exceeding 2268 kg (5000 lb) shall be permitted to be stored in a building, provided the following requirements are met:
 - (a) The warehouse or storage room shall not be accessible to unauthorized personnel.
 - (b) Smokeless propellants shall be stored in non-portable storage cabinets having wood walls of at least 25.4 mm (1 in.) thickness and having shelves with no more than 0.92 m (3 ft) of separation between shelves.
 - (c) No more than 181 kg (400 lb) shall be stored in any one cabinet.
 - (d) Cabinets shall be located against the walls of the storage room or warehouse with at least 12.2 m (40 ft) between cabinets.
 - (e) The separation between cabinets shall be permitted to be reduced to 6.1 m (20 ft) where barricades twice the height of the cabinets are attached to the wall, midway between each cabinet.
 - (f) The barricades shall extend at least 3 m (10 ft) outward, shall be firmly attached to the wall, and shall be constructed of 6.4 mm (1/4 in) boiler plate, 51 mm (2 in.) thick wood, brick, or concrete block.
 - (g) Smokeless propellants shall be separated from materials classified by the U.S. DOT as flammable liquids, flammable solids, and oxidizing materials by a distance of 7.63 m (25 ft) or by a fire partition having a fire resistance of at least 1 hour.
 - (h) The building shall be protected by an automatic sprinkler system installed in accordance with NFPA 13, Standard for the Installation of Sprinkler Systems.
- (5) Smokeless propellants not stored in accordance with 14.3.9(1) through 14.3.9(4) shall be stored in a Type 4 magazine constructed and located in accordance with Chapter 9.

Rifle and Pistol Data

All data for rifle and pistol is arranged with bullets from lightest to heaviest and powders listed with burning rates from slowest to fastest for quick and easy use. Each cartridge is conveniently indexed for rapid location.

Primarily, the data for this edition were developed through the use of pressure barrels. All loads for standard U.S. cartridges adhere to the guidelines provided by the Sporting Arms and Ammunition Manufacturer's Institute (S.A.A.M.I.). Maximum loads for wildcat cartridges and cartridges not covered by S.A.A.M.I., were obtained by visual case-head signs, such as flat or cratered primers, difficult extraction and measured case heads.

Pressures were gauge by one of two methods: mechanically with Copper Units of Pressure (CUP) or electronically with a transducer as Pounds per Square Inch (PSI). CUP is determined by using a copper slug called a "crusher". The crusher is placed in a fixture over the chamber where a hole passes through the barrel to the chamber. When the cartridge is fired, gases swell and cause the crusher to flatten. The results are compared to a Tarage Table and converted to pressure in CUP. The electronic method utilizes

force transducer, which rests against the cartridge in the chamber. When the cartridge is fired, the gases cause the brass to expand against the force transducer, and the results are measured in pounds per square inch (PSI). The two systems do not provide the same maximum number for each cartridge, so no correlation can be made between systems. However, each cartridge has a standard for both systems, and therefore, actual maximums are physically the same.

When working up a load, the reloader should always begin with the starting load, advance in small increments, watch for pressure signs and begin again if changing components. Generally, the best powder choice is the powder that most nearly fills the case for the intended velocity. Most cartridges have only a certain number of appropriate powders. Those cartridges that are more versatile can use a wider range of burning speeds. For others, lesser numbers of propellants will give optimum results.

Most often, slower-burning powders are more suitable with heavy bullets, while faster powders are better with lighter bullets. Of course, most reloaders like a powder that delivers near-maximum or maximum results throughout the range of bullets, but that is not always obtainable, since some cartridges (like the 30-06) have too wide a range of bullets for any one burning rate to be ideal.

The reloader who seriously loads for any given rifle/pistol will choose different components (primers, powders, bullets, cases) in varying combinations to obtain the best overall performance and accuracy. After all, the reloader reloads to save money, but also reloads to improve accuracy and performance, creating special loads he cannot find on the dealer's shelves.

Warnings - Rifle, Pistol

- Hodgdon® Powder, IMR® Powder and Winchester® Powder expressly disclaim any and all warranties with respect to any and all products sold or distributed by them, the safety or suitability thereof, or the results obtained including, without limitation, any implied warranty of merchantability or fitness for a particular purpose and/or any other warranty. Buyers and users assume all risk, responsibility and liability whatsoever for any and all injuries (including death), losses or damages to persons or property (including consequential damages), arising from the use of any product or data, whether or not occasioned by seller's negligence or based on strict liability or principles of indemnity or contribution. Hodgdon®, IMR® and Winchester® powders neither assume nor authorize any person to assume for it any liability in connection with the use of any product or data.
- For all powders, use only the components shown. If the reloader makes any changes in components or gets new lot numbers, he should begin again with the starting loads and work up to maximum cautiously. Never exceed maximum charges.
- For those loads listed where a starting load is not shown, start 10 percent below the suggested maximum load and then approach maximums carefully, watching for any sign of pressure (difficult extraction, cratered and flattened or blown primer, and unusual recoil).
- Never mix any two powders regardless of type, brand, or source. Never substitute any smokeless powder for Black Powder or any Black Powder substitute.
- Powder left in the reloader's powder measure hoppers for extended periods, overnight or several days, should be avoided. Powder needs to be stored in original containers ONLY when not in use. Numerous modern smokeless powders are double base in construction, containing both Nitrocellulose and Nitroglycerine. Many powder measures use plastics containing polystyrene, which Nitroglycerine adversely affects when contact is made for extended periods of time, resulting in etching or misshaping the plastic. Normal usage during the reloading process does not provide adequate time for this to occur, so simply draining hoppers into the original containers when the reloading is completed for the day, prevents damaging the hoppers.
- Trail Boss® was designed to work in specific charge weight ranges. Do not use charges less than the starting load shown, nor greater than the maximum shown.
- For plated bullets, such as the fine line of Berry's Bullets, use existing lead data for the same weight plated bullet.

- When asterisk (*) appears in the title of the cartridge, or in the data, refer to the warning page. Those warnings are as follows:
 - *40 S&W: This data is intended for use in firearms with barrels that fully support the cartridge in the chamber. Use of this data in firearms that do not fully support the cartridge may result in bulged cases, ruptured cases, case-head separation or other condition that may result in damage to the firearm and /or result in injury or death of the shooter and/or bystanders.
 - *45 Colt: *45 Colt data is listed in two categories. The first is intended for original Colt revolvers and their replicas. Max pressure, is 14,000 CUP.
- The second category is *45 Colt (Ruger Blackhawk, Freedom Arms and Thompson/Center Contender/Encore handguns. Max pressure, 30,000 CUP. Do not use these data in any other make or model of firearm.
- *45-70 Government data usage: 45-70 data is listed in the following three divisions based on pressure levels for only the firearms intended:
 - *45-70 Government (Trapdoor Rifle): These data are intended for Springfield "Trapdoor", Rolling Block and Antique Replicas. Max pressure, 28,000 CUP.
 - *45-70 Government (Lever Action): These data are intended for the 1895 lever action Marlin, ONLY. Max pressure, 40,000 CUP. Do not use these data in any of the firearms listed in the Trapdoor section. Do not use pointed bullets in any rifle with a tubular magazine, unless that pointed bullet was designed with a collapsible tip, made for tubular magazines.
 - *45-70 Government (Modern Rifles): These data are only for Ruger No. 1 and No. 3 single-shot rifles, Browning 1885 single-shots and Siamese bolt-action rifles. Max pressure, 50,000 CUP. Do not use these data in either of the prior two sections of 45-70 data (Trapdoor and Lever Actions).
 - *26 Nosler and *6.5mm-300 Weatherby Magnum: Do not reduce starting loads, as doing so can result in pressure spikes that may result in damage to the firearm or injury to the user and/or bystanders.
 - ***Do not use pointed bullets in any rifle with a tubular magazine, unless that pointed bullet was designed with a collapsible tip, made for tubular magazines.
- Max loads listed that show an asterisk (*) following the "C" for compressed loads with IMR 7828 SSC will not fit with the standard IMR 7828. Reduce by four percent.

Warnings - Shotshell

- No data shown in the lead shot data section should be used with steel, bismuth, or other non-toxic shot.
- Never substitute components (except where indicated) when loading shotshells using the data herein. Substitution of different components could cause excessive or dangerous pressures, which could damage or destroy your firearm, or cause serious personal injury, or even death to the user and/or bystanders.
- After choosing an appropriate load, be sure to weigh actual charges thrown by a bushing or charge bar. No bushing or charge bar throws the exact charge as listed in the bushing/charge bar charts. Such changes occur because of small tolerances in bushing sizes, tolerances in bulk density of powder, and the way each loader is mounted and operated. It is important to verify weights for safety and to insure getting the type load you want.

Glossary of Terms

Data

C - Compressed Powder Charge

Primers

LR - Large Rifle
 LRM - Large Rifle Magnum
 SR - Small Rifle
 SRM - Small Rifle Magnum
 LP - Large Pistol
 LPM - Large Pistol Magnum
 SP - Small Pistol
 SPM - Small Pistol Magnum

Brands

ACME - Acme Bullets
 BAR - Barnes
 BTB - Beartooth Bullets
 BERB - Berry's Bullets
 BER - Berger
 BLX - Bull-X
 CEB - Cutting Edge Bullets
 CPB - Cast Performance Bullets
 FA - Freedom Arms
 HDY - Hornady
 JLK - Jimmy Knox
 LGH - Lehigh Defense
 LY - Lyman
 MEI - Meister
 NOS - Nosler
 PLCYS - Polycase
 REM - Remington
 SIE - Sierra
 SFIRE - Sure Fire
 SFT - Swift
 SPR - Speer
 WDLGH - Woodleigh
 WIN - Winchester

Bullets

AB - Accu-Bond
 ABLR - Accubond Long Range
 AFSP - A-Frame Semi Spitzer
 A-Max - Hornady Match
 ARX - Polycase Defense
 BK - Blitz King
 BR - Bench Rest
 BT - Ballistic Tip
 BTLF - Ballistic Tip Lead Free
 BTSP - Boat Tail Spire Point
 CTD - Coated
 ELD-M - Extremely Low Drag Match
 ELD-X - Extremely Low Drag Expanding
 E-TIP - Polymer Tipped Bullet
 FBHP - Flat Base Hollow Point
 FBT - Flat Base Tipped
 FMC - Full Metal Case
 FMJ - Full Metal Jacket
 FMJBT - Full Metal Jacket Boat Tail
 FN - Flat Nose
 FP - Flat Point
 FPJ - Full Plated Jacket
 FS - Fail Safe
 FTX - Flex Tip
 GC - Gas Check
 GDHP - Gold Dot Hollow Point
 GDSP - Gold Dot Soft Point

GMX - Gilding Metal Expanding
 GS - Grand Slam
 HAP - Hornady Action Pistol
 HB - Hollow Base
 HC - Hollow Cavity
 HP - Hollow Point
 HPBT - Hollow Point Boat Tail
 HSP - Hollow Soft Point
 IB - Inter Bond
 JFP - Jacketed Flat Point
 JHC - Jacketed Hollow Cavity
 JRN - Jacketed Round Nose
 JSP - Jacketed Soft Point
 JSWC - Jacketed Semi-Wadcutter
 LBBWC - Lead Bevel Base Wadcutter
 LCN - Lead Conical Nose
 LF - Lead Free
 LFN - Lead Flat Nose
 LFNPB - Lead Flat Nose Plain Base
 LFP - Lead Flat Point
 LHBWC - Lead Hollow Base Wadcutter
 LRN - Lead Round Nose
 LSWC - Lead Semi-Wadcutter
 MC - Metal Case
 MK - Match King
 MRX - Maximum Range X Bullet
 MT-SP - Mag Tip Soft Point
 NTX - Non Toxic Expanding
 PART - Partition
 PSPCL - Pointed Soft Point "Core-Lokt"
 RAPTOR - CEB all Copper
 RN - Round Nose
 SB - Solid Base
 SBP - Spitzer Boat Tail
 SCENAR - Lapua Hollow Point
 SCENARL - Lapua Hollow Point Long Range
 SCIR - Scirocco
 SJ - Short Jacket
 SMP - Semi-Pointed
 SP - Soft Point, Spitzer, Spire Point
 SPBT - Soft Point Boat Tail
 SSP - Single Shot Pistol
 SST - Super Shock Tip
 ST - Silvertip
 SX - Super Explosive
 TAC X-BT - Tactical X Bullet Boat Tail
 TAC-XP - Tactical X Pistol
 TMJ - Totally Metal Jacket
 TMK - Tipped Match King
 TNT - Varmint Bullet
 TSX - Triple Shock X Bullet
 VG - Varmint Grenade
 VLD - Very Low Drag
 V-MAX - Varmint Express
 VPRTRL - Vapor Trail Bullets

WC - V Vetter
 W/GC - V Gas Check
 X - X Bullet
 XBT - X Boat Tail
 XBTC - X Boat Tail Coated
 XD - Extreme Defense
 XFB - X Flat Base
 XPB - X Pistol Bullet
 XTP - Extreme Terminal Performance

Relative Burn Rate

From Fastest to Slowest

1	NORMA R1	40	VIHTAVUORI 3N37	79	IMR 3031	118	IMR 4451	157	HODGDON US869
2	VIHTAVUORI N310	41	VIHTAVUORI N350	80	VIHTAVUORI N133	119	ALLIANT RELODER 16	158	ALLIANT RELODER 50
3	ACCURATE NITRO 100	42	VIHTAVUORI 3N38	81	HODGDON BENCHMARK	120	HODGDON H4350	159	VIHTAVUORI 20N29
4	ALLIANT e3	43	WINCHESTER 572	82	HODGDON H335	121	ALLIANT RELODER 17		
5	HODGDON TITWAD	44	ALLIANT BLUE DOT	83	RAMSHOT X-TERMINATOR	122	ACCURATE 4350		
6	RAMSHOT COMPETITION	45	ACCURATE NO. 7	84	ACCURATE 2230	123	NORMA 204		
7	ALLIANT RED DOT	46	ALLIANT PRO REACH	85	ACCURATE 2460	124	HODGDON HYBRID 100V		
8	ALLIANT PROMO	47	HODGDON LONGSHOT	86	IMR 8208 XBR	125	WINCHESTER StaBALL 6.5		
9	HODGDON CLAYS	48	ALLIANT 410	87	ALLIANT AR COMP	126	VIHTAVUORI N550		
10	ALLIANT CLAY DOT	49	ACCURATE TCM	88	RAMSHOT TAC	127	ALLIANT RELODER 19		
11	HODGDON HI-SKOR 700-X	50	ALLIANT 2400	89	ALLIANT POWER PRO VARMINT	128	IMR 4831		
12	ALLIANT BULLSEYE	51	RAMSHOT ENFORCER	90	HODGDON H4895	129	RAMSHOT HUNTER		
13	HODGDON TITEGROUP	52	VIHTAVUORI N105	91	VIHTAVUORI N530	130	ACCURATE 3100		
14	ALLIANT AMERICAN SELECT	53	ACCURATE NO. 9	92	IMR 4895	131	VIHTAVUORI N160		
15	RAMSHOT SILHOUETTE	54	ACCURATE 4100	93	VIHTAVUORI N135	132	NORMA 205		
16	ACCURATE SOLO 1000	55	ALLIANT STEEL	94	ALLIANT RELODER 12	133	HODGDON H4831 & H4831SC		
17	ALLIANT GREEN DOT	56	NORMA R123	95	ACCURATE 2495	134	HODGDON SUPERFORMANCE		
18	RAMSHOT TRUE BLUE	57	VIHTAVUORI N110	96	IMR 4166	135	IMR 4955		
19	WINCHESTER WST	58	HODGDON LIL' GUN	97	IMR 4064	136	NORMA MRP		
20	HODGDON TRAIL BOSS	59	HODGDON H110	98	NORMA 202	137	ALLIANT RELODER 22		
21	WINCHESTER SUPER HANDICAP	60	WINCHESTER 296	99	ACCURATE 4064	138	NORMA MRP2		
22	HODGDON INTERNATIONAL	61	IMR 4227	100	ACCURATE 2520	139	VIHTAVUORI N560		
23	VIHTAVUORI N320	62	ALLIANT POWER PRO 300-MP	101	ALLIANT RELODER 15	140	ALLIANT RELODER 23		
24	ACCURATE NO.2	63	ACCURATE 5744	102	NORMA 203B	141	VIHTAVUORI N165		
25	RAMSHOT ZIP	64	ACCURATE 1680	103	VIHTAVUORI N140	142	IMR 7828SC		
26	WINCHESTER 231	65	ACCURATE LT-30	104	HODGDON VARGET	143	ALLIANT RELODER 25		
27	ALLIANT 20/28	66	HODGDON CFE BLK	105	WINCHESTER 748	144	VIHTAVUORI N170		
28	WINCHESTER 244	67	NORMA 200	106	HODGDON BL-C(2)	145	ACCURATE MAGPRO		
29	ALLIANT UNIQUE	68	ACCURATE 2200	107	HODGDON CFE 223	146	IMR 7977		
30	HODGDON UNIVERSAL	69	ALLIANT RELODER 7	108	ALLIANT POWER PRO 2000-MR	147	ALLIANT RELODER 26		
31	ALLIANT POWER PISTOL	70	ACCURATE LT-32	109	HODGDON LEVEREVOLUTION	148	HODGDON H1000		
32	VIHTAVUORI N330	71	IMR 4198	110	HODGDON H380	149	RAMSHOT MAGNUM		
33	ALLIANT HERCO	72	HODGDON H4198	111	RAMSHOT BIG GAME	150	HODGDON RETUMBO		
34	WINCHESTER WSF	73	VIHTAVUORI N120	112	VIHTAVUORI N540	151	IMR 8133		
35	VIHTAVUORI N340	74	ALLIANT POWER PRO 1200-R	113	ALLIANT POWER PRO 4000-MR	152	RAMSHOT LRT		
36	ACCURATE NO. 5	75	HODGDON H322	114	WINCHESTER 760	153	VIHTAVUORI N570		
37	HODGDON HS-6	76	ACCURATE 2015BR	115	VIHTAVUORI N150	154	ALLIANT RELODER 33		
38	WINCHESTER AUTOCOMP	77	ALLIANT RELODER 10X	116	ACCURATE 2700	155	VIHTAVUORI 24N41		
39	HODGDON CFE PISTOL	78	VIHTAVUORI N130	117	IMR 4350	156	HODGDON H50BMG		

SHOTSHELL data

Shotshell loading data is shown in a format that provides convenient indexing of the load components and performance. Loads are listed in the following sequence:

- Gauge – largest to smallest
- Length – shortest to longest hull length
- Alphabetical order listing by hull manufacturer
- Shot Weight – lightest to heaviest
- Alphabetical order listing by primer manufacturer

For every load component set, multiple velocity levels are shown. Factory standard velocities are given to allow the handloader to duplicate their favorite offerings. Additional velocity levels may also be listed so the handloader can adjust load performance faster or slower than the standard factory loads.

A common concern with shotshell is recoil. Recoil can be controlled significantly through the use of lower shot weights and lower velocity levels. This shotshell loading data contains a number of such loads for those who want reduced recoil. Note that lower recoil loads may not function semi-automatic shotguns.

Primarily, the data for this edition was developed through the use of pressure barrels. All loads for standard U.S. cartridges adhere to the guidelines provided by the Sporting Arms and Ammunition Manufacturers' Institute (S.A.A.M.I.).

Wad Chart

The following chart shows wads designed to perform as replacements for current popular models as listed in the ensuing data.

BP/SPTG16: BP ULTRA SHORT EURO	BPG/BP, BPG/BP, BP/CS125, G/BP16, SG16	WAA12:	CB1118-12, CBO118-12, WT12, BLUE DUSTER, DRA12, DR XL 1 1/8 BLUE, MEC 118T4, MEC118BIOT4
FEDERAL 12C1:	CB3118-12AR	REMINGTON TGT12:	DRT12, CB 8100-12
FEDERAL 12S0:	CB2100-12, DR XXL ORANGE, DR HFO, DR FO, MEC100S4	WAA12SL:	CB1100-12, GREEN DUSTER, JAMMER XL-1, DR XL1 GREEN, SG-1, DRA 12 PINK, MEC100T4, MEC100BIOT4
FEDERAL 12S3:	CB2118-12, DRF3, DR HF3, MEC118T8	WAA12L:	CB0178-12, DR XXL PINK, MEC78T4
HOR. VERSALITE:	DRV-12	WAA12F114:	CB1114-12, DRA-12 YELLOW
HOR. VERSALITE 20:	DRV-20	WAA20:	CB1078-20, YELLOW DUSTER
PATTERN CONTROL RED:	PC-12-POST	WAA28:	CB1034-28, RED DUSTER
REMINGTON TGT 12:	CB8100-12, DR RT 12, DR RHT 12	WAA28HS:	CB5034-28HS
REMINGTON FIG 8:	CB8118-12, DR RF8, DR HRF8, CB3118-12A, MEC118T8	WAA41, WAA410HS, SP410, 410SC:	CB5050-410 HS
REMINGTON SP 20:	REMINGTON SP20S	WAA16:	CB0100-16
WAA12R:	CB1138-12	WINDJAMMER:	CB4118-12B, DR WJRPL, SG-12
WAA12F114:	CB1114-12, DRA 12 YELLOW	WINDJAMMER LIGHTNING:	CB 4100-12B

Notes on Recoil

In physics we learned that for every force there is an equal and opposite force. In a firearm, the gases generated by burning powder push the ejecta (shot and wad) down the barrel and in turn push the shotgun in the opposite direction creating what we call recoil. According to physics, the momentum of a free recoiling firearm is equal and opposite in direction to the momentum of the ejecta and powder charge. The formula for free recoil of a firearm is:

$$\text{Recoil Energy in ft. lbs.} = \frac{(\text{Bw Mv} + 4700 \text{ Pw})^2}{64.348 \text{ Gw}}$$

Where Gw = the weight of the gun in pounds
 Bw = weight of the ejecta (shot and wad) in pounds
 Pw = powder weight in pounds
 Mv = muzzle velocity in feet per second

Example: Our shooter has an 8 lb. target gun with a load using 18.0 grs. of Clays, a wad weighing 33.0 gr., shot charge of 1 1/8 oz. and giving 1200 f/s muzzle velocity. First, we must convert the ejecta weight to lbs. (1 1/8 oz. = 492.0 gr.) Dividing grains by 7000 converts to pounds.

$$\begin{aligned} \text{Gw} &= 8 \text{ lb.} \\ \text{Bw} &= \frac{492.0 + 33.0}{7000} = \frac{525}{7000} = .075 \text{ lb.} \\ \text{Pw} &= \frac{18}{7000} = .003 \text{ lb.} \\ \text{Mv} &= 1200 \text{ ft/sec} \end{aligned}$$

Substituting the numbers in the formula we find the
 Recoil energy of the shooters load = $[(.075 \times 1200) + (4700 \times .003)]^2 = 21.05 \text{ ft/lbs}$
 64.348×8

Unfortunately, too many shooters think that pressure has an effect on recoil. In truth, it doesn't. It is not included in the formula for calculating recoil as noted in our example. However, there are factors that effect our perception of recoil. A major factor is muzzle blast. Clean burning powders help limit muzzle blast, are quieter, and therefore seem lower in recoil.

Some people think slow burning powders produce less recoil. What they are perceiving is the longer time it takes the powder to reach peak pressure, which gives the same recoil as a faster burning powder, just over a longer period of time. Others like the faster burning powders which peak quicker, although still the same recoil, just a shorter period of recoil. Perception can be everything to a shooter, so he should shoot what he "feels" is the most comfortable. That is why Hodgdon has a complete range of powders to cover all perceptions and needs.

The only real way to lessen recoil is to lower velocities, or lessen shot charge, or both.

Lee

BUSHING #	CLAYS	INTER	UNIV	HS-6	H110	TITWAD	LIL' GUN	572/ LGSH	TITE GRP	700-X	IMR RED	IMR GRN	IMR BLUE	WST	WSF	SUPER HCP
0.095	10.7	12.3	15.2	21.9	22.5	12.4	23.5	19.1	18.4	10.9	11	12.3	18	12.1	18.1	17.4
0.1	11.3	13	16	23	23.7	13	24.7	20.1	19.2	11.5	11.6	13	19	12.7	19	18.3
0.105	11.8	13.7	16.8	24.2	24.9	13.7	26	21.1	20	12	12.2	13.6	19.9	13.4	20	19.2
0.11	12.4	14.3	17.6	25.3	26.1	14.3	27.2	22.1	20.8	12.6	12.8	14.3	20.8	14	21	20.1
0.116	13	15.1	18.5	26.7	27.5	15.1	28.7	23.3	21.7	13.3	13.5	15.1	22	14.8	22.1	21.3
0.122	13.7	15.9	19.5	28.1	28.9	15.9	30.2	24.5	22.9	14	14.2	15.8	23.1	15.6	23.2	22.4
0.128	14.4	16.6	20.4	29.4	30.3	16.7	31.7	25.7	24.1	14.7	14.8	16.6	24.3	16.3	24.4	23.5
0.134	15	17.5	21.4	30.8	31.8	17.5	33.1	26.9	25.3	15.4	15.5	17.4	25.4	17.1	25.5	24.6
0.141	15.8	18.4	22.5	32.4	33.4	18.4	34.9	28.3	26.5	16	16.4	18.3	26.7	18.1	26.9	25.9
0.148	16.6	19.3	23.6	34	35.1	19.3	36.5	29.8		16.7	17.2	19.2	28	19	28.2	27.2
0.151	16.7	19.6	24			19.7	37.2	30.4		17.1				19.4	28.8	27.7
0.155	17.3	20.1	24.7	35.7	36.7	20.4	38.2	31.1		17.5	18	20.1	29.4	19.9	29.6	28.5
0.163	18.2	21.1	25.9	37.5	38.6	21.4	40.2	32.7		18.4	18.9	21.2	30.9	21	31.2	30
0.171	19.1	22	27.1	39.3	40.5	22.5	42.1	34.2		19.3	19.8	22.2	32.4	22	32.9	31.5
0.18	20.1	23.1	28.5	41.4	42.7	23.6	44.4	36.1		20.4	20.9	23.4	34.1	23.2	34.4	33.2
0.189	21.2	24.1	29.9	43.5	44.8		46.6	37.9		21.4	21.9	24.5	35.8	24.3	36.2	34.8
0.198	22.1	25.2	31.3	45.5	46.9	26	48.8	39.7		22.4	23	25.7	37.5	25.5	37.7	36.5

INTERNATIONAL---INTER
 UNIVERSAL---UNIV
 LONGSHOT---LGSH
 IMR GREEN---IMR GRN
 TITEGROUP---TITE GRP

Ponsness
 Warren

BUSHING #	CLAYS	INTER	UNIV	HS-6	H110	TITWAD	LIL' GUN	572/ LGSH	TITE GRP	700-X	IMR RED	IMR GRN	IMR BLUE	WST	WSF	SUPER HCP
1AX							12									
2AX							12.7									
3AX							13.1									
1A					13.7											
2A					14.8											
3A				15.3	15.6		15	13								11.8
A				16.8	17.5		17.8	15								13.5
B				17.6			18.1	15.5	14.5							13.8
C			12.5	18.5			19.6	16.5	15				14.7			14.8
C1			13	19.6			20.1	17	16				15.3		16.4	15.5
D			13.2	20.4			21.4	17.3	16.3				16.1		16.6	15.7
D1			14	21.3			22.4	18.2	17				16.4	12.6	17.7	17
E			15.7	23.5			25.2	20.7	19.4				18.4	14.1	20.1	19
E1			16.2	24			26.5	21.6	20		11.6	11.7	19.2	14.6	20.8	19.8
E2			17.2	26.1		14.7	27	22.8	21.3	12.9	12.2	12.3	20.1	15.2	21.9	20.9
F			18.1	27.5		15.6	27.9	24.2	22.7	13.9	12.9	13.1	21.3	16.4	23.2	22.1
F1			18.3	28.3		15.8		24.4	22.9	14	13.4	13.6	22.2	16.5	23.4	22.2
F2						16.4		25.3	23.5	14.6	13.7	13.8	22.6	16.9	24.2	23.1
F6			18.9													
G			20.2	31.2		17.4		26.8	24.7	15.6	14.5	14.7	23.9	18.1	25.7	23.3
G1			20.6	32.7		17.7		27.1		15.9	14.7	14.9	24.3	18.5	26	24
H	16	18.5	22	34		18.9		29		17.1	15.7	15.9	25.9	19.7	28	
I	16.7	19.3	22.8	34.4		19.6		30		17.6	16.5	16.7	27.2	20.3	29	
J	17.2	19.8	23.9	35.5		20.3		31.2		18.4	16.8	17	27.7	20.9	30.2	
J1	17.6	20.3	24.5	36.9		21		32		19.2	17.3	17.5	28.5	21.7	31.1	
K	17.8	20.6	24.8	37.1		21.3		32.5		19.5	17.6	17.9	29.1	22	31.8	
L	18.7	21.6	25.7	39.5		22.2		34		20.1	18.5	18.8	30.6	23.1		
M	19.7	22.5	26.8	41.2		23.4		35.7		21.5	19.4	19.6	31.9	24.6		
N	20.8	23.7	28.2			25.2		38		22.9	20.7	21.1	34.2			
O	21	24	28.5					38.5			20.9	21.3	34.5			
P	21.5	24.5						39.9			21.3	21.8	35.2			
Q	21.9	25						40.1			21.9	22.3	36			
R								41.8			22.9	23.2	37.5			
S								42.5				23.6	38.1			
T								45.4				25.3	40.7			
U												26.5	42.5			
V													43.8			
W													46.5			
X													47.2			
Y													49.5			
Z													55.7			

INTERNATIONAL---INTER
 UNIVERSAL---UNIV
 LONGSHOT---LGSH
 IMR GREEN---IMR GRN
 TITEGROUP---TITE GRP

Hornady/ Spolar

GRS	CLAYS	INTER	UNIV	HS-6	H110	TITEWAD	LIL GUN	572 LGSH	TITE GRP	700-X	IMR RED	IMR GRN	IMR BLUE	WST	WSF	SUPER HCP
11		333						266								
12		348					250	272			384	363		333		300
13		363	330		256		259				393	378		348		
13.5							266	291						354		309
14		375	342		266		272	300		405	390			360		318
14.7									318					318	372	321
15		390	354			384		309	324	408	423	405		378		324
16	429	402	366			396	291	318	330	420	438	420	336	387		336
16.5	435	408	372			402	300	327	336	423			342	393	330	339
17	441	414	378	300		408		330	342	429	453	435		399	336	342
17.4	447	417	384			414	303	336	345	435			348	405	339	348
18	456	423	390	309		420	309	339	351	441	468	447		411	345	354
18.5	462	429	393			426		345	357	447			360	417	348	360
19	468	435	402	318		432		348	360	450	480	456		423	354	363
19.4	474	438	405			435	318	354	363	459			366	426	357	369
20	483	447	411	327		441		357	369	465	489	468		432	363	372
20.6	489	453	417			450	330	363	375	468			381	441	369	375
21	495	459	420	336		453		366	378	471	498	480		444	372	381
21.5	501	465	423			459	333	369	381	474			390	450	378	384
22	507	471	429	345		462		372	387	486	510	492		456	381	390
22.5		477	432			468	345	378	390				396	459	387	396
23		483	438	351		474		381	396		519	501	408	465	390	399
23.5		489	441				351	384	399				468	396	405	
24		495	447	360		486	354	390	405		513	414	474	399	406	
24.5		501	450			489		393					477	402		
25		507	456	366		492	366	396			522	423	483	408		
26		468	375				372	405			534	435		417		
27		480	381				381	414					441	423		
28		489	387					423					447	429		
29			501	393				429					459	438		
30				402				435					468	444		
31				408				444					474	450		
32				414				450					483	456		
33				423				459					489	459		
34				429				465					495			
35				435				471					501			
36				441				480					510			
37				444				486					516			
38				450				492					522			
39													531			

INTERNATIONAL---INTER
 UNIVERSAL---UNIV
 LONGSHOT---LGSH
 IMR GREEN---IMR GRN
 TITGROUP---TITE GRP

Mec

BUSHING #	CLAYS	INTER	UNIV	HS-6	H110	TITEWAD	LIL GUN	572 LGSH	TITE GRP	700-X	IMR RED	IMR GRN	IMR BLUE	WST	WSF	SUPER HCP
7																11
8																12.5
9																12.9
10						13.5				13.4						11
11						14.4				13.8						11.7
12						15.4				14.8						12.4
12A					15.5	16.4				15.9						13.2
13						16.1		17		16.4						13.9
14						17.9				18.6						15.4
15				12	18.8					19.4	16.1		14.5			14.4
16		10.8	12.9	19.8						20.7	17		15.4		10.3	15.5
17		11.4	13.5	20.7						21.4	17.8	16.2		10.8	16.1	11.9
18		11.8	14	21.6						22.6	18.7	17.1		11.3	16.8	12.5
19		12.3	14.6	22.6						23.6	19.5	18.1		11.8	17.7	13.1
20		12.9	15.5	23.7		13.3		25	20.3	19				12.4	18.3	13.8
21		13.3	16	24.7		13.9		25.9	21.2	19.7		12.1	12.9	19.3	14.3	20.4
22		14.3	16.8	25.8		14.5		27.2	22.1	20.2	12.5	12.6	13.5	20.2	14.9	21.3
23		14.6	17.4	26.8		15.2		28.1	23.1	21.1	13.1	13.1	14	21.2	15.5	22.1
24		15.5	18.3	27.9		15.8		24	21.9	13.7	13.7	14.6	21.8	16.2	23	22.1
25		16	18.9	28.9		16.2		24.8	22.7	14.3	14.2	15.2	22.5	16.8	23.8	22.8
26		16.6	19.1	30.3		16.9		25.9	23.7	15	14.9	15.8	24.1	17.6	24.9	23.8
27	14.6	17.1	20.2	31.2		17.6		26.9	24.7	15.6	15.7	16.4	24.6	18.2	25.7	
28	15.2	17.7	21.1	32.6		18.3		28	25.8	16.3	16.4	17	25.5	18.9	26.6	
29	15.9	18.3	21.7	33.6		19		29		16.9	17.1	17.7	26.4	19.5	27.6	
30	16.3	19.1	22.7	35		19.7		30.1		17.6	17.8	18.3	27.3	20.4	29	
31	16.9	19.9	23.4	36.2		20.4		31.1		18.3	18.5	19	28.2	21	30	
32	17.5	20.6	24.4	37.8		21.4		32.2		19.3	19.2	19.6	29.1	21.8	31.4	
33	18.2	21.2	25.2	39		22.2		33.3		19.7	19.9	20.3	30.5	22.6	32.4	
34	18.9	21.9	26	40.4		23		34.5		20.4	20.6	21	31.6	23.4		
35	19.4	22.6	26.7	41.1		23.4		35.6		21.2	21.3	21.7	32.7	24.2		
36	20.1	23.4	27.6	43		24		36.7		21.9	21.9	22.4	33.8	25.2		
37	20.7	24.2	28.7	44.4		25.3		38		22.7	22.7	23.2	35			
38	21.4	25.1	29.7	46.2				39.3			23.3	23.9	36.1			
38A	22	26						40.6			24.1	24.7	37.3			
39	22.8	26.9		47.6				42			24.7	25.4	38.5			
39A								43.1			25.2	26.2	39.7			
40								44.4			25.9	27	40.9			
41								47.3					43.4			
41A								48.8					44.7			
42								50.2					46			
42A								51.5					47.4			
43								53					48.7			
43A													50.1			

INTERNATIONAL---INTER
 UNIVERSAL---UNIV
 LONGSHOT---LGSH
 IMR GREEN---IMR GRN
 TITGROUP---TITE GRP

*Velocity is measured in feet per second (fps).
Pressure is measured in Pounds per Square Inch (PSI).

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
12 GA., 2 3/4", FEDERAL GOLD MEDAL PLASTIC SHELLS							
				1250 fps	1300 fps	1350 fps	1400 fps
7/8 oz	Titewad	Fed. 209A	Fed. 12SO	19.5 gr / 6,400 PSI	20.5 gr / 7,500 PSI	21.6 gr / 8,800 PSI	22.7 gr / 9,800 PSI
7/8 oz	Titewad	Win. 209	WAA12L	18.4 gr / 6,800 PSI	19.3 gr / 7,400 PSI	20.6 gr / 8,700 PSI	21.9 gr / 9,300 PSI
7/8 oz	Clays	Fed. 209A	WAA12L	19.2 gr / 7,400 PSI	20.0 gr / 8,000 PSI	21.5 gr / 9,700 PSI	22.5 gr / 11,500 PSI
7/8 oz	Clays	Win. 209	WAA12L	19.0 gr / 7,000 PSI	20.3 gr / 8,000 PSI	22.0 gr / 8,800 PSI	23.0 gr / 10,500 PSI
				1200 fps	1250 fps	1300 fps	1350 fps
7/8 oz.	IMR Red	Ched. 209	Fed. 12SO	16.6 gr / 6,200 PSI	17.7 gr / 7,100 PSI	18.7 gr / 7,900 PSI	19.8 gr / 8,800 PSI
7/8 oz.	IMR Red	Ched. 209	WAA12L	16.4 gr / 6,100 PSI	17.5 gr / 6,900 PSI	18.5 gr / 7,700 PSI	19.6 gr / 8,500 PSI
7/8 oz.	IMR Red	Fed. 209A	Fed. 12SO	16.2 gr / 6,900 PSI	17.3 gr / 7,700 PSI	18.5 gr / 8,500 PSI	19.6 gr / 9,300 PSI
7/8 oz.	IMR Red	Fed. 209A	WAA12L	-	17.3 gr / 7,500 PSI	18.5 gr / 8,300 PSI	19.6 gr / 9,000 PSI
7/8 oz.	IMR Red	Win. 209	Fed. 12SO	17.0 gr / 6,100 PSI	18.1 gr / 6,900 PSI	19.3 gr / 7,800 PSI	20.4 gr / 8,600 PSI
7/8 oz.	IMR Red	Win. 209	WAA12L	17.0 gr / 6,000 PSI	18.1 gr / 6,700 PSI	19.3 gr / 7,300 PSI	20.4 gr / 8,000 PSI
7/8 oz.	IMR Green	Ched. 209	Fed. 12SO	18.9 gr / 6,100 PSI	20.1 gr / 6,700 PSI	21.2 gr / 7,400 PSI	22.4 gr / 8,000 PSI
7/8 oz.	IMR Green	Ched. 209	WAA12L	19.1 gr / 5,300 PSI	20.3 gr / 6,000 PSI	21.4 gr / 6,700 PSI	22.6 gr / 7,400 PSI
7/8 oz.	IMR Green	Fed. 209A	Fed. 12SO	18.4 gr / 6,300 PSI	19.6 gr / 7,100 PSI	20.8 gr / 7,900 PSI	22.0 gr / 8,700 PSI
7/8 oz.	IMR Green	Fed. 209A	WAA12L	18.5 gr / 6,000 PSI	19.7 gr / 6,800 PSI	20.8 gr / 7,500 PSI	22.0 gr / 8,300 PSI
7/8 oz.	IMR Green	Win. 209	Fed. 12SO	19.2 gr / 5,700 PSI	20.4 gr / 6,400 PSI	21.5 gr / 7,200 PSI	22.7 gr / 7,900 PSI
7/8 oz.	IMR Green	Win. 209	WAA12L	19.3 gr / 5,400 PSI	20.5 gr / 6,100 PSI	21.6 gr / 6,800 PSI	22.8 gr / 7,500 PSI
				1250 fps	1300 fps	1350 fps	1400 fps
7/8 oz.	Internat'l	Fed. 209A	WAA12L	22.3 gr / 7,500 PSI	23.2 gr / 8,300 PSI	24.5 gr / 9,300 PSI	25.7 gr / 10,000 PSI
7/8 oz.	Internat'l	Win. 209	WAA12L	23.5 gr / 7,500 PSI	24.3 gr / 7,900 PSI	25.5 gr / 9,100 PSI	27.0 gr / 10,600 PSI
				1325 fps	1400 fps		
7/8 oz.	WST	Fed. 209A	WAA12L	21.0 gr / 8,300 PSI	23.0 gr / 9,700 PSI		
7/8 oz.	WST	Win. 209	WAA12L	21.0 gr / 8,200 PSI	23.0 gr / 10,300 PSI		
				1150 fps	1200 fps	1250 fps	1300 fps
24 gm	700-X	Fed. 209A	Fed. 12SO	16.0 gr / 5,500 PSI	17.0 gr / 6,200 PSI	18.0 gr / 6,800 PSI	19.5 gr / 7,800 PSI
24 gm	700-X	Fed. 209A	WAA12SL	15.5 gr / 5,300 PSI	16.5 gr / 5,900 PSI	17.5 gr / 6,600 PSI	19.0 gr / 7,800 PSI
24 gm	700-X	Rem. 209P	WAA12SL	16.0 gr / 4,700 PSI	17.0 gr / 5,400 PSI	18.0 gr / 5,900 PSI	20.5 gr / 6,600 PSI
24 gm	700-X	Win. 209	Fed. 12SO	15.5 gr / 5,400 PSI	16.5 gr / 6,100 PSI	17.5 gr / 6,700 PSI	19.5 gr / 7,800 PSI
24 gm	700-X	Win. 209	WAA12SL	15.5 gr / 5,100 PSI	16.5 gr / 5,700 PSI	17.5 gr / 6,400 PSI	19.0 gr / 7,500 PSI
				1180 fps	1235 fps	1290 fps	1345 fps
1 oz	Titewad	Fed. 209A	Fed. 12SO	17.8 gr / 7,100 PSI	19.3 gr / 8,500 PSI	20.8 gr / 9,600 PSI	21.7 gr / 11,300 PSI
1 oz	Titewad	Fed. 209A	Rem. TGT 12	17.0 gr / 7,500 PSI	18.4 gr / 8,700 PSI	19.7 gr / 9,800 PSI	21.0 gr / 11,000 PSI
1 oz	Titewad	Win. 209	Fed. 12SO	18.0 gr / 7,100 PSI	19.1 gr / 8,600 PSI	20.3 gr / 10,300 PSI	22.0 gr / 11,300 PSI
1 oz	Titewad	Win. 209	WAA12L	17.4 gr / 7,500 PSI	18.7 gr / 8,400 PSI	20.2 gr / 9,700 PSI	21.7 gr / 11,300 PSI
				1125 fps	1180 fps	1235 fps	1290 fps
1 oz	Clays	Fed. 209A	Fed. 12SO	16.8 gr / 6,700 PSI	17.9 gr / 7,700 PSI	19.3 gr / 9,200 PSI	20.3 gr / 10,800 PSI
1 oz	Clays	Rem. 209P	Rem. TGT 12	18.2 gr / 5,900 LUP	19.2 gr / 6,300 LUP	20.2 gr / 6,800 LUP	21.2 gr / 7,300 LUP
1 oz	Clays	Win. 209	WAA12SL	17.2 gr / 6,200 LUP	18.2 gr / 7,000 LUP	19.1 gr / 7,600 LUP	20.0 gr / 8,300 LUP

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
12 GA., 2 3/4", FEDERAL GOLD MEDAL PLASTIC SHELLS (CONT.)							
				1180 fps	1235 fps	1290 fps	1345 fps
1 oz.	IMR Red	Ched. 209	CB 6100-12	16.7 gr / 6,800 PSI	18.1 gr / 7,700 PSI	19.4 gr / 8,700 PSI	20.8 gr / 9,600 PSI
1 oz.	IMR Red	Ched. 209	DRA 12 PINK	16.3 gr / 7,300 PSI	17.7 gr / 8,400 PSI	19.0 gr / 9,500 PSI	20.4 gr / 10,600 PSI
1 oz.	IMR Red	Ched. 209	Rem. TGT 12	16.4 gr / 7,200 PSI	17.8 gr / 8,200 PSI	19.1 gr / 9,200 PSI	20.5 gr / 10,200 PSI
1 oz.	IMR Red	Fed. 209A	CB 6100-12	16.3 gr / 7,200 PSI	17.7 gr / 8,200 PSI	19.0 gr / 9,300 PSI	20.4 gr / 10,300 PSI
1 oz.	IMR Red	Fed. 209A	DRA 12 PINK	15.9 gr / 8,000 PSI	17.3 gr / 9,100 PSI	18.7 gr / 10,300 PSI	20.1 gr / 11,400 PSI
1 oz.	IMR Red	Fed. 209A	Rem. TGT 12	16.0 gr / 7,500 PSI	17.4 gr / 8,500 PSI	18.8 gr / 9,600 PSI	20.2 gr / 10,600 PSI
1 oz.	IMR Red	Win. 209	CB 6100-12	16.9 gr / 6,200 PSI	18.2 gr / 7,300 PSI	19.6 gr / 8,500 PSI	20.9 gr / 9,600 PSI
1 oz.	IMR Red	Win. 209	DRA 12 PINK	16.6 gr / 7,500 PSI	17.9 gr / 8,600 PSI	19.3 gr / 9,700 PSI	20.6 gr / 10,800 PSI
1 oz.	IMR Red	Win. 209	Rem. TGT 12	16.6 gr / 7,100 PSI	17.9 gr / 8,100 PSI	19.3 gr / 9,100 PSI	20.6 gr / 10,100 PSI
				1235 fps	1290 fps	1345 fps	1400 fps
1 oz	Internat'l	Fed. 209A	Fed. 12SO	19.9 gr / 8,300 PSI	21.3 gr / 9,900 PSI	22.5 gr / 11,200 PSI	-
1 oz	Internat'l	Rem. 209P	Rem. TGT 12	20.8 gr / 7,200 PSI	21.2 gr / 7,500 PSI	23.3 gr / 9,400 PSI	24.5 gr / 10,400 PSI
1 oz	Internat'l	Win. 209P	WAA12SL	20.5 gr / 7,200 PSI	22.0 gr / 8,400 PSI	23.4 gr / 9,400 PSI	24.7 gr / 10,400 PSI
				1180 fps	1235 fps	1290 fps	1345 fps
1 oz.	IMR Green	Ched. 209	CB 6100-12	19.3 gr / 6,000 PSI	20.7 gr / 7,000 PSI	22.2 gr / 8,000 PSI	23.6 gr / 9,000 PSI
1 oz.	IMR Green	Ched. 209	DRA 12 PINK	18.9 gr / 6,500 PSI	20.4 gr / 7,500 PSI	21.9 gr / 8,400 PSI	23.4 gr / 9,400 PSI
1 oz.	IMR Green	Ched. 209	Rem. TGT 12	18.7 gr / 6,600 PSI	20.1 gr / 7,600 PSI	21.6 gr / 8,700 PSI	23.0 gr / 9,700 PSI
1 oz.	IMR Green	Fed. 209A	CB 6100-12	18.3 gr / 6,500 PSI	19.7 gr / 7,500 PSI	21.2 gr / 8,600 PSI	22.6 gr / 9,600 PSI
1 oz.	IMR Green	Fed. 209A	DRA 12 PINK	18.0 gr / 7,200 PSI	19.4 gr / 8,400 PSI	20.9 gr / 9,500 PSI	22.3 gr / 10,700 PSI
1 oz.	IMR Green	Fed. 209A	Rem. TGT 12	18.0 gr / 6,900 PSI	19.4 gr / 7,900 PSI	20.9 gr / 9,000 PSI	22.3 gr / 10,000 PSI
1 oz.	IMR Green	Win. 209	CB 6100-12	19.9 gr / 5,500 PSI	21.1 gr / 6,600 PSI	22.4 gr / 7,800 PSI	23.6 gr / 8,900 PSI
1 oz.	IMR Green	Win. 209	DRA 12 PINK	19.3 gr / 6,300 PSI	20.8 gr / 7,300 PSI	22.2 gr / 8,300 PSI	23.7 gr / 9,300 PSI
1 oz.	IMR Green	Win. 209	Rem. TGT 12	19.2 gr / 6,300 PSI	20.5 gr / 7,300 PSI	21.8 gr / 8,200 PSI	23.1 gr / 9,200 PSI
				1100 fps	1150 fps	1200 fps	1250 fps
1 oz	700-X	Fed. 209A	Fed. 12SO	15.0 gr / 6,100 PSI	16.0 gr / 6,700 PSI	17.0 gr / 7,300 PSI	18.5 gr / 8,200 PSI
1 oz	700-X	Rem. 209P	Fed. 12SO	15.0 gr / 5,700 PSI	16.0 gr / 6,300 PSI	18.0 gr / 7,300 PSI	19.5 gr / 8,000 PSI
1 oz	700-X	Rem. 209P	Rem. TGT12	16.0 gr / 5,700 PSI	17.0 gr / 6,200 PSI	18.0 gr / 6,600 PSI	19.5 gr / 7,300 PSI
1 oz	700-X	Rem. 209P	WAA12SL	15.5 gr / 5,800 PSI	16.5 gr / 6,600 PSI	17.5 gr / 7,300 PSI	19.0 gr / 8,400 PSI
1 oz	700-X	Win. 209	Fed. 12SO	15.5 gr / 5,900 PSI	16.5 gr / 6,700 PSI	17.5 gr / 7,300 PSI	18.5 gr / 7,800 PSI
1 oz	700-X	Win. 209	Rem. TGT12	15.5 gr / 5,900 PSI	16.5 gr / 6,600 PSI	17.5 gr / 7,200 PSI	18.5 gr / 7,800 PSI
1 oz	700-X	Win. 209	WAA12SL	15.5 gr / 6,000 PSI	16.5 gr / 6,700 PSI	17.5 gr / 7,600 PSI	18.5 gr / 8,500 PSI
				1180 fps	1235 fps	1290 fps	
1 oz	WST	CCI 209	Fed. 12SO	-	21.0 gr / 8,500 PSI	22.5 gr / 9,500 PSI	
1 oz	WST	Win. 209	Fed. 12SO	20.5 gr / 7,400 PSI	22.0 gr / 8,500 PSI	23.0 gr / 9,300 PSI	
				1180 fps	1235 fps	1290 fps	1345 fps
1 oz	Super Hcp	Ched. 209	WAA12L	19.6 gr / 5,500 PSI	20.8 gr / 6,500 PSI	22.0 gr / 7,500 PSI	23.3 gr / 8,500 PSI
1 oz	Super Hcp	Fed. 209A	WAA12L	19.5 gr / 5,700 PSI	20.9 gr / 6,600 PSI	22.3 gr / 7,500 PSI	23.8 gr / 8,600 PSI
1 oz	Super Hcp	Win. 209	WAA12L	20.6 gr / 4,800 PSI	21.7 gr / 5,900 PSI	22.8 gr / 7,000 PSI	23.9 gr / 8,100 PSI

*Velocity is measured in feet per second (fps).
Pressure is measured in Pounds per Square Inch (PSI).

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
12 GA., 2 3/4", FEDERAL GOLD MEDAL PLASTIC SHELLS (CONT.)							
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz	Titewad	Fed. 209A	Fed. 12S3	16.3 gr / 8,300 PSI	17.3 gr / 8,900 PSI	18.8 gr / 10,300 PSI	-
1 1/8 oz	Titewad	Fed. 209A	Rem. Fig. 8	15.8 gr / 8,000 PSI	16.9 gr / 9,600 PSI	18.1 gr / 11,300 PSI	-
1 1/8 oz	Titewad	Fed. 209A	WAA12	15.4 gr / 8,200 PSI	16.8 gr / 9,800 PSI	18.0 gr / 11,100 PSI	-
1 1/8 oz	Titewad	Rem. 209P	Rem. Fig. 8	16.0 gr / 7,500 PSI	17.0 gr / 8,600 PSI	18.0 gr / 9,500 PSI	-
1 1/8 oz	Titewad	Win. 209	WAA12SL	16.5 gr / 7,900 PSI	17.5 gr / 9,100 PSI	18.2 gr / 9,800 PSI	-
1 1/8 oz	Clays	Fed. 209A	Fed. 12S3	16.8 gr / 7,900 PSI	17.1 gr / 8,600 PSI	19.0 gr / 10,400 PSI	-
1 1/8 oz	Clays	Fed. 209A	Rem. Fig. 8	17.0 gr / 7,400 PSI	17.5 gr / 7,900 PSI	19.0 gr / 9,600 PSI	-
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz	Clays	Fed. 209A	WAA12	16.5 gr / 7,700 PSI	17.0 gr / 8,100 PSI	18.5 gr / 10,300 PSI	-
1 1/8 oz	Clays	Rem. 209P	Rem. Fig. 8	16.6 gr / 7,200 PSI	17.8 gr / 8,600 PSI	18.9 gr / 9,900 PSI	20.1 gr / 11,300 PSI
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz.	IMR Red	Ched. 209	CB 4118-12B	15.3 gr / 6,900 PSI	16.7 gr / 7,900 PSI	18.1 gr / 8,900 PSI	19.3 gr / 9,800 PSI
1 1/8 oz.	IMR Red	Ched. 209	DRV-12	15.4 gr / 7,100 PSI	16.8 gr / 8,300 PSI	18.1 gr / 9,400 PSI	19.4 gr / 10,500 PSI
1 1/8 oz.	IMR Red	Ched. 209	Fed. 12S3	15.6 gr / 7,500 PSI	17.0 gr / 8,500 PSI	18.4 gr / 9,600 PSI	19.6 gr / 10,500 PSI
1 1/8 oz.	IMR Red	Ched. 209	Rem. FIG. 8	15.4 gr / 7,500 PSI	16.8 gr / 8,500 PSI	18.1 gr / 9,600 PSI	19.4 gr / 10,500 PSI
1 1/8 oz.	IMR Red	Fed. 209A	CB 4118-12B	15.2 gr / 7,100 PSI	16.6 gr / 8,200 PSI	17.9 gr / 9,400 PSI	19.2 gr / 10,400 PSI
1 1/8 oz.	IMR Red	Fed. 209A	DRV-12	15.0 gr / 8,000 PSI	16.4 gr / 9,200 PSI	17.8 gr / 10,300 PSI	19.0 gr / 11,400 PSI
1 1/8 oz.	IMR Red	Fed. 209A	Fed. 12S3	15.3 gr / 7,500 PSI	16.7 gr / 8,700 PSI	18.1 gr / 10,000 PSI	19.3 gr / 11,100 PSI
1 1/8 oz.	IMR Red	Fed. 209A	Rem. FIG. 8	15.2 gr / 7,700 PSI	16.6 gr / 8,800 PSI	17.9 gr / 9,900 PSI	19.2 gr / 10,900 PSI
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz.	IMR Red	Win. 209	CB 4118-12B	15.3 gr / 6,800 PSI	16.7 gr / 7,900 PSI	18.1 gr / 8,900 PSI	19.3 gr / 9,900 PSI
1 1/8 oz.	IMR Red	Win. 209	DRV-12	15.1 gr / 7,300 PSI	16.5 gr / 8,400 PSI	17.9 gr / 9,600 PSI	19.1 gr / 10,600 PSI
1 1/8 oz.	IMR Red	Win. 209	Fed. 12S3	15.5 gr / 7,600 PSI	16.9 gr / 8,700 PSI	18.2 gr / 9,700 PSI	19.5 gr / 10,700 PSI
1 1/8 oz.	IMR Red	Win. 209	Rem. FIG. 8	15.3 gr / 7,200 PSI	16.7 gr / 8,400 PSI	18.1 gr / 9,500 PSI	19.3 gr / 10,600 PSI
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz	Internat'l	Fed. 209A	Fed. 12S3	18.5 gr / 7,000 PSI	19.0 gr / 7,200 PSI	20.5 gr / 8,800 PSI	22.2 gr / 10,600 PSI
1 1/8 oz	Internat'l	Fed. 209A	WAA12	-	18.4 gr / 8,200 PSI	19.6 gr / 9,500 PSI	20.7 gr / 10,700 PSI
1 1/8 oz	Internat'l	Win. 209	WAA12SL	19.1 gr / 6,600 LUP	20.1 gr / 7,100 LUP	21.0 gr / 7,500 LUP	22.4 gr / 8,900 LUP
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz.	IMR Green	Ched. 209	CB 4118-12B	17.8 gr / 6,300 PSI	19.1 gr / 7,300 PSI	20.5 gr / 8,200 PSI	21.7 gr / 9,100 PSI
1 1/8 oz.	IMR Green	Ched. 209	DRV-12	17.5 gr / 6,300 PSI	18.9 gr / 7,400 PSI	20.3 gr / 8,600 PSI	21.6 gr / 9,600 PSI
1 1/8 oz.	IMR Green	Ched. 209	Fed. 12S3	17.5 gr / 6,800 PSI	19.0 gr / 7,800 PSI	20.5 gr / 8,700 PSI	21.8 gr / 9,600 PSI
1 1/8 oz.	IMR Green	Ched. 209	Rem. FIG. 8	17.4 gr / 7,000 PSI	18.8 gr / 8,000 PSI	20.2 gr / 8,900 PSI	21.5 gr / 9,800 PSI
1 1/8 oz.	IMR Green	Fed. 209A	CB 4118-12B	16.9 gr / 6,800 PSI	18.3 gr / 7,800 PSI	19.7 gr / 8,900 PSI	21.0 gr / 9,800 PSI
1 1/8 oz.	IMR Green	Fed. 209A	DRV-12	16.8 gr / 7,200 PSI	18.3 gr / 8,200 PSI	19.8 gr / 9,300 PSI	21.1 gr / 10,200 PSI
1 1/8 oz.	IMR Green	Fed. 209A	Fed. 12S3	16.9 gr / 7,400 PSI	18.4 gr / 8,300 PSI	19.9 gr / 9,200 PSI	21.3 gr / 10,000 PSI
1 1/8 oz.	IMR Green	Fed. 209A	Rem. FIG. 8	16.8 gr / 7,400 PSI	18.2 gr / 8,300 PSI	19.6 gr / 9,200 PSI	20.9 gr / 10,000 PSI
1 1/8 oz.	IMR Green	Rem. 209P	CB 4118-12B	17.4 gr / 6,100 PSI	18.8 gr / 7,000 PSI	20.2 gr / 8,000 PSI	21.5 gr / 8,800 PSI
1 1/8 oz.	IMR Green	Win. 209	CB 4118-12B	17.1 gr / 6,300 PSI	18.5 gr / 7,300 PSI	19.9 gr / 8,400 PSI	21.1 gr / 9,300 PSI

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
12 GA., 2 3/4", FEDERAL GOLD MEDAL PLASTIC SHELLS (CONT.)							
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz.	IMR Green	Win. 209	DRV-12	17.4 gr / 6,600 PSI	18.8 gr / 7,500 PSI	20.1 gr / 8,400 PSI	21.4 gr / 9,200 PSI
1 1/8 oz.	IMR Green	Win. 209	Fed. 12S3	17.5 gr / 6,800 PSI	18.9 gr / 7,600 PSI	20.3 gr / 8,400 PSI	21.6 gr / 9,200 PSI
1 1/8 oz.	IMR Green	Win. 209	Rem. FIG. 8	17.4 gr / 6,600 PSI	18.8 gr / 7,700 PSI	20.1 gr / 8,700 PSI	21.4 gr / 9,700 PSI
				1200 fps	1255 fps	1310 fps	
1 1/8 oz	Universal	Fed. 209A	Fed. 12S3	23.0 gr / 8,700 PSI	24.4 gr / 9,600 PSI	25.7 gr / 10,500 PSI	
1 1/8 oz	Universal	Win. 209	Rem. Fig. 8	24.0 gr / 8,000 PSI	25.0 gr / 8,700 PSI	26.8 gr / 9,500 PSI	
1 1/8 oz	Universal	Win. 209	WAA12	23.2 gr / 8,800 PSI	24.5 gr / 9,700 PSI	25.0 gr / 10,400 PSI	
				1420 fps	1475 fps	1530 fps	1585 fps
1 1/8 oz	Longshot	Fed. 209A	Fed. 12S3	32.0 gr / 9,000 PSI	33.3 gr / 10,000 PSI	34.6 gr / 11,500 PSI	-
1 1/8 oz	Longshot	Fed. 209A	Rem. Fig. 8	32.2 gr / 8,600 PSI	33.6 gr / 9,500 PSI	35.0 gr / 10,500 PSI	36.4 gr / 11,400 PSI
1 1/8 oz	Longshot	Fed. 209A	WAA12	31.7 gr / 8,900 PSI	33.1 gr / 9,700 PSI	34.6 gr / 10,700 PSI	36.0 gr / 11,500 PSI
1 1/8 oz	Longshot	Win. 209	Fed. 12S3	34.2 gr / 7,100 PSI	35.5 gr / 8,200 PSI	36.8 gr / 9,400 PSI	38.1 gr / 10,600 PSI
1 1/8 oz	Longshot	Win. 209	Rem. Fig. 8	34.9 gr / 7,100 PSI	36.0 gr / 8,100 PSI	37.1 gr / 9,100 PSI	38.2 gr / 10,000 PSI
1 1/8 oz	Longshot	Win. 209	WAA12	34.0 gr / 7,600 PSI	35.2 gr / 8,500 PSI	36.4 gr / 9,400 PSI	37.8 gr / 10,400 PSI
				1100 fps	1150 fps	1200 fps	1250 fps
1 1/8 oz	700-X	Fed. 209A	Fed. 12S3	16.0 gr / 7,900 PSI	17.0 gr / 8,600 PSI	18.5 gr / 9,500 PSI	20.0 gr / 10,400 PSI
1 1/8 oz	700-X	Rem. 209P	Fed. 12S3	16.0 gr / 7,500 PSI	17.5 gr / 8,300 PSI	18.5 gr / 8,900 PSI	20.0 gr / 9,800 PSI
1 1/8 oz	700-X	Win. 209	Fed. 12S3	16.0 gr / 7,800 PSI	17.0 gr / 8,500 PSI	18.0 gr / 9,400 PSI	19.5 gr / 10,700 PSI
1 1/8 oz	700-X	Win. 209	Rem. TGT12	16.0 gr / 6,800 PSI	17.0 gr / 7,500 PSI	18.5 gr / 8,600 PSI	20.0 gr / 9,600 PSI
				1145 fps	1200 fps	1255 fps	1310 fps
1 1/8 oz	WST	CCI 209	Fed. 12S3	19.5 gr / 8,500 PSI	21.0 gr / 10,300 PSI	-	-
1 1/8 oz	WST	Win. 209	Fed. 12S3	-	21.0 gr / 9,500 PSI	-	-
1 1/8 oz	Super Hcp	Fed. 209A	Fed. 12SO	18.8 gr / 6,600 PSI	20.5 gr / 7,800 PSI	21.3 gr / 8,400 PSI	23.9 gr / 10,400 PSI
1 1/8 oz	Super Hcp	Fed. 209A	J-XL-1	-	20.7 gr / 7,500 PSI	22.3 gr / 8,600 PSI	24.0 gr / 9,800 PSI
1 1/8 oz	Super Hcp	Rem. 209P	Fed. 12SO	19.9 gr / 6,100 PSI	21.3 gr / 7,700 PSI	22.7 gr / 9,000 PSI	24.1 gr / 10,400 PSI
1 1/8 oz	Super Hcp	Rem. 209P	J-XL-1	-	21.6 gr / 7,000 PSI	22.8 gr / 8,200 PSI	24.2 gr / 9,500 PSI
1 1/8 oz	Super Hcp	Rem. 209P	Rem. TGT12	-	21.2 gr / 6,900 PSI	22.7 gr / 8,200 PSI	24.1 gr / 9,500 PSI
1 1/8 oz	Super Hcp	Win. 209	Fed. 12SO	20.5 gr / 5,700 PSI	21.9 gr / 7,200 PSI	23.3 gr / 8,700 PSI	24.6 gr / 10,100 PSI
1 1/8 oz	Super Hcp	Win. 209	Rem. TGT12	-	21.6 gr / 7,100 PSI	23.0 gr / 8,100 PSI	24.5 gr / 9,400 PSI
				1200 fps	1220 fps	1225 fps	1330 fps
1 1/4 oz	Universal	CCI 209	Fed. 12S4	-	25.0 gr / 10,100 PSI	-	-
1 1/4 oz	Universal	Fed. 209A	Fed. 12S4	-	23.3 gr / 10,400 PSI	-	-
1 1/4 oz	Universal	Win. 209	WAA12-F114	-	24.5 gr / 10,300 PSI	-	-
				1330 fps	1385 fps	1440 fps	1495 fps
1 1/4 oz	Longshot	Fed. 209A	Fed. 12S4	28.4 gr / 9,800 PSI	30.2 gr / 10,800 PSI	-	-
1 1/4 oz	Longshot	Fed. 209A	Rem. R12L	29.2 gr / 9,400 PSI	30.7 gr / 10,400 PSI	32.1 gr / 11,400 PSI	-
1 1/4 oz	Longshot	Win. 209	Fed. 12S4	29.7 gr / 8,000 PSI	31.3 gr / 9,300 PSI	32.9 gr / 10,600 PSI	-
1 1/4 oz	Longshot	Win. 209	Rem. R12L	30.7 gr / 7,700 PSI	32.2 gr / 8,700 PSI	33.6 gr / 9,700 PSI	35.0 gr / 10,800 PSI

SHOT SHELL data

*Velocity is measured in feet per second (fps).
Pressure is measured in Pounds per Square Inch (PSI).

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
12 GA., 2 3/4", REMINGTON STS. OR NITRO 27, OR GUN CLUB PLASTIC SHELLS (CONT.)							
				1180 fps	1235 fps	1290 fps	1345 fps
1 oz	Internat'l	Rem. 209P	WAA12SL	19.0 gr / 6,800 PSI	20.2 gr / 8,100 PSI	21.3 gr / 9,300 PSI	22.4 gr / 10,500 PSI
1 oz	Internat'l	Win. 209	Rem. TGT 12	18.9 gr / 7,100 PSI	20.2 gr / 8,200 PSI	21.5 gr / 9,300 PSI	22.8 gr / 10,300 PSI
1 oz	Internat'l	Win. 209	WAA12SL	18.4 gr / 7,100 LUP	20.1 gr / 8,600 LUP	21.0 gr / 10,000 LUP	-
1 oz	Titigroup	Rem. 209P	Rem. TGT 12	16.1 gr / 7,900 PSI	17.3 gr / 8,900 PSI	18.6 gr / 10,100 PSI	19.9 gr / 11,200 PSI
1 oz	Titigroup	Rem. 209P	WAA12SL	16.4 gr / 7,700 PSI	17.6 gr / 9,100 PSI	18.8 gr / 10,400 PSI	-
1 oz	Titigroup	Win. 209	Rem. TGT 12	16.0 gr / 7,700 PSI	17.5 gr / 8,900 PSI	18.9 gr / 10,000 PSI	20.3 gr / 11,000 PSI
1 oz	Titigroup	Win. 209	WAA12SL	16.3 gr / 8,100 PSI	17.6 gr / 9,100 PSI	18.9 gr / 10,200 PSI	20.5 gr / 11,300 PSI
				1150 fps	1200 fps	1250 fps	1300 fps
1 oz.	IMR Green	Ched. 209	Rem. TGT 12	16.8 gr / 7,100 PSI	18.1 gr / 8,000 PSI	19.5 gr / 9,000 PSI	20.8 gr / 9,900 PSI
1 oz.	IMR Green	Ched. 209	WAA12SL	16.9 gr / 7,100 PSI	18.2 gr / 8,000 PSI	19.5 gr / 8,900 PSI	20.8 gr / 9,800 PSI
1 oz.	IMR Green	Win. 209	Rem. TGT 12	17.1 gr / 6,600 PSI	18.4 gr / 7,400 PSI	19.8 gr / 8,300 PSI	21.1 gr / 9,100 PSI
1 oz.	IMR Green	Win. 209	WAA12SL	17.0 gr / 6,700 PSI	18.3 gr / 7,600 PSI	19.7 gr / 8,600 PSI	21.0 gr / 9,500 PSI
				1100 fps	1150 fps	1200 fps	1250 fps
1 oz	700-X	Rem. 209P	Rem. TGT12	14.5 gr / 6,600 PSI	15.5 gr / 7,500 PSI	16.5 gr / 8,400 PSI	18.0 gr / 9,500 PSI
1 oz	700-X	Rem. 209P	WAA12SL	14.5 gr / 7,300 PSI	15.5 gr / 8,100 PSI	16.5 gr / 9,000 PSI	18.0 gr / 10,500 PSI
1 oz	700-X	Win. 209	Rem. TGT12	15.0 gr / 7,300 PSI	15.5 gr / 7,700 PSI	16.5 gr / 8,700 PSI	18.0 gr / 9,800 PSI
1 oz	700-X	Win. 209	WAA12SL	15.0 gr / 7,400 PSI	16.0 gr / 8,300 PSI	17.0 gr / 9,300 PSI	18.0 gr / 10,300 PSI
				1180 fps	1235 fps	1290 fps	
1 oz	WST	Win. 209	Fed. 12SO	19.0 gr / 8,200 PSI	20.0 gr / 8,900 PSI	21.0 gr / 9,700 PSI	
1 oz	WST	Win. 209	WAA12SL	-	19.5 gr / 8,000 PSI	21.0 gr / 10,000 PSI	
				1180 fps	1235 fps	1290 fps	1345 fps
1 oz	Super Hcp	Rem. 209P	J-XL-1	18.4 gr / 6,700 PSI	19.5 gr / 7,600 PSI	20.8 gr / 8,600 PSI	22.3 gr / 9,900 PSI
1 oz	Super Hcp	Rem. 209P	Rem. TGT12	18.7 gr / 6,500 PSI	19.9 gr / 7,500 PSI	21.0 gr / 8,400 PSI	22.6 gr / 9,700 PSI
1 oz	Super Hcp	Rem. 209P	WAA12SL	18.7 gr / 6,200 PSI	20.0 gr / 7,400 PSI	21.2 gr / 8,500 PSI	22.5 gr / 9,700 PSI
1 oz	Super Hcp	Win. 209	J-XL-1	19.0 gr / 6,200 PSI	20.3 gr / 7,500 PSI	21.5 gr / 8,700 PSI	22.8 gr / 10,000 PSI
1 oz	Super Hcp	Win. 209	Rem. TGT12	20.0 gr / 6,400 PSI	20.7 gr / 7,300 PSI	21.7 gr / 8,500 PSI	22.9 gr / 9,900 PSI
1 oz	Super Hcp	Win. 209	WAA12SL	19.2 gr / 6,100 PSI	20.5 gr / 7,400 PSI	21.7 gr / 8,600 PSI	23.0 gr / 9,900 PSI
				1090 fps	1145 fps	1200 fps	
1 1/8 oz	Titewad	Fed. 209A	Rem. Fig. 8	15.2 gr / 9,600 PSI	16.3 gr / 10,700 PSI	-	
1 1/8 oz	Titewad	Fed. 209A	WAA12	15.2 gr / 9,800 PSI	16.0 gr / 10,500 PSI	-	
1 1/8 oz	Titewad	Rem. 209P	Rem. Fig. 8	15.2 gr / 9,100 PSI	16.5 gr / 10,100 PSI	17.9 gr / 10,900 PSI	
1 1/8 oz	Titewad	Rem. 209P	WAA12	15.1 gr / 9,700 PSI	16.1 gr / 10,900 PSI	-	
1 1/8 oz	Titewad	Win. 209	Rem. Fig. 8	15.8 gr / 9,200 PSI	16.8 gr / 10,400 PSI	17.8 gr / 11,300 PSI	
1 1/8 oz	Titewad	Win. 209	WAA12	15.4 gr / 8,700 PSI	16.7 gr / 10,000 PSI	17.9 gr / 11,400 PSI	
1 1/8 oz	Clays	Rem. 209P	Rem. Fig. 8	16.9 gr / 6,900 LUP	18.0 gr / 7,900 LUP	19.2 gr / 9,000 LUP	
1 1/8 oz	Clays	Rem. 209P	WAA12	16.6 gr / 7,700 LUP	17.7 gr / 9,000 LUP	18.8 gr / 10,300 LUP	
1 1/8 oz	Clays	Win. 209	Hor Versalite	15.8 gr / 7,600 LUP	17.2 gr / 9,100 LUP	18.6 gr / 10,500 LUP	
1 1/8 oz	Clays	Win. 209	Rem. Fig. 8	16.4 gr / 8,400 PSI	17.5 gr / 9,700 PSI	18.6 gr / 11,000 PSI	
1 1/8 oz	Clays	Win. 209	WAA12	16.2 gr / 8,100 PSI	17.3 gr / 9,700 PSI	18.4 gr / 11,300 PSI	

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
12 GA., 2 3/4", REMINGTON STS. OR NITRO 27, OR GUN CLUB PLASTIC SHELLS (CONT.)							
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz.	IMR Red	Ched. 209	WAA12	15.5 gr / 8,300 PSI	16.8 gr / 9,500 PSI	18.1 gr / 10,600 PSI	-
1 1/8 oz.	IMR Red	Ched. 209	Windjammer	15.5 gr / 7,400 PSI	16.8 gr / 8,600 PSI	18.1 gr / 9,700 PSI	19.4 gr / 10,900 PSI
1 1/8 oz.	IMR Red	Fed. 209A	Rem. RXP12	14.8 gr / 8,800 PSI	16.1 gr / 9,800 PSI	17.3 gr / 10,800 PSI	-
1 1/8 oz.	IMR Red	Fed. 209A	WAA12	14.8 gr / 8,600 PSI	16.0 gr / 9,600 PSI	17.2 gr / 10,600 PSI	-
1 1/8 oz.	IMR Red	Rem. 209P	DRV-12	14.8 gr / 8,200 PSI	16.1 gr / 9,500 PSI	17.4 gr / 10,800 PSI	-
1 1/8 oz.	IMR Red	Rem. 209P	Windjammer	15.1 gr / 7,500 PSI	16.3 gr / 8,600 PSI	17.5 gr / 9,600 PSI	-
1 1/8 oz.	IMR Red	Win. 209	DRRF8	15.0 gr / 8,400 PSI	16.2 gr / 9,400 PSI	17.4 gr / 10,500 PSI	-
1 1/8 oz.	IMR Red	Win. 209	WAA12	14.6 gr / 8,600 PSI	15.8 gr / 9,600 PSI	17.0 gr / 10,700 PSI	-
1 1/8 oz	Internat'l	Rem. 209P	Hor. Vers.	17.2 gr / 7,700 PSI	18.4 gr / 8,900 PSI	19.6 gr / 10,100 PSI	20.8 gr / 11,300 PSI
1 1/8 oz	Internat'l	Rem. 209P	Rem. Fig. 8	18.6 gr / 6,400 LUP	19.6 gr / 7,000 LUP	20.9 gr / 7,500 LUP	21.7 gr / 9,100 LUP
1 1/8 oz	Internat'l	Rem. 209P	WAA12	18.3 gr / 7,000 LUP	18.8 gr / 7,600 LUP	19.7 gr / 8,700 LUP	20.9 gr / 10,400 LUP
1 1/8 oz	Internat'l	Win. 209	Hor. Versalite	17.8 gr / 6,900 LUP	18.4 gr / 7,800 LUP	19.5 gr / 9,100 LUP	20.6 gr / 10,400 LUP
1 1/8 oz	Internat'l	Win. 209	Rem. Fig. 8	17.5 gr / 7,900 PSI	18.6 gr / 9,000 PSI	19.7 gr / 10,200 PSI	20.8 gr / 11,300 PSI
1 1/8 oz	Internat'l	Win. 209	WAA12	17.0 gr / 7,100 PSI	18.4 gr / 8,600 PSI	19.8 gr / 10,100 PSI	21.1 gr / 11,500 PSI
1 1/8 oz	Titigroup	Rem. 209P	Rem. Fig. 8	14.9 gr / 8,200 PSI	16.0 gr / 9,100 PSI	17.1 gr / 10,000 PSI	18.5 gr / 11,500 PSI
1 1/8 oz	Titigroup	Rem. 209P	WAA12	14.9 gr / 8,000 PSI	15.8 gr / 9,200 PSI	16.7 gr / 10,300 PSI	-
1 1/8 oz	Titigroup	Win. 209	Rem. Fig. 8	15.1 gr / 8,000 PSI	16.1 gr / 8,900 PSI	17.1 gr / 9,900 PSI	-
1 1/8 oz	Titigroup	Win. 209	WAA12	14.7 gr / 8,300 PSI	15.8 gr / 9,400 PSI	16.8 gr / 10,500 PSI	-
				1090 fps	1145 fps	1200 fps	1250 fps
1 1/8 oz.	IMR Green	Ched. 209	WAA12	16.5 gr / 6,900 PSI	17.7 gr / 7,900 PSI	18.9 gr / 8,900 PSI	-
1 1/8 oz.	IMR Green	Ched. 209	Windjammer	16.5 gr / 6,200 PSI	17.8 gr / 7,100 PSI	19.1 gr / 7,900 PSI	-
1 1/8 oz.	IMR Green	Fed. 209A	CB 3116-12-A	16.0 gr / 8,600 PSI	17.4 gr / 9,600 PSI	18.7 gr / 10,600 PSI	-
1 1/8 oz.	IMR Green	Fed. 209A	Rem. RXP12	15.9 gr / 8,800 PSI	17.4 gr / 9,800 PSI	18.8 gr / 10,900 PSI	-
1 1/8 oz.	IMR Green	Fed. 209A	Windjammer	15.9 gr / 8,100 PSI	17.2 gr / 9,200 PSI	18.6 gr / 10,200 PSI	19.8 gr / 11,200 PSI
1 1/8 oz.	IMR Green	Rem. 209P	Rem. RXP12	16.0 gr / 8,200 PSI	17.4 gr / 9,100 PSI	18.9 gr / 10,000 PSI	20.2 gr / 10,800 PSI
1 1/8 oz.	IMR Green	Rem. 209P	WAA12	16.6 gr / 7,500 PSI	18.2 gr / 8,500 PSI	19.8 gr / 9,600 PSI	21.2 gr / 10,500 PSI
1 1/8 oz.	IMR Green	Win. 209	Rem. RXP12	16.8 gr / 7,900 PSI	18.2 gr / 8,900 PSI	19.6 gr / 9,800 PSI	20.9 gr / 10,700 PSI
1 1/8 oz.	IMR Green	Win. 209	WAA12	16.5 gr / 7,800 PSI	17.9 gr / 8,900 PSI	19.3 gr / 9,900 PSI	20.6 gr / 10,900 PSI
				1200 fps	1255 fps	1310 fps	
1 1/8 oz	Universal	Win. 209	Rem. Fig. 8	22.5 gr / 8,900 PSI	23.7 gr / 9,900 PSI	25.0 gr / 10,800 PSI	
1 1/8 oz	Universal	Win. 209	WAA12	21.5 gr / 9,800 PSI	23.0 gr / 10,700 PSI	-	
				1420 fps	1475 fps	1530 fps	1585 fps
1 1/8 oz	Longshot	Rem. 209P	Hor. Vers.	31.0 gr / 9,100 PSI	32.4 gr / 10,000 PSI	33.7 gr / 10,900 PSI	-
1 1/8 oz	Longshot	Win. 209	WAA12	31.7 gr / 9,100 PSI	32.8 gr / 10,100 PSI	33.5 gr / 11,200 PSI	-
				1100 fps	1150 fps	1200 fps	1250 fps
1 1/8 oz	700-X	Fed. 209A	Rem. FIG. 8	15.5 gr / 8,900 PSI	16.5 gr / 10,000 PSI	17.5 gr / 11,000 PSI	-
1 1/8 oz	700-X	Fed. 209A	WAA12	15.0 gr / 9,500 PSI	16.5 gr / 10,900 PSI	-	-
1 1/8 oz	700-X	Rem. 209P	Rem. FIG. 8	15.5 gr / 8,100 PSI	16.5 gr / 9,000 PSI	18.0 gr / 10,400 PSI	19.0 gr / 11,300 PSI
1 1/8 oz	700-X	Rem. 209P	WAA12	15.0 gr / 8,500 PSI	16.0 gr / 9,600 PSI	17.5 gr / 11,200 PSI	-

*Velocity is measured in feet per second (fps).
Pressure is measured in Pounds per Square Inch (PSI).

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
12 GA., 2 3/4", REMINGTON STS, OR NITRO 27, OR GUN CLUB PLASTIC SHELLS (CONT.)							
				1100 fps	1150 fps	1200 fps	1250 fps
1 1/8 oz	700-X	Win. 209	Rem. FIG 8	15.5 gr / 8,500 PSI	16.5 gr / 9,400 PSI	18.0 gr / 10,800 PSI	-
1 1/8 oz	700-X	Win. 209	WAA12	15.5 gr / 9,300 PSI	16.5 gr / 10,200 PSI	17.5 gr / 11,200 PSI	-
				1145 fps	1200 fps	1255 fps	1310 fps
1 1/8 oz	WST	Win. 209	Rem. FIG 8	19.0 gr / 10,400 PSI	-	-	-
1 1/8 oz	WST	Win. 209	Rem. RXP12	19.0 gr / 10,500 PSI	-	-	-
1 1/8 oz	Super Hcp	Rem. 209P	DRV-12	18.3 gr / 8,700 PSI	19.6 gr / 10,000 PSI	20.9 gr / 11,200 PSI	-
1 1/8 oz	Super Hcp	Rem. 209P	Rem. FIG 8	18.4 gr / 8,400 PSI	19.6 gr / 9,700 PSI	20.9 gr / 11,100 PSI	-
1 1/8 oz	Super Hcp	Rem. 209P	WAA12	18.5 gr / 8,700 PSI	19.8 gr / 10,000 PSI	21.0 gr / 11,400 PSI	-
1 1/8 oz	Super Hcp	Win. 209	DRV-12	18.5 gr / 8,600 PSI	19.8 gr / 10,000 PSI	21.0 gr / 11,300 PSI	-
1 1/8 oz	Super Hcp	Win. 209	Rem. FIG 8	18.2 gr / 8,200 PSI	19.6 gr / 9,700 PSI	20.9 gr / 11,100 PSI	-
1 1/8 oz	Super Hcp	Win. 209	WAA12	18.4 gr / 8,100 PSI	19.7 gr / 9,600 PSI	21.0 gr / 11,200 PSI	-
				1310 fps	1365 fps	1400 fps	
1 1/8 oz	WSF	Win. 209	Fed. 1253	-	28.0 gr / 8,900 PSI	29.0 gr / 9,500 PSI	
1 1/8 oz	WSF	Win. 209	WAA12	27.0 gr / 9,700 PSI	28.5 gr / 10,700 PSI	-	
				1220 fps			
1 1/4 oz	Universal	Rem. 209P	Rem. SP12	24.0 gr / 9,600 PSI			
1 1/4 oz	Universal	Rem. 209P	WAA12F114	23.7 gr / 10,600 PSI			
1 1/4 oz	Universal	Win. 209	Rem. SP12	24.0 gr / 10,000 PSI			
1 1/4 oz	Universal	Win. 209	WAA12F114	23.5 gr / 10,900 PSI			
				1220 fps	1330 fps	1385 fps	1440 fps
1 1/4 oz	HS-6	Win. 209	WAA12F114	32.0 gr / 9,200 LUP	34.0 gr / 10,400 LUP	-	-
1 1/4 oz	HS-6	Win. 209	Rem. R12H	32.0 gr / 9,100 LUP	34.0 gr / 10,200 LUP	-	-
1 1/4 oz	Longshot	Rem. 209P	Rem. R12L	-	28.5 gr / 9,900 PSI	29.9 gr / 10,700 PSI	-
1 1/4 oz	Longshot	Rem. 209P	WAA12F114	-	27.1 gr / 10,600 PSI	28.2 gr / 11,500 PSI	-
1 1/4 oz	Longshot	Win. 209	Rem. R12L	-	28.5 gr / 9,300 PSI	30.2 gr / 10,300 PSI	31.8 gr / 11,200 PSI
1 1/4 oz	Longshot	Win. 209	WAA12F114	-	28.2 gr / 9,100 PSI	30.1 gr / 10,400 PSI	-
				1220 fps	1275 fps	1330 fps	1385 fps
1 1/4 oz	IMR Blue	Fed. 209A	DRA 12 Yellow	28.7 gr / 9,100 PSI	30.6 gr / 10,100 PSI	32.5 gr / 11,100 PSI	-
1 1/4 oz	IMR Blue	Fed. 209A	Rem. SP12	28.8 gr / 8,800 PSI	30.6 gr / 9,700 PSI	32.4 gr / 10,600 PSI	34.3 gr / 11,500 PSI
1 1/4 oz	IMR Blue	Fed. 209A	WAA12R	28.7 gr / 8,600 PSI	30.6 gr / 9,600 PSI	32.4 gr / 10,500 PSI	34.3 gr / 11,500 PSI
1 1/4 oz	IMR Blue	Win. 209	DRA 12 Yellow	29.3 gr / 9,000 PSI	31.3 gr / 9,800 PSI	33.3 gr / 10,600 PSI	35.3 gr / 11,400 PSI
1 1/4 oz	IMR Blue	Win. 209	Rem. SP12	29.7 gr / 8,600 PSI	31.6 gr / 9,500 PSI	33.4 gr / 10,400 PSI	35.2 gr / 11,300 PSI
1 1/4 oz	IMR Blue	Win. 209	WAA12R	29.5 gr / 8,400 PSI	31.5 gr / 9,300 PSI	33.4 gr / 10,200 PSI	35.4 gr / 11,100 PSI
				1225 fps	1275 fps	1325 fps	
1 1/4 oz	WSF	CCI 209	WAA12F114	25.5 gr / 9,100 PSI	27.0 gr / 10,200 PSI	28.5 gr / 10,900 PSI	
1 1/4 oz	WSF	Win. 209	WAA12F114	-	27.5 gr / 9,700 PSI	29.5 gr / 10,400 PSI	
				1220 fps	1275 fps	1330 fps	
1 1/4 oz	572	Fed. 209A	DRA 12 YELLOW	22.6 gr / 10,700 PSI	-	-	
1 1/4 oz	572	Fed. 209A	Rem. SP12	22.2 gr / 10,400 PSI	-	-	

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
12 GA., 2 3/4", REMINGTON STS, OR NITRO 27, OR GUN CLUB PLASTIC SHELLS (CONT.)							
				1220 fps	1275 fps	1330 fps	
1 1/4 oz	572	Rem. 209P	DRA 12 YELLOW	22.8 gr / 10,400 PSI	24.3 gr / 11,300 PSI	-	
1 1/4 oz	572	Rem. 209P	Rem. SP12	22.9 gr / 9,800 PSI	24.3 gr / 10,900 PSI	-	
1 1/4 oz	572	Win. 209	DRA 12 YELLOW	23.9 gr / 9,600 PSI	25.4 gr / 10,800 PSI	-	
1 1/4 oz	572	Win. 209	Rem. SP12	24.0 gr / 9,400 PSI	25.1 gr / 10,600 PSI	27.1 gr / 11,100 PSI	
12 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA AND HS PLASTIC SHELLS							
				1250 fps	1300 fps	1350 fps	1400 fps
7/8 oz	Titewad	Fed. 209A	WAA12L	17.8 gr / 8,600 PSI	18.8 gr / 9,100 PSI	19.8 gr / 10,700 PSI	-
7/8 oz	Titewad	Rem. 209P	Rem. TGT12	17.2 gr / 8,300 PSI	18.2 gr / 9,400 PSI	19.5 gr / 10,300 PSI	-
7/8 oz	Titewad	Rem. 209P	WAA12L	18.0 gr / 8,500 PSI	19.0 gr / 9,100 PSI	19.9 gr / 10,000 PSI	-
7/8 oz	Titewad	Win. 209	Rem. TGT12	17.1 gr / 9,300 PSI	18.1 gr / 9,900 PSI	19.5 gr / 10,800 PSI	-
7/8 oz	Titewad	Win. 209	WAA12L	17.8 gr / 8,600 PSI	19.1 gr / 9,500 PSI	20.2 gr / 10,300 PSI	21.4 gr / 10,800 PSI
				1200 fps	1250 fps	1300 fps	1350 fps
7/8 oz	Clays	Fed. 209A	WAA12L	-	18.0 gr / 8,400 PSI	19.1 gr / 9,300 PSI	20.5 gr / 10,800 PSI
7/8 oz	Clays	Rem. 209P	Rem. TGT 12	18.2 gr / 6,000 LUP	18.9 gr / 6,800 LUP	-	-
7/8 oz	Clays	Rem. 209P	WAA12L	16.8 gr / 6,800 PSI	18.1 gr / 7,500 PSI	19.1 gr / 8,600 PSI	20.5 gr / 10,700 PSI
7/8 oz	Clays	Win. 209	Rem. TGT12	15.8 gr / 7,100 PSI	17.4 gr / 8,000 PSI	18.4 gr / 9,000 PSI	19.4 gr / 11,300 PSI
7/8 oz	Clays	Win. 209	WAA12L	-	18.3 gr / 8,300 PSI	19.2 gr / 9,400 PSI	20.5 gr / 10,000 PSI
				1150 fps	1200 fps	1250 fps	1300 fps
7/8 oz	IMR Red	Ched. 209	DRXXL ORANGE	14.5 gr / 6,400 PSI	15.6 gr / 7,400 PSI	16.7 gr / 8,400 PSI	17.8 gr / 9,400 PSI
7/8 oz	IMR Red	Ched. 209	WAA12L	14.8 gr / 6,600 PSI	15.8 gr / 7,500 PSI	16.9 gr / 8,400 PSI	17.9 gr / 9,300 PSI
7/8 oz	IMR Red	Rem. 209P	DRXXL ORANGE	14.9 gr / 6,700 PSI	16.0 gr / 7,500 PSI	17.0 gr / 8,300 PSI	18.0 gr / 9,100 PSI
7/8 oz	IMR Red	Rem. 209P	WAA12L	14.8 gr / 6,700 PSI	15.8 gr / 7,400 PSI	16.9 gr / 8,200 PSI	17.9 gr / 9,000 PSI
7/8 oz	IMR Red	Win. 209	CB 4100-12B	14.4 gr / 6,400 PSI	15.4 gr / 7,200 PSI	16.4 gr / 7,900 PSI	17.4 gr / 8,700 PSI
7/8 oz	IMR Red	Win. 209	Rem. TGT 12	14.4 gr / 6,300 PSI	15.5 gr / 7,100 PSI	16.6 gr / 7,800 PSI	17.7 gr / 8,600 PSI
7/8 oz	IMR Red	Win. 209	WAA12L	14.4 gr / 6,500 PSI	15.4 gr / 7,400 PSI	16.5 gr / 8,300 PSI	17.5 gr / 9,200 PSI
				1250 fps	1300 fps	1350 fps	1400 fps
7/8 oz	Internal	Rem. 209P	Rem. TGT12	20.5 gr / 6,800 PSI	21.5 gr / 7,300 PSI	22.5 gr / 8,300 PSI	23.0 gr / 9,300 PSI
7/8 oz	Internal	Rem. 209P	WAA12L	20.0 gr / 7,500 PSI	20.8 gr / 8,300 PSI	22.2 gr / 8,900 PSI	22.7 gr / 10,200 PSI
7/8 oz	Internal	Win. 209	Rem. TGT12	19.2 gr / 7,100 PSI	20.2 gr / 7,800 PSI	21.2 gr / 8,700 PSI	22.5 gr / 9,300 PSI
7/8 oz	Internal	Win. 209	WAA12SL	20.5 gr / 7,900 PSI	21.0 gr / 8,600 PSI	21.5 gr / 9,100 PSI	22.5 gr / 10,200 PSI
				1250 fps	1300 fps	1350 fps	
7/8 oz	IMR Green	Ched. 209	CB 4100-12B	19.1 gr / 7,200 PSI	20.4 gr / 8,000 PSI	21.7 gr / 8,800 PSI	
7/8 oz	IMR Green	Ched. 209	DRXXL ORANGE	18.4 gr / 8,000 PSI	19.8 gr / 9,000 PSI	21.2 gr / 10,000 PSI	
7/8 oz	IMR Green	Ched. 209	WAA12L	19.0 gr / 7,700 PSI	20.2 gr / 8,400 PSI	21.3 gr / 9,200 PSI	
7/8 oz	IMR Green	Rem. 209P	DRXXL ORANGE	18.7 gr / 7,900 PSI	20.1 gr / 8,600 PSI	21.4 gr / 9,400 PSI	
7/8 oz	IMR Green	Win. 209	WAA12L	18.8 gr / 7,900 PSI	20.1 gr / 8,700 PSI	21.3 gr / 9,500 PSI	
				1150 fps	1200 fps	1250 fps	1325 fps
24 gm	700-X	Fed. 209A	Rem. TGT12	14.5 gr / 6,000 PSI	16.0 gr / 7,000 PSI	17.0 gr / 7,800 PSI	18.5 gr / 8,600 PSI

12 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA AND HS PLASTIC SHELLS (CONT.)

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
				1150 fps	1200 fps	1250 fps	1325 fps
24 gm	700-X	Fed. 209A	WAA12SL	14.5 gr / 6,400 PSI	15.5 gr / 7,000 PSI	17.0 gr / 8,100 PSI	18.5 gr / 9,100 PSI
24 gm	700-X	Rem. 209P	Rem. TGT12	15.5 gr / 5,000 PSI	16.5 gr / 5,500 PSI	18.0 gr / 6,100 PSI	20.5 gr / 6,800 PSI
24 gm	700-X	Rem. 209P	WAA12SL	15.0 gr / 5,300 PSI	16.5 gr / 6,000 PSI	18.0 gr / 6,800 PSI	19.5 gr / 7,600 PSI
24 gm	700-X	Win. 209	Rem. TGT12	14.5 gr / 6,000 PSI	16.0 gr / 6,900 PSI	17.0 gr / 7,600 PSI	18.5 gr / 8,700 PSI
24 gm	700-X	Win. 209	WAA12SL	14.5 gr / 6,300 PSI	15.5 gr / 7,100 PSI	17.0 gr / 8,200 PSI	18.5 gr / 9,100 PSI
				1325 fps	1355 fps	1400 fps	
7/8 oz	WST	Fed. 209A	WAA12L	-	23.5 gr / 7,400 PSI	-	
7/8 oz	WST	Win. 209	WAA12L	22.0 gr / 7,900 PSI	-	23.5 gr / 8,200 PSI	
				1125 fps	1180 fps	1235 fps	1290 fps
1 oz	Titewad	Fed. 209A	Rem. TGT12	15.7 gr / 7,600 PSI	17.3 gr / 8,800 PSI	18.1 gr / 10,000 PSI	19.4 gr / 11,200 PSI
1 oz	Titewad	Fed. 209A	WAA12SL	16.4 gr / 7,300 PSI	17.4 gr / 7,700 PSI	18.4 gr / 9,600 PSI	20.1 gr / 10,600 PSI
1 oz	Titewad	Rem. 209P	Rem. TGT 12	15.9 gr / 6,900 PSI	16.8 gr / 7,800 PSI	18.4 gr / 8,900 PSI	20.2 gr / 10,600 PSI
1 oz	Titewad	Rem. 209P	WAA12SL	15.5 gr / 7,300 PSI	17.1 gr / 8,000 PSI	18.5 gr / 9,600 PSI	19.5 gr / 11,200 PSI
1 oz	Titewad	Win. 209	Fed. 12S0	15.6 gr / 9,000 PSI	16.8 gr / 10,300 PSI	-	-
1 oz	Titewad	Win. 209	Rem. TGT12	15.2 gr / 8,200 PSI	16.4 gr / 9,200 PSI	17.7 gr / 10,200 PSI	19.0 gr / 11,300 PSI
1 oz	Titewad	Win. 209	WAA12SL	15.5 gr / 7,300 PSI	17.1 gr / 8,000 PSI	18.5 gr / 9,600 PSI	19.5 gr / 11,200 PSI
1 oz	Clays	Rem. 209P	Rem. TGT12	16.1 gr / 7,500 PSI	17.3 gr / 8,400 PSI	18.5 gr / 9,900 PSI	-
1 oz	Clays	Rem. 209P	WAA12SL	16.2 gr / 6,500 PSI	17.4 gr / 8,000 PSI	18.6 gr / 9,200 PSI	20.4 gr / 10,600 PSI
1 oz	Clays	Win. 209	Rem. TGT12	15.8 gr / 7,700 PSI	16.8 gr / 8,500 PSI	18.2 gr / 10,300 PSI	-
1 oz	Clays	Win. 209	WAA12SL	16.0 gr / 7,400 LUP	17.2 gr / 8,300 LUP	18.5 gr / 9,200 LUP	19.8 gr / 10,200 LUP
				1145 fps	1200 fps	1250 fps	1300 fps
1 oz.	IMR Red	Ched. 209	Green Duster	15.7 gr / 8,100 PSI	16.9 gr / 9,100 PSI	17.9 gr / 10,000 PSI	19.0 gr / 11,000 PSI
1 oz.	IMR Red	Ched. 209	Rem. TGT 12	15.7 gr / 7,600 PSI	16.9 gr / 8,500 PSI	17.9 gr / 9,400 PSI	19.0 gr / 10,200 PSI
1 oz.	IMR Red	Rem. 209P	Rem. TGT 12	15.7 gr / 7,700 PSI	16.9 gr / 8,600 PSI	18.0 gr / 9,400 PSI	19.1 gr / 10,300 PSI
1 oz.	IMR Red	Win. 209	CB 1100-12	15.4 gr / 8,100 PSI	16.5 gr / 9,200 PSI	17.6 gr / 10,100 PSI	18.6 gr / 11,100 PSI
1 oz.	IMR Red	Win. 209	Rem. TGT 12	15.3 gr / 8,200 PSI	16.5 gr / 9,100 PSI	17.6 gr / 10,000 PSI	18.7 gr / 10,900 PSI
				1180 fps	1235 fps	1290 fps	1345 fps
1 oz	Internat'l	Fed. 209A	WAA12SL	18.0 gr / 8,700 PSI	19.0 gr / 10,400 PSI	20.0 gr / 11,300 PSI	-
1 oz	Internat'l	Rem. 209P	Rem. TGT 12	20.8 gr / 5,900 LUP	21.5 gr / 7,100 LUP	22.3 gr / 7,800 LUP	-
1 oz	Internat'l	Rem. 209P	WAA12SL	19.0 gr / 7,700 PSI	20.0 gr / 9,200 PSI	21.2 gr / 9,700 PSI	22.5 gr / 11,100 PSI
1 oz	Internat'l	Win. 209	Rem. TGT12	18.4 gr / 7,700 PSI	19.6 gr / 8,600 PSI	20.7 gr / 9,600 PSI	22.2 gr / 11,000 PSI
1 oz	Internat'l	Win. 209	WAA12SL	18.9 gr / 6,900 LUP	20.4 gr / 8,300 LUP	21.3 gr / 8,900 LUP	-
1 oz	Titigroup	Rem. 209P	Rem. TGT 12	16.0 gr / 7,700 PSI	17.3 gr / 9,000 PSI	18.6 gr / 10,200 PSI	20.0 gr / 11,200 PSI
1 oz	Titigroup	Rem. 209P	WAA12SL	16.2 gr / 7,800 PSI	17.4 gr / 9,100 PSI	18.6 gr / 10,400 PSI	20.0 gr / 11,500 PSI
1 oz	Titigroup	Win. 209	Rem. TGT 12	15.7 gr / 7,900 PSI	17.1 gr / 9,100 PSI	18.5 gr / 10,200 PSI	19.9 gr / 11,400 PSI
1 oz	Titigroup	Win. 209	WAA12SL	16.5 gr / 7,500 PSI	17.7 gr / 8,800 PSI	18.9 gr / 10,100 PSI	20.1 gr / 11,400 PSI
				1145 fps	1200 fps	1250 fps	1300 fps
1 oz.	IMR Green	Ched. 209	Green Duster	17.0 gr / 6,700 PSI	18.3 gr / 7,500 PSI	19.4 gr / 8,200 PSI	20.6 gr / 8,900 PSI
1 oz.	IMR Green	Ched. 209	Rem. TGT 12	17.0 gr / 6,500 PSI	18.3 gr / 7,200 PSI	19.4 gr / 7,800 PSI	20.6 gr / 8,400 PSI

*Velocity is measured in feet per second (fps).
Pressure is measured in Pounds per Square Inch (PSI).

12 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA AND HS PLASTIC SHELLS (CONT.)

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
				1145 fps	1200 fps	1250 fps	1300 fps
1 oz.	IMR Green	Rem. 209P	Rem. TGT 12	16.9 gr / 6,500 PSI	18.2 gr / 7,200 PSI	19.4 gr / 7,800 PSI	20.6 gr / 8,500 PSI
1 oz.	IMR Green	Win. 209	CB 1100-12	17.0 gr / 7,200 PSI	18.2 gr / 8,200 PSI	19.4 gr / 9,000 PSI	20.5 gr / 9,800 PSI
1 oz.	IMR Green	Win. 209	Rem. TGT 12	17.2 gr / 7,000 PSI	18.5 gr / 7,900 PSI	19.6 gr / 8,600 PSI	20.8 gr / 9,400 PSI
				1100 fps	1150 fps	1200 fps	1250 fps
1 oz	700-X	Rem. 209P	Rem. TGT12	15.5 gr / 5,800 PSI	16.5 gr / 6,200 PS	18.0 gr / 7,100 PSI	19.0 gr / 7,700 PSI
1 oz	700-X	Rem. 209P	WAA12SL	15.0 gr / 6,400 PSI	16.5 gr / 7,000 PSI	18.0 gr / 7,600 PSI	19.0 gr / 8,000 PSI
1 oz	700-X	Win. 209	Rem. TGT12	14.5 gr / 6,700 PSI	15.5 gr / 7,400 PSI	16.5 gr / 8,200 PSI	18.0 gr / 9,400 PSI
1 oz	700-X	Win. 209	WAA12SL	14.5 gr / 7,500 PSI	15.5 gr / 8,200 PSI	16.5 gr / 9,000 PSI	18.0 gr / 10,100 PSI
				1180 fps	1235 fps	1290 fps	1345 fps
1 oz	WST*	Win. 209	WAA12SL	19.5 gr / 7,400 PSI	21.0 gr / 8,100 PSI	22.0 gr / 9,000 PSI	-
1 oz	Super Hcp	Fed. 209A	WAA12SL	18.3 gr / 8,000 PSI	19.5 gr / 9,100 PSI	20.8 gr / 10,300 PS	22.0 gr / 11,300 PSI
1 oz	Super Hcp	Rem. 209P	J-XL-1	19.0 gr / 7,200 PSI	20.0 gr / 8,300 PSI	21.0 gr / 9,400 PSI	22.1 gr / 10,700 PSI
1 oz	Super Hcp	Win. 209	J-XL-1	19.3 gr / 7,000 PSI	20.3 gr / 8,100 PSI	21.2 gr / 9,000 PSI	22.1 gr / 10,100 PSI
1 oz	Super Hcp	Win. 209	Rem. TGT12	18.2 gr / 7,100 PSI	19.6 gr / 8,500 PSI	20.9 gr / 9,900 PSI	22.2 gr / 11,200 PSI
				1180 fps	1235 fps	1290 fps	1345 fps
1 oz	Super Hcp	Win. 209	WAA12SL	18.5 gr / 7,400 PSI	19.7 gr / 8,600 PSI	20.8 gr / 9,800 PSI	22.0 gr / 11,000 PSI
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz	Titewad	Fed. 209A	Fed. 12S3	15.5 gr / 9,900 PSI	16.8 gr / 10,800 PSI	-	
1 1/8 oz	Titewad	Rem. 209P	Rem. Fig. 8	15.7 gr / 8,500 PSI	16.8 gr / 9,300 PSI	18.3 gr / 10,400 PSI	
1 1/8 oz	Titewad	Rem. 209P	WAA12	15.5 gr / 10,100 PSI	16.4 gr / 11,200 PSI	-	
1 1/8 oz	Titewad	Win. 209	Rem. Fig. 8	15.2 gr / 9,000 PSI	16.2 gr / 9,700 PSI	17.5 gr / 11,100 PSI	
1 1/8 oz	Titewad	Win. 209	WAA12	15.2 gr / 9,500 PSI	16.5 gr / 10,400 PSI	17.8 gr / 11,100 PSI	
1 1/8 oz	Clays	Rem. 209P	Rem. Fig. 8	16.3 gr / 9,000 PSI	17.3 gr / 10,100 PSI	18.5 gr / 11,500 PSI	
1 1/8 oz	Clays	Rem. 209P	WAA12	15.9 gr / 8,900 PSI	17.0 gr / 9,400 PSI	-	
1 1/8 oz	Clays	Win. 209	Hor. Versaite	16.4 gr / 8,300 LUP	17.6 gr / 9,400 LUP	18.8 gr / 10,600 LUP	
1 1/8 oz	Clays	Win. 209	Rem. Fig. 8	16.0 gr / 7,700 LUP	17.0 gr / 8,500 LUP	18.1 gr / 9,400 LUP	
1 1/8 oz	Clays	Win. 209	WAA12	16.1 gr / 7,700 LUP	17.3 gr / 8,800 LUP	18.2 gr / 9,800 LUP	
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz.	IMR Red	Ched. 209	DRV-12	15.1 gr / 8,100 PSI	16.4 gr / 9,300 PSI	17.7 gr / 10,500 PSI	-
1 1/8 oz.	IMR Red	Ched. 209	Rem. FIG. 8	15.3 gr / 8,100 PSI	16.6 gr / 9,200 PSI	17.9 gr / 10,400 PSI	19.2 gr / 11,500 PSI
1 1/8 oz.	IMR Red	Ched. 209	WAA12	15.0 gr / 8,400 PSI	16.2 gr / 9,500 PSI	17.5 gr / 10,500 PSI	-
1 1/8 oz.	IMR Red	Fed. 209A	DRV-12	15.0 gr / 8,700 PSI	16.1 gr / 10,000 PSI	17.2 gr / 11,400 PSI	-
1 1/8 oz.	IMR Red	Fed. 209A	Rem. FIG. 8	15.0 gr / 8,800 PSI	16.2 gr / 9,800 PSI	17.3 gr / 10,900 PSI	-
1 1/8 oz.	IMR Red	Fed. 209A	WAA12	15.0 gr / 8,900 PSI	16.2 gr / 9,900 PSI	17.5 gr / 11,000 PSI	-
1 1/8 oz.	IMR Red	Rem. 209P	Rem. FIG. 8	15.2 gr / 7,900 PSI	16.5 gr / 8,800 PSI	17.9 gr / 9,700 PSI	19.2 gr / 10,600 PSI
1 1/8 oz.	IMR Red	Rem. 209P	WAA12	14.9 gr / 8,300 PSI	16.2 gr / 9,400 PSI	17.5 gr / 10,500 PSI	-
1 1/8 oz.	IMR Red	Win. 209	DR-XL-1 1/8	15.0 gr / 8,900 PSI	16.1 gr / 9,900 PSI	17.2 gr / 10,900 PSI	-
1 1/8 oz.	IMR Red	Win. 209	DRPF8	15.0 gr / 8,600 PSI	16.2 gr / 9,600 PSI	17.5 gr / 10,600 PSI	-
1 1/8 oz.	IMR Red	Win. 209	Windjammer	15.3 gr / 8,100 PSI	16.5 gr / 9,000 PSI	17.6 gr / 10,000 PSI	-

*Velocity is measured in feet per second (fps).
Pressure is measured in Pounds per Square Inch (PSI).

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
12 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA AND HS PLASTIC SHELLS (CONT.)							
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz	Internat'l	Fed. 209A	Rem. FIG. 8	16.5 gr / 9,700 PSI	17.0 gr / 10,100 PSI	18.0 gr / 10,900 PSI	-
1 1/8 oz	Internat'l	Fed. 209A	WAA12	16.0 gr / 9,500 PSI	16.8 gr / 10,300 PSI	17.5 gr / 10,900 PSI	-
1 1/8 oz	Internat'l	Rem. 209P	Hor. Vers.	16.8 gr / 9,000 PSI	17.8 gr / 10,000 PSI	19.0 gr / 11,300 PSI	-
1 1/8 oz	Internat'l	Rem. 209P	Rem. FIG. 8	-	20.1 gr / 6,300 LUP	21.1 gr / 7,700 LUP	22.1 gr / 8,000 LUP
1 1/8 oz	Internat'l	Rem. 209P	WAA12	16.5 gr / 8,900 PSI	17.8 gr / 9,500 PSI	18.7 gr / 11,100 PSI	-
1 1/8 oz	Internat'l	Win. 209	Hor. Versalite	17.4 gr / 7,900 LUP	18.1 gr / 8,600 LUP	19.2 gr / 9,800 LUP	-
1 1/8 oz	Internat'l	Win. 209	Rem. FIG. 8	17.3 gr / 8,100 PSI	18.3 gr / 9,500 PSI	-	-
1 1/8 oz	Internat'l	Win. 209	WAA12	17.6 gr / 7,400 LUP	18.1 gr / 8,300 LUP	19.2 gr / 9,600 LUP	21.3 gr / 10,800 LUP
1 1/8 oz	Titegroup	Rem. 209P	Rem. FIG. 8	14.7 gr / 8,500 PSI	15.9 gr / 9,700 PSI	17.0 gr / 10,700 PSI	-
1 1/8 oz	Titegroup	Rem. 209P	WAA12	14.6 gr / 8,400 PSI	15.6 gr / 9,600 PSI	16.5 gr / 10,600 PSI	-
1 1/8 oz	Titegroup	Win. 209	Rem. FIG. 8	14.9 gr / 8,200 PSI	15.9 gr / 9,200 PSI	16.9 gr / 10,200 PSI	-
1 1/8 oz	Titegroup	Win. 209	WAA12	14.9 gr / 7,900 PSI	15.9 gr / 9,000 PSI	17.4 gr / 10,400 PSI	18.4 gr / 11,400 PSI
				1090 fps	1145 fps	1200 fps	1250 fps
1 1/8 oz.	IMR Green	Ched. 209	DRV-12	16.3 gr / 8,900 PSI	17.5 gr / 7,900 PSI	18.8 gr / 9,000 PSI	20.0 gr / 10,000 PSI
1 1/8 oz.	IMR Green	Ched. 209	Rem. FIG. 8	16.4 gr / 7,100 PSI	17.7 gr / 7,900 PSI	19.1 gr / 8,700 PSI	20.4 gr / 9,500 PSI
1 1/8 oz.	IMR Green	Ched. 209	WAA12	16.2 gr / 7,200 PSI	17.5 gr / 8,100 PSI	18.7 gr / 9,000 PSI	20.0 gr / 9,900 PSI
1 1/8 oz.	IMR Green	Fed. 209A	CB 1118-12	16.4 gr / 8,700 PSI	17.8 gr / 9,800 PSI	19.1 gr / 11,000 PSI	-
1 1/8 oz.	IMR Green	Fed. 209A	DRV-12	16.4 gr / 9,000 PSI	17.7 gr / 10,000 PSI	19.0 gr / 11,000 PSI	-
1 1/8 oz.	IMR Green	Fed. 209A	Rem. FIG. 8	16.4 gr / 8,300 PSI	17.7 gr / 9,300 PSI	19.1 gr / 10,300 PSI	20.3 gr / 11,200 PSI
1 1/8 oz.	IMR Green	Rem. 209P	Rem. FIG. 8	16.1 gr / 6,800 PSI	17.5 gr / 7,600 PSI	18.8 gr / 8,500 PSI	20.2 gr / 9,200 PSI
1 1/8 oz.	IMR Green	Rem. 209P	WAA12	16.2 gr / 7,500 PSI	17.5 gr / 8,200 PSI	18.8 gr / 9,000 PSI	20.1 gr / 9,700 PSI
1 1/8 oz.	IMR Green	Win. 209	DRRF8	16.7 gr / 7,500 PSI	18.1 gr / 8,600 PSI	19.5 gr / 9,700 PSI	20.8 gr / 10,700 PSI
1 1/8 oz.	IMR Green	Win. 209	DRV-12	16.5 gr / 7,600 PSI	17.8 gr / 8,700 PSI	19.1 gr / 9,900 PSI	20.3 gr / 10,900 PSI
				1200 fps	1255 fps	1310 fps	
1 1/8 oz	Universal	Fed. 209A	WAA12	21.5 gr / 9,600 PSI	22.8 gr / 10,700 PSI	23.6 gr / 11,300 PSI	
1 1/8 oz	Universal	Win. 209	Rem. FIG. 8	22.5 gr / 9,000 PSI	23.5 gr / 10,000 PSI	24.5 gr / 10,700 PSI	
1 1/8 oz	Universal	Win. 209	WAA12	22.0 gr / 10,000 PSI	22.7 gr / 10,600 PSI	-	
				1420 fps	1475 fps	1530 fps	1585 fps
1 1/8 oz	Longshot	Fed. 209A	Fed. 12S3	31.1 gr / 10,300 PSI	32.2 gr / 11,300 PSI	-	-
1 1/8 oz	Longshot	Fed. 209A	WAA12	31.0 gr / 9,800 PSI	32.3 gr / 10,800 PSI	-	-
1 1/8 oz	Longshot	Rem. 209P	WAA12	30.8 gr / 9,500 PSI	32.1 gr / 10,500 PSI	-	-
1 1/8 oz	Longshot	Win. 209	Hor. Vers.	32.2 gr / 8,600 PSI	33.6 gr / 9,500 PSI	34.9 gr / 10,300 PSI	-
1 1/8 oz	Longshot	Win. 209	WAA12	32.1 gr / 9,200 PSI	33.2 gr / 10,100 PSI	34.4 gr / 11,100 PSI	-
				1100 fps	1150 fps	1200 fps	1250 fps
1 1/8 oz	700-X	Fed. 209A	Rem. FIG. 8	15.5 gr / 8,900 PSI	16.5 gr / 9,600 PSI	18.0 gr / 10,600 PSI	19.0 gr / 11,200 PSI
1 1/8 oz	700-X	Fed. 209A	WAA12	15.0 gr / 9,100 PSI	16.0 gr / 10,000 PSI	17.5 gr / 11,300 PSI	-
1 1/8 oz	700-X	Rem. 209P	Rem. FIG. 8	16.0 gr / 7,900 PSI	17.0 gr / 8,400 PSI	18.5 gr / 9,500 PSI	19.5 gr / 10,200 PSI
1 1/8 oz	700-X	Rem. 209P	WAA12	15.5 gr / 8,200 PSI	17.0 gr / 9,000 PSI	18.5 gr / 9,800 PSI	20.0 gr / 10,800 PSI

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
12 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA AND HS PLASTIC SHELLS (CONT.)							
				1100 fps	1150 fps	1200 fps	1250 fps
1 1/8 oz	700-X	Win. 209	Rem. FIG. 8	15.5 gr / 8,300 PSI	16.5 gr / 9,000 PSI	18.0 gr / 10,200 PSI	19.5 gr / 11,400 PSI
1 1/8 oz	700-X	Win. 209	WAA12	15.5 gr / 9,200 PSI	16.5 gr / 10,100 PSI	17.5 gr / 10,800 PSI	-
				1145 fps	1200 fps	1255 fps	1310 fps
1 1/8 oz	Super Hcp	Rem. 209P	Rem. FIG. 8	18.1 gr / 7,700 PSI	19.6 gr / 9,400 PSI	21.0 gr / 10,900 PSI	-
1 1/8 oz	Super Hcp	Rem. 209P	WAA12	18.4 gr / 7,600 PSI	19.6 gr / 9,100 PSI	20.8 gr / 10,700 PSI	-
1 1/8 oz	Super Hcp	Win. 209	DRV-12	18.0 gr / 8,500 PSI	19.4 gr / 9,900 PSI	20.8 gr / 11,400 PSI	-
1 1/8 oz	Super Hcp	Win. 209	Rem. FIG. 8	18.4 gr / 7,200 PSI	19.7 gr / 8,800 PSI	21.0 gr / 10,400 PSI	-
1 1/8 oz	Super Hcp	Win. 209	WAA12	18.1 gr / 8,200 PSI	19.5 gr / 9,700 PSI	20.9 gr / 11,300 PSI	-
				1145 fps	1310 fps	1365 fps	1400 fps
1 1/8 oz	WSF	Win. 209	Fed. 12S3	-	27.5 gr / 8,500 PSI	28.5 gr / 9,500 PSI	29.5 gr / 10,800 PSI
1 1/8 oz	WSF	Win. 209	WAA12	-	27.5 gr / 8,700 PSI	29.0 gr / 9,900 PSI	30.0 gr / 10,600 PSI
				1220 fps	1225 fps	1250 fps	
1 1/4 oz	Universal	Fed. 209A	WAA12F114	22.6 gr / 11,500 PSI	-	-	
1 1/4 oz	Universal	Rem. 209P	Rem. SP12	23.3 gr / 10,600 PSI	-	24.2 gr / 11,200 PSI	
1 1/4 oz	Universal	Rem. 209P	WAA12F114	23.0 gr / 11,500 PSI	-	-	
1 1/4 oz	Universal	Win. 209	Rem. SP12	22.8 gr / 10,700 PSI	-	23.3 gr / 11,400 PSI	
1 1/4 oz	Universal	Win. 209	WAA12 F114	23.0 gr / 10,900 PSI	-	-	
				1220 fps	1330 fps		
1 1/4 oz	HS-6	Win. 209	WAA12F114	30.0 gr / 8,800 LUP	33.0 gr / 10,500 LUP		
				1330 fps	1385 fps	1440 fps	
1 1/4 oz	Longshot	Fed. 209A	Rem. SP12	28.6 gr / 9,400 PSI	30.0 gr / 10,600 PSI	-	
1 1/4 oz	Longshot	Fed. 209A	WAA12F114	27.7 gr / 10,800 PSI	-	-	
1 1/4 oz	Longshot	Rem. 209P	Rem. SP12	29.1 gr / 9,400 PSI	30.9 gr / 9,800 PSI	32.2 gr / 11,200 PSI	
1 1/4 oz	Longshot	Rem. 209P	WAA12F114	27.9 gr / 10,500 PSI	29.5 gr / 11,300 PSI	-	
1 1/4 oz	Longshot	Win. 209	Rem. SP12	30.0 gr / 8,300 PSI	31.5 gr / 9,300 PSI	33.0 gr / 10,400 PSI	
1 1/4 oz	Longshot	Win. 209	WAA12F114	28.7 gr / 9,800 PSI	30.4 gr / 10,800 PSI	-	
				1220 fps	1275 fps	1330 fps	1385 fps
1 1/4 oz.	IMR Blue	Fed. 209A	DRA 12 Yellow	28.5 gr / 9,700 PSI	30.4 gr / 10,700 PSI	-	-
1 1/4 oz.	IMR Blue	Fed. 209A	Rem. SP12	28.8 gr / 9,100 PSI	30.6 gr / 10,100 PSI	32.4 gr / 11,100 PSI	-
1 1/4 oz.	IMR Blue	Fed. 209A	WAA12R	28.5 gr / 8,900 PSI	30.5 gr / 9,900 PSI	32.4 gr / 10,800 PSI	-
1 1/4 oz.	IMR Blue	Win. 209	DRA 12 Yellow	29.4 gr / 9,300 PSI	31.3 gr / 10,100 PSI	-	-
1 1/4 oz.	IMR Blue	Win. 209	Rem. SP12	29.6 gr / 8,600 PSI	31.5 gr / 9,600 PSI	33.4 gr / 10,500 PSI	35.3 gr / 11,400 PSI
1 1/4 oz.	IMR Blue	Win. 209	WAA12R	29.6 gr / 8,300 PSI	31.4 gr / 9,400 PSI	33.3 gr / 10,400 PSI	35.1 gr / 11,400 PSI
				1220 fps	1275 fps	1330 fps	
1 1/4 oz	WSF	Win. 209	Fed. 12S4	26.0 gr / 9,000 PSI	27.5 gr / 10,900 PSI	-	
1 1/4 oz	572	Fed. 209A	DRA 12 YELLOW	22.6 gr / 10,700 PSI	24.1 gr / 11,500 PSI	-	
1 1/4 oz	572	Fed. 209A	Fed. 12S4	22.3 gr / 11,400 PSI	-	-	
1 1/4 oz	572	Fed. 209A	Rem. SP12	22.8 gr / 10,000 PSI	24.2 gr / 11,300 PSI	-	
1 1/4 oz	572	Rem. 209P	DRA 12 YELLOW	22.5 gr / 10,000 PSI	23.7 gr / 10,600 PSI	-	

*Velocity is measured in feet per second (fps).
Pressure is measured in Pounds per Square Inch (PSI).

12 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA AND HS PLASTIC SHELLS (CONT.)

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*		
				1220 fps	1275 fps	1330 fps
1 1/4 oz	572	Rem. 209P	Rem. SP12	22.6 gr / 9,800 PSI	24.6 gr / 10,600 PSI	26.7 gr / 11,500 PSI
1 1/4 oz	572	Win. 209	Rem. SP12	23.4 gr / 8,200 PSI	25.4 gr / 9,500 PSI	27.3 gr / 10,800 PSI

16 GA., 2 3/4", FEDERAL HI POWER PLASTIC PAPER BASE WAD SHELLS

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*		
				1165 fps	1220 fps	1275 fps
1 oz	Universal	CCI 209M	Activ G-28	21.5 gr / 7,500 PSI	22.5 gr / 8,200 PSI	24.2 gr / 9,000 PSI
1 oz	Universal	Fed. 209A	BRG/BP	21.0 gr / 7,400 PSI	22.0 gr / 8,200 PSI	23.5 gr / 9,200 PSI
1 oz	Universal	Win. 209	WAA16	20.7 gr / 7,600 PSI	22.3 gr / 8,200 PSI	23.5 gr / 8,900 PSI

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
				1165 fps	1220 fps	1275 fps	1300 fps
1 oz.	IMR Blue	Fed. 209A	BP/SPTG16	25.0 gr / 6,700 PSI	26.5 gr / 7,400 PSI	28.0 gr / 8,000 PSI	28.7 gr / 8,300 PSI
1 oz.	IMR Blue	Fed. 209A	CB 0100-16	24.8 gr / 6,800 PSI	26.3 gr / 7,700 PSI	27.8 gr / 8,600 PSI	28.5 gr / 9,000 PSI
1 oz.	IMR Blue	Win. 209	BP/SPTG16	26.0 gr / 6,500 PSI	27.5 gr / 7,300 PSI	28.9 gr / 8,000 PSI	29.6 gr / 8,400 PSI
1 oz.	IMR Blue	Win. 209	CB 0100-16	25.6 gr / 6,700 PSI	27.1 gr / 7,500 PSI	28.5 gr / 8,200 PSI	29.2 gr / 8,600 PSI

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
				1165 fps	1220 fps	1275 fps	1300 fps
1 oz	572	Fed. 209A	BP/SPTG16	19.2 gr / 7,400 PSI	20.3 gr / 8,200 PSI	21.4 gr / 9,000 PSI	22.0 gr / 9,400 PSI
1 oz	572	Fed. 209A	CB 0100-16	19.5 gr / 7,500 PSI	20.9 gr / 8,400 PSI	22.3 gr / 9,300 PSI	23.0 gr / 9,700 PSI
1 oz	572	Rem. 209P	BP/SPTG16	19.6 gr / 6,800 PSI	20.9 gr / 7,900 PSI	22.2 gr / 9,000 PSI	22.8 gr / 9,500 PSI
1 oz	572	Rem. 209P	CB 0100-16	20.1 gr / 7,000 PSI	21.2 gr / 7,900 PSI	22.4 gr / 8,900 PSI	23.0 gr / 9,300 PSI
1 oz	572	Win. 209	BP/SPTG16	20.6 gr / 8,400 PSI	22.1 gr / 9,400 PSI	23.8 gr / 10,800 PSI	24.5 gr / 11,300 PSI
1 oz	572	Win. 209	CB 0100-16	20.3 gr / 7,000 PSI	21.8 gr / 7,900 PSI	23.3 gr / 8,700 PSI	24.0 gr / 9,100 PSI

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
				1185 fps	1240 fps	1295 fps	1350 fps
1 1/8 oz.	IMR Blue	CCI 209M	BP/SPTG16	26.6 gr / 7,800 PSI	28.3 gr / 8,900 PSI	30.1 gr / 9,900 PSI	31.8 gr / 11,000 PSI
1 1/8 oz.	IMR Blue	CCI 209M	CB 0100-16	26.3 gr / 8,100 PSI	28.0 gr / 9,000 PSI	29.7 gr / 9,800 PSI	31.4 gr / 10,700 PSI

16 GA., 2 3/4", FEDERAL HI POWER PLASTIC PAPER BASE WAD SHELLS

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
				1185 fps	1240 fps	1295 fps	1350 fps
1 1/8 oz.	IMR Blue	Fed. 209A	BP/SPTG16	26.0 gr / 8,400 PSI	27.7 gr / 9,300 PSI	29.5 gr / 10,200 PSI	31.2 gr / 11,100 PSI
1 1/8 oz.	IMR Blue	Fed. 209A	CB 0100-16	25.7 gr / 8,500 PSI	27.3 gr / 9,500 PSI	28.8 gr / 10,400 PSI	30.4 gr / 11,400 PSI
1 1/8 oz.	IMR Blue	Fed. 209A	Rem. SP16	25.7 gr / 8,200 PSI	27.3 gr / 9,100 PSI	28.9 gr / 10,000 PSI	30.5 gr / 10,900 PSI
1 1/8 oz.	IMR Blue	Win. 209	BP/SPTG16	26.8 gr / 7,800 PSI	-	30.1 gr / 9,700 PSI	31.8 gr / 10,700 PSI
1 1/8 oz.	IMR Blue	Win. 209	CB 0100-16	26.2 gr / 8,400 PSI	27.9 gr / 9,300 PSI	29.5 gr / 10,100 PSI	31.2 gr / 11,000 PSI
1 1/8 oz.	IMR Blue	Win. 209	Rem. SP16	26.5 gr / 7,500 PSI	28.2 gr / 8,500 PSI	29.9 gr / 9,600 PSI	31.6 gr / 10,600 PSI

16 GA., 2 3/4", REMINGTON SP PLASTIC SHELLS

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
				1150 fps	1200 fps	1250 fps	1300 fps
7/8 oz.	IMR Green	Rem. 209P	DR 16	14.9 gr / 8,500 PSI	16.0 gr / 9,500 PSI	17.1 gr / 10,400 PSI	18.2 gr / 11,400 PSI
7/8 oz.	IMR Green	Win. 209	DR 16	14.7 gr / 8,500 PSI	15.8 gr / 9,500 PSI	16.8 gr / 10,500 PSI	17.9 gr / 11,500 PSI
1 oz	Universal	Win. 209	REM. SP16	18.5 gr / 8,800 PSI	19.8 gr / 9,900 PSI	20.5 gr / 10,400 PSI	

16 GA., 2 3/4", REMINGTON SP PLASTIC SHELLS (CONT.)

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*		
				1165 fps	1220 fps	1275 fps
1 oz	Universal	Win. 209	WAA16	18.5 gr / 9,000 PSI	19.5 gr / 9,900 PSI	20.5 gr / 10,400 PSI

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
				1165 fps	1220 fps	1275 fps	1300 fps
1 oz	572	Fed. 209A	BP/SPTG16	18.3 gr / 8,200 PSI	19.7 gr / 9,500 PSI	21.2 gr / 10,700 PSI	21.8 gr / 11,300 PSI
1 oz	572	Fed. 209A	CB 0100-16	17.4 gr / 8,900 PSI	18.6 gr / 10,200 PSI	19.9 gr / 11,400 PSI	-
1 oz	572	Fed. 209A	Rem. SP16	17.6 gr / 8,500 PSI	19.0 gr / 9,700 PSI	20.5 gr / 10,900 PSI	21.1 gr / 11,500 PSI
1 oz	572	Rem. 209P	BP/SPTG16	18.5 gr / 8,200 PSI	20.0 gr / 9,400 PSI	21.4 gr / 10,600 PSI	22.1 gr / 11,200 PSI
1 oz	572	Rem. 209P	CB 0100-16	17.6 gr / 8,200 PSI	18.9 gr / 9,500 PSI	20.2 gr / 10,700 PSI	20.8 gr / 11,400 PSI
1 oz	572	Rem. 209P	Rem. SP16	18.0 gr / 7,600 PSI	19.4 gr / 8,800 PSI	20.8 gr / 10,000 PSI	21.4 gr / 10,600 PSI
1 oz	572	Win. 209	BP/SPTG16	18.8 gr / 7,800 PSI	20.3 gr / 9,100 PSI	21.8 gr / 10,300 PSI	22.5 gr / 10,900 PSI
1 oz	572	Win. 209	CB 0100-16	17.6 gr / 8,300 PSI	19.0 gr / 9,400 PSI	20.5 gr / 10,500 PSI	21.1 gr / 11,000 PSI
1 oz	572	Win. 209	Rem. SP16	18.2 gr / 7,800 PSI	19.7 gr / 8,900 PSI	21.1 gr / 10,100 PSI	21.8 gr / 10,600 PSI

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
				1165 fps	1220 fps	1275 fps	1300 fps
1 oz.	IMR Blue	Fed. 209A	BP/SPTG16	23.0 gr / 8,400 PSI	24.5 gr / 9,300 PSI	25.9 gr / 10,300 PSI	26.6 gr / 10,700 PSI
1 oz.	IMR Blue	Fed. 209A	CB 0100-16	22.7 gr / 9,000 PSI	24.2 gr / 9,900 PSI	25.6 gr / 10,800 PSI	26.3 gr / 11,200 PSI
1 oz.	IMR Blue	Fed. 209A	Rem. SP16	22.5 gr / 8,400 PSI	23.9 gr / 9,300 PSI	25.4 gr / 10,200 PSI	26.0 gr / 10,600 PSI
1 oz.	IMR Blue	Rem. 209P	BP/SPTG16	23.6 gr / 7,900 PSI	25.1 gr / 8,900 PSI	26.7 gr / 9,900 PSI	27.4 gr / 10,400 PSI
1 oz.	IMR Blue	Rem. 209P	CB 0100-16	23.6 gr / 8,400 PSI	25.0 gr / 9,300 PSI	26.5 gr / 10,100 PSI	27.1 gr / 10,500 PSI
1 oz.	IMR Blue	Rem. 209P	Rem. SP16	23.4 gr / 7,800 PSI	24.9 gr / 8,800 PSI	26.5 gr / 9,800 PSI	27.2 gr / 10,300 PSI
1 oz.	IMR Blue	Win. 209	BP/SPTG16	23.6 gr / 8,200 PSI	25.1 gr / 9,200 PSI	26.6 gr / 10,200 PSI	27.3 gr / 10,600 PSI
1 oz.	IMR Blue	Win. 209	CB 0100-16	23.3 gr / 8,800 PSI	24.6 gr / 9,700 PSI	26.0 gr / 10,500 PSI	26.6 gr / 10,900 PSI
1 oz.	IMR Blue	Win. 209	Rem. SP16	23.3 gr / 8,200 PSI	24.7 gr / 9,100 PSI	26.2 gr / 9,900 PSI	26.8 gr / 10,300 PSI

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*	
				1185 fps	1240 fps
1 1/8 oz.	IMR Blue	Fed. 209A	BP/SPTG16	23.9 gr / 10,500 PSI	25.3 gr / 11,300 PSI
1 1/8 oz.	IMR Blue	Fed. 209A	CB 0100-16	23.4 gr / 10,700 PSI	-
1 1/8 oz.	IMR Blue	Fed. 209A	Rem. SP16	23.4 gr / 9,900 PSI	24.8 gr / 11,000 PSI
1 1/8 oz.	IMR Blue	Rem. 209P	BP/SPTG16	24.5 gr / 9,600 PSI	26.3 gr / 11,000 PSI
1 1/8 oz.	IMR Blue	Rem. 209P	CB 0100-16	24.4 gr / 10,300 PSI	26.1 gr / 11,000 PSI
1 1/8 oz.	IMR Blue	Rem. 209P	Rem. SP16	24.4 gr / 9,600 PSI	26.1 gr / 10,700 PSI
1 1/8 oz.	IMR Blue	Win. 209	BP/SPTG16	24.4 gr / 9,700 PSI	26.0 gr / 11,400 PSI
1 1/8 oz.	IMR Blue	Win. 209	CB 0100-16	24.3 gr / 10,500 PSI	25.6 gr / 11,200 PSI
1 1/8 oz.	IMR Blue	Win. 209	Rem. SP16	24.3 gr / 9,700 PSI	25.6 gr / 11,200 PSI

16 GA., 2 3/4", WINCHESTER X-PERT PLASTIC SHELLS

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
				1165 fps	1220 fps	1275 fps	1300 fps
1 oz.	IMR Blue	Fed. 209A	BP/SPTG16	24.4 gr / 6,900 PSI	26.0 gr / 7,700 PSI	27.7 gr / 8,400 PSI	28.4 gr / 8,800 PSI
1 oz.	IMR Blue	Fed. 209A	CB 0100-16	23.6 gr / 7,300 PSI	25.2 gr / 8,100 PSI	26.9 gr / 8,900 PSI	27.6 gr / 9,300 PSI
1 oz.	IMR Blue	Fed. 209A	Rem. SP16	23.6 gr / 6,600 PSI	25.2 gr / 7,500 PSI	26.8 gr / 8,400 PSI	27.5 gr / 8,800 PSI
1 oz.	IMR Blue	Win. 209	BP/SPTG16	25.1 gr / 6,600 PSI	26.7 gr / 7,400 PSI	28.4 gr / 8,200 PSI	29.1 gr / 8,600 PSI
1 oz.	IMR Blue	Win. 209	CB 0100-16	24.7 gr / 7,000 PSI	26.3 gr / 7,800 PSI	27.9 gr / 8,600 PSI	28.6 gr / 9,000 PSI

*Velocity is measured in feet per second (fps).
Pressure is measured in Pounds per Square Inch (PSI).

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
16 GA., 2 3/4", WINCHESTER X-PERT PLASTIC SHELLS (CONT.)							
				1165 fps	1220 fps	1275 fps	1300 fps
1 oz.	IMR Blue	Win. 209	Rem. SP16	25.0 gr / 6,500 PSI	26.6 gr / 7,200 PSI	28.3 gr / 7,900 PSI	29.0 gr / 8,200 PSI
				1185 fps	1240 fps	1295 fps	1350 fps
1 1/8 oz.	IMR Blue	Fed. 209A	BP/SPTG16	25.3 gr / 8,500 PSI	27.0 gr / 9,400 PSI	28.6 gr / 10,400 PSI	30.3 gr / 11,300 PSI
1 1/8 oz.	IMR Blue	Fed. 209A	CB 0100-16	25.0 gr / 8,900 PSI	26.6 gr / 9,700 PSI	28.2 gr / 10,600 PSI	29.8 gr / 11,400 PSI
1 1/8 oz.	IMR Blue	Fed. 209A	Rem. SP16	25.1 gr / 8,200 PSI	26.7 gr / 9,200 PSI	28.3 gr / 10,300 PSI	29.9 gr / 11,300 PSI
1 1/8 oz.	IMR Blue	Win. 209	BP/SPTG16	26.3 gr / 8,400 PSI	28.1 gr / 9,100 PSI	29.8 gr / 9,900 PSI	31.6 gr / 10,600 PSI
1 1/8 oz.	IMR Blue	Win. 209	CB 0100-16	26.0 gr / 8,600 PSI	27.6 gr / 9,500 PSI	29.1 gr / 10,500 PSI	30.7 gr / 11,400 PSI
1 1/8 oz.	IMR Blue	Win. 209	Rem. SP16	26.2 gr / 7,900 PSI	28.0 gr / 8,800 PSI	29.7 gr / 9,800 PSI	31.5 gr / 10,700 PSI
20 GA., 2 3/4", REMINGTON RXP, PREMIER AND STS PLASTIC SHELLS							
				1150 fps	1200 fps		
3/4 oz.	Internat'l	Rem. 209P	WAA20	12.5 gr / 8,800 PSI	13.6 gr / 10,600 PSI		
3/4 oz.	Internat'l	Win. 209	WAA20	12.0 gr / 9,000 PSI	13.2 gr / 10,400 PSI		
				1100 fps	1150 fps		
7/8 oz. Lt.	IMR Green	Ched. 209	DRV-20	13.0 gr / 10,500 PSI	13.8 gr / 11,200 PSI		
7/8 oz. Lt.	IMR Green	Ched. 209	Rem. RXP20	12.9 gr / 10,000 PSI	13.7 gr / 10,900 PSI		
7/8 oz. Lt.	IMR Green	Rem. 209P	DRV-20	13.0 gr / 9,900 PSI	13.8 gr / 11,100 PSI		
7/8 oz. Lt.	IMR Green	Rem. 209P	Rem. RXP20	13.1 gr / 10,100 PSI	13.8 gr / 10,700 PSI		
7/8 oz. Lt.	IMR Green	Win. 209	DRV-20	12.9 gr / 10,400 PSI	13.6 gr / 11,100 PSI		
7/8 oz. Lt.	IMR Green	Win. 209	Rem. RXP20	12.8 gr / 10,200 PSI	13.6 gr / 11,000 PSI		
7/8 oz. Lt.	Internat'l	Rem. 209P	Rem. RXP20	12.9 gr / 9,900 PSI	13.4 gr / 11,000 PSI		
7/8 oz. Lt.	Internat'l	Win. 209	Rem. RXP20	-	13.4 gr / 10,900 PSI		
7/8 oz. Lt.	Universal	Rem. 209P	DRV-20	15.0 gr / 9,200 PSI	15.7 gr / 9,900 PSI		
7/8 oz. Lt.	Universal	Rem. 209P	Rem. RXP20	15.2 gr / 9,100 PSI	15.6 gr / 9,300 PSI		
7/8 oz. Lt.	Universal	Rem. 209P	WAA20	14.5 gr / 9,700 PSI	-		
7/8 oz. Lt.	Universal	Win. 209	DRV-20	14.8 gr / 9,500 PSI	15.3 gr / 10,100 PSI		
7/8 oz. Lt.	Universal	Win. 209	Rem. RXP20	15.0 gr / 9,300 PSI	15.5 gr / 9,500 PSI		
7/8 oz. Lt.	Universal	Win. 209	WAA20	14.5 gr / 9,100 PSI	-		
7/8 oz. Lt.	Super Hcp	Rem. 209P	WAA20	12.4 gr / 10,600 PSI	12.9 gr / 11,800 PSI		
7/8 oz. Lt.	Super Hcp	Win. 209	WAA20	12.4 gr / 10,300 PSI	12.9 gr / 11,400 PSI		
				1155 fps	1200 fps	1225 fps	1250 fps
7/8 oz.	Universal	Fed. 209A	Rem. RXP 20	-	15.4 gr / 10,700 PSI	15.9 gr / 11,300 PSI	-
7/8 oz.	Universal	Rem. 209P	Rem. RXP 20	-	15.8 gr / 9,900 PSI	16.7 gr / 10,700 PSI	-
7/8 oz.	Universal	Rem. 209P	WAA20F1	-	15.6 gr / 10,500 PSI	16.0 gr / 11,000 PSI	16.5 gr / 11,200 PSI
7/8 oz.	Universal	Win. 209	Rem. RXP 20	-	16.0 gr / 10,400 PSI	16.7 gr / 11,400 PSI	-
				1250 fps	1300 fps	1350 fps	
7/8 oz.	Longshot	Fed. 209A	Rem. RXP20	17.6 gr / 10,100 PSI	18.6 gr / 11,200 PSI	-	
7/8 oz.	Longshot	Fed. 209A	WAA20	17.1 gr / 10,600 PSI	18.3 gr / 11,700 PSI	-	
7/8 oz.	Longshot	Rem. 209P	Rem. RXP20	17.6 gr / 9,600 PSI	18.9 gr / 11,200 PSI	-	

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
20 GA., 2 3/4", REMINGTON RXP, PREMIER AND STS PLASTIC SHELLS (CONT.)							
				1250 fps	1300 fps	1350 fps	
7/8 oz.	Longshot	Rem. 209P	WAA20	17.3 gr / 10,300 PSI	18.5 gr / 11,800 PSI	-	
7/8 oz.	Longshot	Win. 209	Rem. RXP20	18.2 gr / 9,100 PSI	19.4 gr / 10,300 PSI	20.6 gr / 11,500 PSI	
7/8 oz.	Longshot	Win. 209	WAA20	17.9 gr / 9,900 PSI	19.0 gr / 11,200 PSI	-	
				1150 fps	1200 fps	1250 fps	1300 fps
7/8 oz.	WSF	Win. 209	Fed. 20S1	-	17.0 gr / 11,300 PSI	-	-
7/8 oz.	WSF	Win. 209	Rem. RXP20	-	17.5 gr / 10,600 PSI	-	-
7/8 oz.	WSF	Win. 209	WAA20	-	17.0 gr / 10,500 PSI	-	-
7/8 oz.	572	Ched. 209	CB 1078-20	15.2 gr / 10,000 PSI	16.0 gr / 11,000 PSI	16.9 gr / 12,000 PSI	-
7/8 oz.	572	Ched. 209	DRV-20	15.4 gr / 9,000 PSI	16.5 gr / 10,200 PSI	17.6 gr / 11,300 PSI	-
7/8 oz.	572	Ched. 209	Rem. RXP20	15.4 gr / 9,000 PSI	16.4 gr / 10,200 PSI	17.4 gr / 11,400 PSI	-
7/8 oz.	572	Fed. 209A	CB 1078-20	14.6 gr / 9,700 PSI	16.2 gr / 11,300 PSI	-	-
7/8 oz.	572	Fed. 209A	DRV-20	14.4 gr / 8,800 PSI	15.7 gr / 10,000 PSI	17.0 gr / 11,300 PSI	-
7/8 oz.	572	Fed. 209A	Rem. RXP20	15.2 gr / 9,400 PSI	16.3 gr / 10,500 PSI	17.3 gr / 11,500 PSI	-
7/8 oz.	572	Win. 209	CB 1078-20	15.3 gr / 9,500 PSI	16.4 gr / 10,500 PSI	17.4 gr / 11,400 PSI	-
7/8 oz.	572	Win. 209	DRV-20	15.4 gr / 8,400 PSI	16.4 gr / 9,600 PSI	17.4 gr / 10,800 PSI	18.4 gr / 12,000 PSI
7/8 oz.	572	Win. 209	Rem. RXP20	15.3 gr / 8,800 PSI	16.3 gr / 9,900 PSI	17.3 gr / 11,000 PSI	18.2 gr / 12,000 PSI
				1165 fps	1220 fps		
1 oz.	HS-6	Rem. 209P	Fed. 20S1	20.0 gr / 10,900 PSI	-		
1 oz.	HS-6	Rem. 209P	WAA20F1	20.4 gr / 10,900 PSI	21.6 gr / 11,700 PS		
1 oz.	HS-6	Win. 209	Rem. SP 20	20.0 gr / 11,200 PSI	-		
1 oz.	HS-6	Win. 209	WAA20F1	20.3 gr / 11,200 PSI	-		
1 oz.	Longshot	Rem. 209P	Rem. SP20	16.0 gr / 11,100 PSI	-		
1 oz.	Longshot	Rem. 209P	WAA20F1	15.9 gr / 10,900 PSI	17.3 gr / 12,000 PSI		
1 oz.	Longshot	Win. 209	Rem. SP20	16.0 gr / 10,400 PSI	17.8 gr / 12,000 PSI		
1 oz.	Longshot	Win. 209	WAA20F1	16.3 gr / 9,900 PSI	18.0 gr / 12,000 PSI		
				1150 fps	1200 fps	1250 fps	
1 oz.	IMR Blue	Ched. 209	BP SG20S	20.2 gr / 8,900 PSI	21.5 gr / 9,700 PSI	22.8 gr / 10,500 PSI	
1 oz.	IMR Blue	Ched. 209	Rem. SP20	20.0 gr / 8,600 PSI	21.3 gr / 9,400 PSI	22.7 gr / 10,300 PSI	
1 oz.	IMR Blue	Fed. 209A	BP SG20S	19.8 gr / 9,000 PSI	21.1 gr / 9,800 PSI	22.5 gr / 10,500 PSI	
1 oz.	IMR Blue	Fed. 209A	Rem. SP20	19.8 gr / 9,200 PSI	21.1 gr / 10,000 PSI	22.4 gr / 10,900 PSI	
1 oz.	IMR Blue	Rem. 209P	BP SG20S	20.3 gr / 8,800 PSI	21.8 gr / 9,800 PSI	23.3 gr / 10,800 PSI	
1 oz.	IMR Blue	Rem. 209P	Rem. SP20	20.5 gr / 9,400 PSI	21.8 gr / 10,000 PSI	23.1 gr / 10,600 PSI	
1 oz.	IMR Blue	Win. 209	BP SG20S	20.5 gr / 8,400 PSI	21.7 gr / 9,300 PSI	22.9 gr / 10,200 PSI	
1 oz.	IMR Blue	Win. 209	Rem. SP20	20.5 gr / 9,200 PSI	21.8 gr / 10,000 PSI	23.0 gr / 10,900 PSI	
				1165 fps			
1 oz.	572	CCI 209	BP SG20S	16.0 gr / 12,000 PSI			
1 oz.	572	Ched. 209	BP SG20S	16.2 gr / 11,800 PSI			
1 oz.	572	Fed. 209A	BP SG20S	16.2 gr / 12,000 PSI			
1 oz.	572	Rem. 209P	BP SG20S	16.0 gr / 11,800 PSI			

SHOT SHELL data

*Velocity is measured in feet per second (fps).
Pressure is measured in Pounds per Square Inch (PSI).

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
20 GA., 2 3/4", REMINGTON RXP, PREMIER AND STS PLASTIC SHELLS (CONT.)							
1165 fps							
1 oz	572	Win. 209	Rem. SP20	16.2 gr / 11,500 PSI			
20 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA AND HS TYPE SHELLS							
1150 fps 1200 fps 1250 fps							
3/4 oz	Internat'l	Rem. 209P	WAA20	12.1 gr / 9,000 PSI	13.2 gr / 10,500 PSI	-	
3/4 oz	Internat'l	Win. 209	WAA20	12.0 gr / 10,100 PSI	13.0 gr / 11,700 PSI	-	
1100 fps 1150 fps							
7/8 oz. Lt.	IMR Green	Ched. 209	DRV-20	13.0 gr / 11,200 PSI	13.8 gr / 12,000 PSI		
7/8 oz. Lt.	IMR Green	Ched. 209	Rem. RXP20	12.9 gr / 10,400 PSI	13.7 gr / 11,000 PSI		
7/8 oz. Lt.	IMR Green	Win. 209	DRV-20	12.8 gr / 10,800 PSI	13.6 gr / 11,800 PSI		
7/8 oz. Lt.	IMR Green	Win. 209	Rem. RXP20	12.7 gr / 10,900 PSI	13.5 gr / 11,500 PSI		
7/8 oz. Lt.	Universal	Rem. 209P	DRV-20	14.8 gr / 9,900 PSI	15.5 gr / 11,500 PSI		
7/8 oz. Lt.	Universal	Rem. 209P	Rem. RXP20	14.7 gr / 9,100 PSI	15.0 gr / 9,700 PSI		
7/8 oz. Lt.	Universal	Win. 209	DRV-20	14.5 gr / 10,500 PSI	15.0 gr / 11,400 PSI		
7/8 oz. Lt.	Universal	Win. 209	Rem. RXP20	14.4 gr / 9,600 PSI	14.8 gr / 10,100 PSI		
7/8 oz. Lt.	Super Hcp	Rem. 209P	WAA20	12.3 gr / 11,000 PSI	12.9 gr / 11,900 PSI		
7/8 oz. Lt.	Super Hcp	Win. 209	WAA20	12.4 gr / 11,000 PSI	12.9 gr / 11,800 PSI		
1200 fps							
7/8 oz	Universal	Fed. 209A	Fed. 20S1	14.3 gr / 12,000 PSI			
7/8 oz	Universal	Fed. 209A	Rem. RXP20	14.8 gr / 11,400 PSI			
7/8 oz	Universal	Fed. 209A	WAA20F1	14.6 gr / 12,000 PSI			
7/8 oz	Universal	Rem. 209P	Rem. RXP20	15.8 gr / 9,800 PSI			
7/8 oz	Universal	Rem. 209P	WAA20F1	15.3 gr / 11,600 PSI			
7/8 oz	Universal	Win. 209	Rem. RXP20	15.0 gr / 11,000 PSI			
7/8 oz	Universal	Win. 209	WAA20	15.5 gr / 10,200 PSI			
1250 fps 1300 fps							
7/8 oz	Longshot	Fed. 209A	Fed. 20S1	17.5 gr / 11800 PSI	-		
7/8 oz	Longshot	Rem. 209P	Fed. 20S1	17.6 gr / 10800 PSI	18.5 gr / 12000 PSI		
7/8 oz	Longshot	Rem. 209P	Rem. RXP20	17.7 gr / 10400 PSI	18.7 gr / 11400 PSI		
7/8 oz	Longshot	Rem. 209P	WAA20	17.2 gr / 11100 PSI	18.4 gr / 11800 PSI		
7/8 oz	Longshot	Win. 209	Rem. RXP20	18.4 gr / 9800 PSI	19.3 gr / 10700 PSI		
7/8 oz	Longshot	Win. 209	WAA20	17.8 gr / 10600 PSI	18.6 gr / 11700 PSI		
1150 fps 1200 fps 1250 fps 1300 fps							
7/8 oz	WSF	Win. 209	Rem. RXP20	-	17.0 gr / 10,700 PSI	-	
7/8 oz	WSF	Win. 209	WAA20	-	16.5 gr / 11,200 PSI	-	
7/8 oz	572	Ched. 209	CB 1076-20	15.5 gr / 9,100 PSI	16.6 gr / 10,400 PSI	17.6 gr / 11,700 PSI	-
7/8 oz	572	Ched. 209	DRV-20	15.8 gr / 8,900 PSI	16.9 gr / 9,900 PSI	18.0 gr / 10,900 PSI	19.0 gr / 12,000 PSI
7/8 oz	572	Ched. 209	Rem. RXP20	16.0 gr / 8,900 PSI	17.1 gr / 9,900 PSI	18.2 gr / 10,900 PSI	19.3 gr / 11,900 PSI
7/8 oz	572	Fed. 209A	CB 1076-20	15.6 gr / 10,300 PSI	16.8 gr / 11,200 PSI	18.0 gr / 12,000 PSI	-

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
20 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA AND HS TYPE SHELLS (CONT.)							
1150 fps 1200 fps 1250 fps 1300 fps							
7/8 oz	572	Fed. 209A	DRV-20	15.5 gr / 8,800 PSI	16.9 gr / 10,300 PSI	18.3 gr / 11,700 PSI	-
7/8 oz	572	Fed. 209A	Rem. RXP20	15.4 gr / 8,600 PSI	16.9 gr / 9,700 PSI	18.4 gr / 10,800 PSI	-
7/8 oz	572	Win. 209	CB 1076-20	15.5 gr / 8,100 PSI	16.6 gr / 8,900 PSI	17.7 gr / 9,800 PSI	18.8 gr / 10,700 PSI
7/8 oz	572	Win. 209	DRV-20	15.8 gr / 7,500 PSI	16.9 gr / 8,500 PSI	18.0 gr / 9,500 PSI	19.1 gr / 10,400 PSI
7/8 oz	572	Win. 209	Rem. RXP20	16.0 gr / 7,200 PSI	17.1 gr / 8,300 PSI	18.1 gr / 9,400 PSI	19.2 gr / 10,400 PSI
1165 fps 1220 fps 1250 fps							
1 oz	HS-6	Rem. 209P	Rem. SP20	19.8 gr / 11,900 PSI	-	-	
1 oz	HS-6	Rem. 209P	WAA20F1	19.5 gr / 11,800 PSI	-	-	
1 oz	HS-6	Win. 209	WAA20F1	21.5 gr / 10,000 LUP	22.5 gr / 10,900 LUP	-	
1 oz	HS-6	Win. 209	Rem. SP20	23.0 gr / 10,100 LUP	24.0 gr / 10,800 LUP	-	
1 oz	Longshot	Rem. 209P	Rem. SP20	16.3 gr / 11,800 PSI	-	-	
1 oz	Longshot	Rem. 209P	WAA20F1	15.8 gr / 11,800 PSI	-	-	
1 oz	Longshot	Win. 209	Rem. SP20	16.5 gr / 10,700 PSI	18.1 gr / 12,000 PSI	-	
1 oz	Longshot	Win. 209	WAA20F1	15.7 gr / 10,900 PSI	17.2 gr / 12,000 PSI	-	
1165 fps							
1 oz	572	CCI 209	BP SG20S	16.0 gr / 11,600 PSI			
1 oz	572	CCI 209	Rem. SP20	16.0 gr / 11,700 PSI			
1 oz	572	Ched. 209	BP SG20S	16.4 gr / 12,000 PSI			
1 oz	572	Ched. 209	Rem. SP20	16.0 gr / 11,400 PSI			
1 oz	572	Fed. 209A	BP SG20S	16.3 gr / 12,000 PSI			
1 oz	572	Rem. 209P	BP SG20S	16.2 gr / 11,300 PSI			
1 oz	572	Rem. 209P	Rem. SP20	16.4 gr / 11,800 PSI			
1 oz	572	Win. 209	Rem. SP20	16.2 gr / 12,000 PSI			
1150 fps 1200 fps 1250 fps							
1 oz.	IMR Blue	Ched. 209	BP SG20S	20.2 gr / 9,800 PSI	21.6 gr / 10,800 PSI	23.0 gr / 11,800 PSI	
1 oz.	IMR Blue	Ched. 209	Rem. SP20	20.4 gr / 9,600 PSI	21.9 gr / 10,600 PSI	23.4 gr / 11,600 PSI	
1 oz.	IMR Blue	Fed. 209A	BP SG20S	19.5 gr / 10,000 PSI	21.0 gr / 11,000 PSI	22.5 gr / 11,900 PSI	
1 oz.	IMR Blue	Fed. 209A	Rem. SP20	20.0 gr / 9,900 PSI	21.4 gr / 10,900 PSI	22.7 gr / 11,800 PSI	
1 oz.	IMR Blue	Rem. 209P	BP SG20S	20.2 gr / 10,100 PSI	21.6 gr / 11,000 PSI	23.0 gr / 11,900 PSI	
1 oz.	IMR Blue	Rem. 209P	Rem. SP20	20.6 gr / 9,800 PSI	21.9 gr / 10,800 PSI	23.2 gr / 11,700 PSI	
1 oz.	IMR Blue	Win. 209	BP SG20S	20.0 gr / 9,200 PSI	21.4 gr / 10,000 PSI	22.9 gr / 10,900 PSI	
1 oz.	IMR Blue	Win. 209	Rem. SP20	20.0 gr / 9,000 PSI	21.3 gr / 9,800 PSI	22.6 gr / 10,600 PSI	

28 GA., 2 3/4", REMINGTON STS PLASTIC SHELLS							
1200 fps							
3/4 oz	Universal	Fed. 209A	WAA28	13.5 gr / 12,200 PSI			
3/4 oz	Universal	Rem. 209P	PC28	13.6 gr / 12,000 PSI			
3/4 oz	Universal	Rem. 209P	Rem. FT28	13.8 gr / 12,000 PSI			

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
28 GA., 2 3/4", REMINGTON STS PLASTIC SHELLS (CONT.)							
1200 fps							
3/4 oz	Universal	Rem. 209P	WAA28	13.9 gr / 11,700 PSI			
3/4 oz	Universal	Win. 209	PC28	13.5 gr / 12,400 PSI			
3/4 oz	Universal	Win. 209	Rem. PT28	13.8 gr / 12,100 PSI			
3/4 oz	Universal	Win. 209	WAA28	13.8 gr / 11,500 PSI			
3/4 oz	HS-6	Fed. 209A	Rem. PT28	16.7 gr / 11,700 PSI			
3/4 oz	HS-6	Rem. 209P	Rem. PT28	17.1 gr / 11,000 PSI			
3/4 oz	HS-6	Rem. 209P	WAA28	17.1 gr / 10,400 PSI			
3/4 oz	HS-6	Win. 209	Rem. PT28	17.0 gr / 11,500 PSI			
3/4 oz	HS-6	Win. 209	WAA28	17.0 gr / 10,700 PSI			
1225 fps 1250 fps 1275 fps 1300 fps							
3/4 oz	Longshot	Rem. 209P	PC 28	14.5 gr / 11,200 PSI	15.0 gr / 11,800 PSI	15.5 gr / 12,300 PSI	-
3/4 oz	Longshot	Rem. 209P	Rem. PT28	14.3 gr / 11,300 PSI	14.9 gr / 12,000 PSI	15.4 gr / 12,500 PSI	-
3/4 oz	Longshot	Rem. 209P	WAA28	14.3 gr / 11,000 PSI	14.8 gr / 11,600 PSI	15.2 gr / 12,000 PSI	15.6 gr / 12,400 PSI
3/4 oz	Longshot	Win. 209	PC 28	14.9 gr / 10,900 PSI	15.4 gr / 11,600 PSI	15.8 gr / 12,100 PSI	-
3/4 oz	Longshot	Win. 209	Rem. PT28	14.7 gr / 10,900 PSI	15.3 gr / 11,300 PSI	15.9 gr / 11,900 PSI	16.4 gr / 12,300 PSI
3/4 oz	Longshot	Win. 209	WAA28	14.5 gr / 10,700 PSI	15.1 gr / 11,200 PSI	15.6 gr / 11,600 PSI	16.2 gr / 12,200 PSI
1150 fps 1200 fps							
3/4 oz	572	Ched. 209	BP SG 28	12.8 gr / 11,200 PSI 13.8 gr / 12,200 PSI			
3/4 oz	572	Ched. 209	Fed. 28S1	12.0 gr / 11,600 PSI -			
3/4 oz	572	Ched. 209	PC28	12.7 gr / 10,800 PSI 13.8 gr / 12,300 PSI			
3/4 oz	572	Ched. 209	Red Duster	12.3 gr / 10,200 PSI 13.5 gr / 12,200 PSI			
3/4 oz	572	Ched. 209	Rem. PT28	12.6 gr / 10,700 PSI 13.6 gr / 11,800 PSI			
3/4 oz	572	Fed. 209A	BP SG 28	12.5 gr / 11,400 PSI -			
3/4 oz	572	Fed. 209A	Fed. 28S1	12.1 gr / 12,100 PSI -			
3/4 oz	572	Fed. 209A	PC28	12.5 gr / 11,400 PSI -			
3/4 oz	572	Fed. 209A	Red Duster	12.3 gr / 10,800 PSI 13.4 gr / 12,300 PSI			
3/4 oz	572	Fed. 209A	Rem. PT28	12.5 gr / 10,900 PSI 13.5 gr / 12,300 PSI			
3/4 oz	572	Rem. 209P	BP SG 28	12.7 gr / 10,900 PSI 13.8 gr / 12,300 PSI			
3/4 oz	572	Rem. 209P	Fed. 28S1	12.2 gr / 11,200 PSI 13.0 gr / 12,500 PSI			
3/4 oz	572	Rem. 209P	PC28	12.3 gr / 10,600 PSI 13.5 gr / 11,900 PSI			
3/4 oz	572	Rem. 209P	Red Duster	12.5 gr / 10,000 PSI 13.7 gr / 12,000 PSI			
3/4 oz	572	Rem. 209P	Rem. PT28	12.3 gr / 10,400 PSI 13.4 gr / 11,900 PSI			
3/4 oz	572	Win. 209	BP SG 28	12.8 gr / 10,800 PSI 13.9 gr / 12,500 PSI			
3/4 oz	572	Win. 209	Fed. 28S1	12.0 gr / 11,100 PSI 13.0 gr / 12,500 PSI			
3/4 oz	572	Win. 209	PC28	12.3 gr / 10,500 PSI 13.6 gr / 11,900 PSI			
3/4 oz	572	Win. 209	Red Duster	12.6 gr / 10,500 PSI 13.7 gr / 11,400 PSI			
3/4 oz	572	Win. 209	Rem. PT28	12.5 gr / 10,500 PSI 13.5 gr / 11,700 PSI			
1150 fps 1200 fps 1250 fps 1300 fps							
3/4 oz	IMR Blue	Ched. 209	DR Red Duster	17.1 gr / 9,600 PSI	18.1 gr / 10,500 PSI	19.0 gr / 11,500 PSI	20.0 gr / 12,400 PSI

*Velocity is measured in feet per second (fps).
Pressure is measured in Pounds per Square Inch (PSI).

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
28 GA., 2 3/4", REMINGTON STS PLASTIC SHELLS (CONT.)							
1150 fps 1200 fps 1250 fps 1300 fps							
3/4 oz	IMR Blue	Ched. 209	Fed. 28S1	17.4 gr / 10,300 PSI	18.5 gr / 11,100 PSI	19.6 gr / 11,900 PSI	-
3/4 oz	IMR Blue	Ched. 209	PC28	17.4 gr / 10,100 PSI	18.4 gr / 11,000 PSI	19.5 gr / 12,000 PSI	-
3/4 oz	IMR Blue	Ched. 209	Rem. PT28	16.7 gr / 9,600 PSI	17.8 gr / 10,500 PSI	18.9 gr / 11,300 PSI	20.0 gr / 12,200 PSI
3/4 oz	IMR Blue	Fed. 209A	DR Red Duster	16.2 gr / 10,100 PSI	17.4 gr / 11,100 PSI	18.6 gr / 12,200 PSI	-
3/4 oz	IMR Blue	Fed. 209A	Fed. 28S1	16.5 gr / 10,600 PSI	17.5 gr / 11,800 PSI	-	-
3/4 oz	IMR Blue	Fed. 209A	PC28	16.5 gr / 10,500 PSI	17.6 gr / 11,900 PSI	-	-
3/4 oz	IMR Blue	Fed. 209A	Rem. PT28	16.5 gr / 10,200 PSI	17.5 gr / 11,200 PSI	18.5 gr / 12,300 PSI	-
3/4 oz	IMR Blue	Rem. 209P	DR Red Duster	17.3 gr / 10,000 PSI	18.4 gr / 10,900 PSI	19.5 gr / 11,800 PSI	-
3/4 oz	IMR Blue	Rem. 209P	Fed. 28S1	16.9 gr / 10,800 PSI	18.0 gr / 11,600 PSI	19.1 gr / 12,500 PSI	-
3/4 oz	IMR Blue	Rem. 209P	PC28	17.2 gr / 10,200 PSI	18.3 gr / 11,200 PSI	19.4 gr / 12,200 PSI	-
3/4 oz	IMR Blue	Rem. 209P	Rem. PT28	17.2 gr / 10,100 PSI	18.3 gr / 10,800 PSI	19.4 gr / 11,600 PSI	20.5 gr / 12,300 PSI
3/4 oz	IMR Blue	Win. 209	DR Red Duster	17.0 gr / 10,200 PSI	18.2 gr / 11,000 PSI	19.4 gr / 11,900 PSI	-
3/4 oz	IMR Blue	Win. 209	Fed. 28S1	16.9 gr / 11,100 PSI	17.9 gr / 12,000 PSI	-	-
3/4 oz	IMR Blue	Win. 209	PC28	17.1 gr / 10,400 PSI	18.3 gr / 11,400 PSI	19.5 gr / 12,400 PSI	-
3/4 oz	IMR Blue	Win. 209	Rem. PT28	16.8 gr / 9,600 PSI	17.9 gr / 10,500 PSI	18.9 gr / 11,300 PSI	20.0 gr / 12,200 PSI
28 GA., 2 3/4", WINCHESTER AA, HS AND SUPER-X HS PLASTIC SHELLS							
1200 fps 1225 fps							
3/4 oz	Universal	Rem. 209P	Fed. 28S1	13.8 gr / 11,600 PSI 14.5 / 12,000 PSI			
3/4 oz	Universal	Rem. 209P	Rem. PT28	14.5 gr / 10,500 PSI -			
3/4 oz	Universal	Rem. 209P	WAA28HS	14.0 gr / 11,300 PSI -			
3/4 oz	Universal	Win. 209	Fed. 28S1	14.1 gr / 11,500 PSI -			
3/4 oz	Universal	Win. 209	Rem. PT28	14.3 gr / 10,700 PSI 14.7 / 11,300 PSI			
3/4 oz	Universal	Win. 209	WAA28HS	14.1 gr / 12,200 PSI -			
1200 fps							
3/4 oz	HS-6	Fed. 209A	WAA28HS	17.5 gr / 11,000 PSI			
3/4 oz	HS-6	Rem. 209P	WAA28HS	18.0 gr / 10,600 PSI			
3/4 oz	HS-6	Win. 209	WAA28HS	18.0 gr / 10,600 PSI			
1200 fps 1225 fps 1250 fps 1275 fps							
3/4 oz	Longshot	Fed. 209A	Fed. 28S1	14.1 gr / 10,000 PSI	14.6 gr / 10,900 PSI	15.0 gr / 11,000 PSI	-
3/4 oz	Longshot	Fed. 209A	WAA28HS	13.9 gr / 10,500 PSI	14.4 gr / 11,200 PSI	14.9 gr / 12,000 PSI	-
3/4 oz	Longshot	Rem. 209P	Fed. 28S1	14.4 gr / 9,500 PSI	14.9 gr / 10,200 PSI	15.4 gr / 10,800 PSI	15.9 gr / 11,400 PSI
3/4 oz	Longshot	Rem. 209P	Rem. PT28	14.7 gr / 8,700 PSI	15.1 gr / 9,400 PSI	15.6 gr / 10,200 PSI	16.0 gr / 10,800 PSI
3/4 oz	Longshot	Rem. 209P	WAA28HS	14.5 gr / 9,900 PSI	14.9 gr / 10,600 PSI	15.4 gr / 11,400 PSI	-
3/4 oz	Longshot	Win. 209	Fed. 28S1	14.5 gr / 9,500 PSI	14.9 gr / 10,100 PSI	15.3 gr / 10,700 PSI	15.7 gr / 11,200 PSI
3/4 oz	Longshot	Win. 209	Rem. PT28	14.6 gr / 8,900 PSI	15.1 gr / 9,600 PSI	15.6 gr / 10,300 PSI	16.0 gr / 10,800 PSI
3/4 oz	Longshot	Win. 209	WAA28HS	14.6 gr / 9,800 PSI	14.9 gr / 10,100 PSI	15.5 gr / 11,100 PSI	-
1150 fps 1200 fps 1250 fps							
3/4 oz	572	Ched. 209	BP SG 28	12.8 gr / 9,000 PSI 14.6 gr / 11,800 PSI -			

S HOTSHELL data

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
				1150 fps	1200 fps	1250 fps	
28 GA., 2 3/4", WINCHESTER AA, HS AND SUPER-X HS PLASTIC SHELLS (CONT.)							
3/4 oz	572	Ched. 209	CB 5034-28HS	12.8 gr / 9,000 PSI	13.9 gr / 10,600 PSI	15.0 gr / 12,200 PSI	
3/4 oz	572	Ched. 209	Fed. 28S1	12.7 gr / 9,600 PSI	13.7 gr / 11,500 PSI	-	
3/4 oz	572	Ched. 209	PC28	13.0 gr / 9,100 PSI	14.0 gr / 10,400 PSI	15.0 gr / 11,700 PSI	
3/4 oz	572	Ched. 209	Rem. PT28	13.1 gr / 8,900 PSI	13.9 gr / 10,300 PSI	14.7 gr / 11,700 PSI	
3/4 oz	572	Fed. 209A	BP SG 28	12.8 gr / 10,400 PSI	14.0 gr / 11,700 PSI	-	
3/4 oz	572	Fed. 209A	CB 5034-28HS	12.4 gr / 9,500 PSI	13.4 gr / 10,800 PSI	14.5 gr / 12,200 PSI	
3/4 oz	572	Fed. 209A	Fed. 28S1	12.4 gr / 10,100 PSI	13.4 gr / 11,400 PSI	-	
3/4 oz	572	Fed. 209A	PC28	12.6 gr / 9,200 PSI	13.7 gr / 10,600 PSI	14.8 gr / 12,000 PSI	
3/4 oz	572	Fed. 209A	Rem. PT28	12.6 gr / 9,200 PSI	13.4 gr / 10,600 PSI	14.3 gr / 12,000 PSI	
3/4 oz	572	Rem. 209P	BP SG 28	13.0 gr / 9,700 PSI	14.0 gr / 11,700 PSI	-	
3/4 oz	572	Rem. 209P	CB 5034-28HS	12.7 gr / 8,500 PSI	13.7 gr / 10,100 PSI	14.8 gr / 11,800 PSI	
3/4 oz	572	Rem. 209P	Fed. 28S1	12.6 gr / 9,700 PSI	13.6 gr / 11,400 PSI	-	
3/4 oz	572	Rem. 209P	PC28	12.9 gr / 9,800 PSI	14.0 gr / 10,800 PSI	15.2 gr / 11,800 PSI	
3/4 oz	572	Rem. 209P	Rem. PT28	13.0 gr / 8,500 PSI	13.8 gr / 10,100 PSI	14.6 gr / 11,800 PSI	
				1150 fps	1200 fps	1250 fps	1300 fps
3/4 oz	JMR Blue	Ched. 209	Fed. 28S1	17.4 gr / 10,300 PSI	18.5 gr / 11,200 PSI	19.6 gr / 12,200 PSI	-
3/4 oz	JMR Blue	Ched. 209	PC28	18.1 gr / 9,900 PSI	19.2 gr / 10,800 PSI	-	-
3/4 oz	JMR Blue	Ched. 209	Rem. PT28	17.5 gr / 9,600 PSI	18.5 gr / 10,400 PSI	19.5 gr / 11,100 PSI	20.5 gr / 11,900 PSI
3/4 oz	JMR Blue	Ched. 209	WAA28HS	18.0 gr / 10,000 PSI	19.1 gr / 11,000 PSI	20.2 gr / 12,100 PSI	-
3/4 oz	JMR Blue	Fed. 209A	Fed. 28S1	16.8 gr / 10,500 PSI	18.0 gr / 11,500 PSI	19.2 gr / 12,500 PSI	-
3/4 oz	JMR Blue	Fed. 209A	PC28	17.2 gr / 10,500 PSI	18.4 gr / 11,400 PSI	19.7 gr / 12,300 PSI	-
3/4 oz	JMR Blue	Fed. 209A	Rem. PT28	16.6 gr / 9,800 PSI	17.7 gr / 10,700 PSI	18.9 gr / 11,600 PSI	20.0 gr / 12,500 PSI
3/4 oz	JMR Blue	Fed. 209A	WAA28HS	17.1 gr / 10,300 PSI	18.2 gr / 11,400 PSI	19.3 gr / 12,400 PSI	-
3/4 oz	JMR Blue	Rem. 209P	Fed. 28S1	17.2 gr / 10,100 PSI	18.3 gr / 11,200 PSI	19.4 gr / 12,400 PSI	-
3/4 oz	JMR Blue	Rem. 209P	PC28	17.9 gr / 9,800 PSI	19.0 gr / 10,800 PSI	20.1 gr / 11,900 PSI	-
3/4 oz	JMR Blue	Rem. 209P	Rem. PT28	17.5 gr / 9,600 PSI	18.5 gr / 10,300 PSI	19.5 gr / 10,900 PSI	20.5 gr / 11,600 PSI
3/4 oz	JMR Blue	Rem. 209P	WAA28HS	18.0 gr / 10,000 PSI	19.0 gr / 10,800 PSI	20.0 gr / 11,700 PSI	-
3/4 oz	JMR Blue	Win. 209	Fed. 28S1	17.1 gr / 10,100 PSI	18.3 gr / 11,200 PSI	19.5 gr / 12,300 PSI	-
3/4 oz	JMR Blue	Win. 209	PC28	17.9 gr / 9,600 PSI	19 gr / 10,800 PSI	20.1 gr / 12,000 PSI	-
3/4 oz	JMR Blue	Win. 209	Rem. PT28	17.1 gr / 9,300 PSI	18.2 gr / 10,200 PSI	19.3 gr / 11,100 PSI	20.4 gr / 12,000 PSI
3/4 oz	JMR Blue	Win. 209	WAA28HS	17.8 gr / 9,800 PSI	18.9 gr / 10,700 PSI	19.9 gr / 11,500 PSI	21.0 gr / 12,400 PSI
				1150 fps	1200 fps	1250 fps	
3/4 oz	572	Win. 209	BP SG 28	13.4 gr / 9,000 PSI	14.4 gr / 10,400 PSI	15.4 gr / 11,800 PSI	
3/4 oz	572	Win. 209	CB 5034-28HS	12.8 gr / 9,000 PSI	13.8 gr / 10,300 PSI	14.8 gr / 11,700 PSI	
3/4 oz	572	Win. 209	Fed. 28S1	12.5 gr / 8,700 PSI	13.7 gr / 11,700 PSI	-	
3/4 oz	572	Win. 209	PC28	13.4 gr / 9,600 PSI	14.3 gr / 10,600 PSI	15.3 gr / 11,700 PSI	
3/4 oz	572	Win. 209	Rem. PT28	13.2 gr / 8,600 PSI	13.9 gr / 10,100 PSI	14.7 gr / 11,600 PSI	

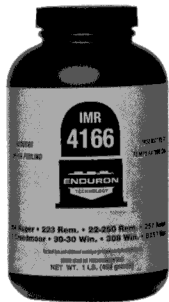
*Velocity is measured in feet per second (fps).
Pressure is measured in Pounds per Square Inch (PSI).

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*		
				1200 fps	1250 fps	1300 fps
410 BORE, 2 1/2", REMINGTON-PETERS STS PLASTIC SHELLS						
1/2 oz	Li'Gun	Fed. 209A	Rem. SP410	12.9 gr / 10,900 PSI		
1/2 oz	Li'Gun	Rem. 209P	Fed. 410SC	13.0 gr / 11,000 PSI		
1/2 oz	Li'Gun	Rem. 209P	Orange PC	13.3 gr / 10,400 PSI		
1/2 oz	Li'Gun	Rem. 209P	Rem. SP410	13.2 gr / 10,800 PSI		
1/2 oz	Li'Gun	Rem. 209P	WAA41	13.0 gr / 10,600 PSI		
1/2 oz	Li'Gun	Win. 209	Fed. 410SC	12.6 gr / 11,800 PSI		
1/2 oz	Li'Gun	Win. 209	Orange PC	12.9 gr / 11,100 PSI		
1/2 oz	Li'Gun	Win. 209	Rem. SP410	12.6 gr / 11,600 PSI		
1/2 oz	Li'Gun	Win. 209	WAA41	12.9 gr / 11,500 PSI		
1/2 oz	H110	Fed. 209A	Fed. 410SC	14.2 gr / 10,600 PSI		
1/2 oz	H110	Rem. 209P	Fed. 410SC	14.7 gr / 9,600 PSI		
1/2 oz	H110	Rem. 209P	Orange PC	15.2 gr / 9,300 PSI		
1/2 oz	H110	Rem. 209P	Rem. SP410	14.8 gr / 8,900 PSI		
1/2 oz	H110	Win. 209	WAA41	14.0 gr / 10,000 PSI		
410 BORE, 2 1/2", WINCHESTER AA AND HS PLASTIC SHELLS						
				1200 fps	1250 fps	1300 fps
1/2 oz	Li'Gun	Fed. 209A	Fed. 410SC	13.3 gr / 11,900 PSI	-	-
410 BORE, 2 1/2", WINCHESTER AA AND HS PLASTIC SHELLS (CONT.)						
				1200 fps	1250 fps	1300 fps
1/2 oz	Li'Gun	Fed. 209A	Rem. SP410	13.3 gr / 11,600 PSI	-	-
1/2 oz	Li'Gun	Fed. 209A	WAA41HS	13.7 gr / 11,900 PSI	-	-
1/2 oz	Li'Gun	Rem. 209P	Orange PC	13.3 gr / 10,600 PSI	-	-
1/2 oz	Li'Gun	Rem. 209P	Rem. SP410	13.5 gr / 11,200 PSI	-	-
1/2 oz	Li'Gun	Rem. 209P	WAA41HS	13.8 gr / 11,600 PSI	-	-
1/2 oz	Li'Gun	Win. 209	Orange PC	13.3 gr / 10,900 PSI	-	-
1/2 oz	Li'Gun	Win. 209	Rem. SP410	13.3 gr / 11,100 PSI	-	-
1/2 oz	Li'Gun	Win. 209	WAA41HS	13.5 gr / 11,700 PSI	-	-
1/2 oz	H110	Fed. 209A	Rem. SP410	14.6 gr / 8,600 PSI	15.3 gr / 9,400 PSI	16.3 gr / 10,400 PSI
1/2 oz	H110	Fed. 209A	WAA41HS	14.6 gr / 9,600 PSI	15.3 gr / 10,200 PSI	16.5 gr / 10,800 PSI
1/2 oz	H110	Rem. 209P	Rem. SP410	16.0 gr / 6,900 PSI	16.5 gr / 8,400 PSI	17.4 gr / 9,300 PSI
1/2 oz	H110	Rem. 209P	WAA41HS	16.0 gr / 7,400 PSI	16.5 gr / 9,000 PSI	17.6 gr / 9,900 PSI
1/2 oz	H110	Win. 209	Orange PC	15.5 gr / 8,100 PSI	16.1 gr / 8,600 PSI	17.0 gr / 9,800 PSI
1/2 oz	H110	Win. 209	Rem. SP410	15.0 gr / 8,300 PSI	15.5 gr / 9,200 PSI	16.7 gr / 10,100 PSI
1/2 oz	H110	Win. 209	WAA41HS	15.3 gr / 8,900 PSI	16.3 gr / 9,300 PSI	16.7 gr / 10,400 PSI
1/2 oz	296	Win. 209	WAA41HS	15.3 gr / 8,900 PSI	-	-



LEGENDARY POWDERS

Enduron 4166 Enduron 4451 Enduron 4955 Enduron 7977 Enduron 8133



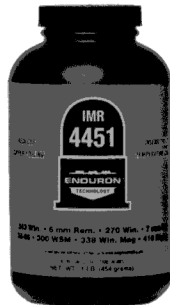
Perfect burn speed for cartridges like:

- 308 Win
- 7.62mm NATO
- 22-250 Rem
- 257 Roberts

Fastest burn rate in the Enduron lineup

Performs comparably to Hodgdon Varget

Available in 1-LB and 8-LB containers



Top burn-rate performance in cartridges like:

- 6mm, 6.5mm Creedmoor
- 30-06
- 270 Win

Ideally suited for mid-range burn speed cartridges

Performs comparably to Hodgdon H4350

Available in 1-LB and 8-LB containers



Top performer with cartridges like:

- 25-06
- 270 Win
- 280 Rem
- 300 Win Mag

Perfect for big game cartridges

Performs comparably to Hodgdon H4831

Available in 1-LB and 8-LB containers



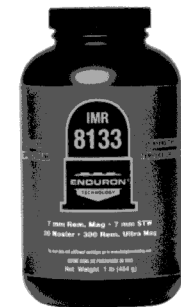
True magnum propellant yielding outstanding performance in:

- 300 Win Mag
- 7mm Rem Mag
- 338 Lapua

Loading density perfect for magnums, contributing to superb uniformity

Performs comparably to Hodgdon H1000

Available in 1-LB and 8-LB containers



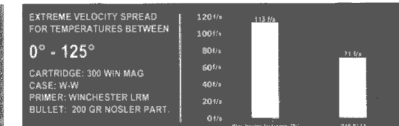
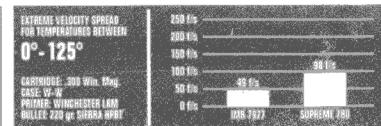
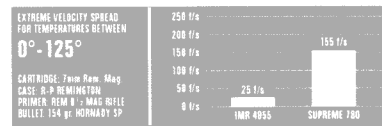
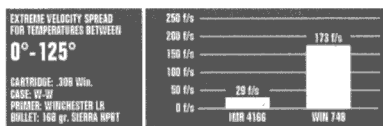
True magnum propellant yielding outstanding performance in:

- 6.5-300 Weatherby
- 264 Win Mag
- 28 Nosler
- 300 Rem Ultra Mag

Slowest burn rate Enduron® Technology powder

Performs comparably to Hodgdon Retumbo

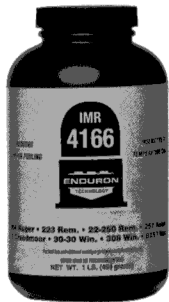
Available in 1-LB and 8-LB containers





LEGENDARY POWDERS

Enduron 4166 Enduron 4451 Enduron 4955 Enduron 7977 Enduron 8133



Perfect burn speed for cartridges like:

- 308 Win
- 7.62mm NATO
- 22-250 Rem
- 257 Roberts

Fastest burn rate in the Enduron lineup

Performs comparably to Hodgdon Varget

Available in 1-LB and 8-LB containers



Top burn-rate performance in cartridges like:

- 6mm, 6.5mm Creedmoor
- 30-06
- 270 Win

Ideally suited for mid-range burn speed cartridges

Performs comparably to Hodgdon H4350

Available in 1-LB and 8-LB containers



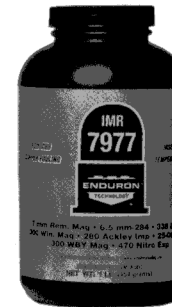
Top performer with cartridges like:

- 25-06
- 270 Win
- 280 Rem
- 300 Win Mag

Perfect for big game cartridges

Performs comparably to Hodgdon H4831

Available in 1-LB and 8-LB containers



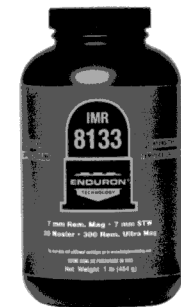
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