

# Vihtavuori Premium Smokeless Powder

Vihtavuori Reloading Powders are known and respected as a top grade products of consistent quality. Vihtavuori powders propel ammunition which earns Gold Medals in competition at the Olympics, World Cups and National Championships in countries around the world, championship after championship. If you depend on perfect performance in order to achieve results in competition or hunting then you can depend on Vihtavuori powders.

Nammo Lapua Oy is marketing and distributing Vihtavuori Reloading powders around the world. Vihtavuori powders are manufactured by Nexplo Vihtavuori, <a href="https://www.nexplo.fi">www.nexplo.fi</a>

Vihtavuori has been manufacturing propellants in Finland for 80 years. Their complete product line of powders satisfies every need for ammunition, from .22 rimfire through largest artillery. All Vihtavuori powders are made using nitro-cellulose produced from cotton linters in their own NC plant. More than 20 propellants are produced for small arms and handloading of ammunition. The N100 series of powders are single base propellants for rifle calibre's. The N300/3N series are single base powders for pistol cartridges, rimfire cartridges and shotshells. The N500 series are special high energy propellants for rifle cartridges which are enchanted with nitro-glycerine for extra ballistic performance.

Vihtavuori powders are numbered in a decade system which indicates the burning rate. N110 is the fastest burning rifle powder, N170 is the slowest.

All Vihtavuori powders for small arms are extruded propellants. Propellant grains are produced as perforated cylinders of various sizes, with flat ribbon flakes and other

shapes extruded for special applications. The various grain geometry of the different powder types provide appropriate combustion characteristics for the selected cartridge application.

As required for each different powder type, Vihtavuori propellants may be surface treated during manufacture. These treatments bring about progressive burning behaviour for maximum ballistic performance with cleanburning and complete combustion, while reducing chamber pressure, flame temperature and barrel wear. These are characteristics which Vihtavuori is known for, and they provide for an accurate and long life for firearms while achieving perfect performance ant the target. Vihtavuori propellants are finished with a hard graphite coating with short and uniform powder grains in order to permit precision metering of charges during the loading process.

## RIFLE POWDERS

### N100 series

The series N100 powders are primarily rifle powders, with suitable speeds to optimise handloading from the tiny .17 Remington and .22 Hornet all the way to the monster bashing .458 Winchester Magnum. There are ten speeds in this series and they include:

## N110

Our fastest rifle powder which is used for small capacity cartridges like the .22 Hornet. This Powder is also a superb performer with heavy magnum pistol cartridges, like .357 S&W Magnum, .357 Maximum, .44 Magnum and .454 Casull.

## N120

Propellant for the  $7.62 \times 39$  and for the lightest weight bullets in the .222 Remington and similar cartridges. Also a good choice for many straight wall cartridges. N120 needs higher pressure than N110 in order to optimise burning.

## N130

For the .222 Remington and for fast, lightweight bullets in other .22 bottleneck cartridges. This is the powder used in factory loaded .22 and 6mm PPC. Superb powder for benchrest.

## N133

Developed by Vihtavuori for SS109-M855 ammunition in 5.56 x 45 with 4,0 g bullets. It is ideal for the .222 Remington, .223 Remington up to .45-70 Government and other applications where relatively fast burning rifle propellant is needed. Famous all over the world for the championship winning 6 mm PPC benchrest cartridges.

# N135

A good choice for medium weight (< 10 g) bullets in the .308 Winchester and alike. This moderate burning propellant is optimal for heavier bullets (4,5 g) in the 5.56 x 45 and similar .22 centerfires.

# N140

Ideal propellant for moderate to heavy bullets in medium length cartridges such as

.308 Winchester and similar 6.5 mm and 7mm rounds. Superb performance in gas operated actions.

### N150

Similar applications to N140, moderately slow powder that can help refine rifle cartridge ballistics when N140 is just a tad too fast and N160 is a tad too slow. Accurate performer with heavy bullets (11 g) in 7.62, 6.5 and 7 mm bolt guns. Excellent propellant for cartridges with long case, like the .30-06 Springfield and .375 H&H Magnum.

#### N160

A relatively slow powder ideally suited to many magnum and standard rounds requiring slow propellant like the .300 Winchester Magnum and .300 H&H Magnum. A perfect propellant for the family of 6mm high capacity cartridges. N160 is destined to being one of the most popular Vihtavuori powders.

### N165

A very slow burning magnum propellant for use in high capacity magnum cartridges with heavy bullets. Somewhat interchangeable with N160, select the propellant which better fills the cartridge case and choose the N165 in the case of heavier bullets.

## N170

Slowest standard rifle powder for the largest magnum cases firing the heaviest bullets. A real choice for .338 Lapua Magnum, .338 Winchester Magnum and the Weatherby Magnums.

# **POWDERS FOR .50 BMG**

# 20N29 and 24N41

These are special propellants for the .50 BMG and like up to 20 mm cannon. They are, like N100 series, single base surface treated powders. The burning rate of them is slower and their grain size is larger than that of the N100 series rifle powders. 20N29 is a tad slower than 24N41.

## N500 series

The N500 series of Vihtavuori propellants provide the utmost in performance for added velocity and range with heavy bullets. These High Energy powders are made from extruded powder grains which are enhanced with Nitro-glycerine, resulting in a denser, more energetic propellant. The Vihtavuori solution for driving heavy bullets to long range, loading with these powders will provide increases of muzzle velocity of up to 50 m/sec with outstanding accuracy and no pressure increase. The grains are coated with a new type of chemical which results in very progressive burning characteristics. Geometrically the powders in the N500 series are equal to the N100 series. Although these new powders have a higher energy content, they do not cause greater wear to the gun. This is because the surface of the powder has been treated with an agent designed to reduce barrel wear. N500 series powders work well at different temperatures, even better than the traditional N100 and N300 series. Temperature sensitivity naturally depends very much on the weapon and on the cartridge. The manufacturing technique employed permits a very high bulk density,

which in turn makes it possible to use a bigger charge in a certain limited loading volume.

## N540

A bit slower burning than N140. Superb long-range performance with heavy bullets in the .308 Winchester and in many 6.5 and 7mm cartridges with medium case capacity.

### N550

A bit slower burning than N150. Ideal performance with heaviest bullets of the above mentioned range of cartridges.

### N560

A bit slower burning than N160. High Energy propellant gives outstanding performance in large magnum cartridges and in many 6,5 mm family of cartridges loaded with heavy bullets.

## **HANDGUN POWDERS**

Handgun powders include five **N300** series propellants and three special propellants:

**N310**: Very fast burning and competitive with Bullseye and Accurate No.2. It has applications in a very wide range from the .25 ACP to the 9mm Luger.

N320 is a handgun powder of comparatively fast burning rate. Useful in many popular cartridges. Currently available data includes 9mm Luger, .38 Special, .357 Magnum, .44 Magnum, .45 ACP and .45 (Long) Colt. Burning rate generally is perhaps a tad faster than 231 or generally about like Red Dot.

**N330**: This is a handgun powder that has a burning rate similar to Green Dot, No. 5, or PB. Data is currently available for 9mm Luger, .38 Special, .40 S&W, .44 S&W Special and .45 (Long) Colt.

**N340**: With a burning rate not dissimilar to Winchester 540 or Herco, this powder is a wide application type. Data for the following handgun cartridges is currently available:.30 Luger, 9mm Luger, .38 S&W (Colt New Police),.38 Super Auto, .38 Special, .357 Magnum, .44 Magnum, .45 Auto and .45 (Long) Colt.

**N350:** This is the slowest burning propellant in the N300 series. Burning speed is about like Blue Dot, "Hi-Skor" 800-X or No. 7. Data is currently available for: 9mm Luger, .38 Super Auto, .38 Special, .357 Magnum, .44 Magnum and .45 Auto.

**3N37**: Burning speed is between N340 and N350, close to "Hi-Skor" 800-X, and it therefore has applications also

in handgun cartridges. Data is currently available for all popular handgun calibers. The characteristics of this propellant makes it very desirable for competitive handgun shooting.