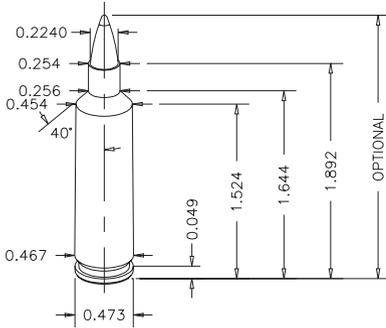


22-250 Ackley Improved



Test Specifications/ Components

Firearm Used: Savage Model 11

Barrel Length: 26"

Twist: 1 x 8"

Case: Federal

Trim-to Length: 1.892"

Primer: Remington 9 1/2

Remarks:

Despite being one of the most popular varmint cartridges, 22-250 hasn't been immune to the wildcatter's attentions. And, in this example, it isn't a bad thing either. With the gentle case taper and mild shoulder angle of the parent case, the 22-250 provides fertile ground for improvement. In the Ackley

version that we chose to work with, the fire-formed case provides almost exactly the same internal capacity as that of a 220 Swift in its standard configuration. With close to a 10 percent increase in useable capacity, the improved version gives enough added velocity to make a noticeable difference in the field.

As with the other members of the improved family of cartridges, cases for the 22-250 must be fireformed before it can be reloaded in its improved configuration. With most cartridges, this process drastically reduces velocity and accuracy. Unlike some other chamberings, the 22-250 Improved has a reputation for giving very good accuracy when fireforming. Velocity usually drops by only 100 to 150 fps from that of the standard 22-250, leaving a fairly potent cartridge for casual varminting. After this initial fireforming, the improved case can be reloaded like any other.

With velocity and energy levels equaling the Swift, the 22-250 Improved offers some advantages over the older cartridge. Cases and ammunition are more readily available and usually more affordable. The Improved's more modern design also tends to reduce stretching when compared to either the Swift or the parent case. Given the enthusiasm most reloaders have for case trimming, this may be enough reason to make the conversion!

22-250 Ackley Improved continued

#1385 .224" 40 grain HP

C.O.A.L. 2.300"



#1440 .224" 40 grain BlitzKing

C.O.A.L. 2.380"



Powder↓/Velocity→	3700	3800	3900	4000	4100	4200	4300
IMR-3031	34.2	35.0	35.8	36.6	37.4	38.2	39.0
IMR-4895	35.6	36.5	37.4	38.3	39.2	40.1	
Varget	36.0	37.0	38.0	39.0	40.0	41.0	42.0
IMR-4064	37.3	38.0	38.7	39.4	40.1	40.8	41.5
Viht N140	36.8	37.7	38.6	39.5	40.4	41.3	42.2
BigGame	39.0	40.0	41.0	42.0	43.0		
RE-15	36.5	37.4	38.3	39.2	40.1	41.0	41.9
Energy/ft.lbs.	1216	1282	1351	1421	1493	1567	1642

	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	IMR-3031	38.2	4200	1567
Hunting Load	RE-15	41.9	4300	1642

#1310 .224" 45 grain SPT

C.O.A.L. 2.385"



#1320 .224" 50 grain SMP

C.O.A.L. 2.360"



#1330 .224" 50 grain SPT

C.O.A.L. 2.385"



#1450 .224" 50 grain BlitzKing

C.O.A.L. 2.400"



Powder↓/Velocity→	3600	3700	3800	3900	3950	4000
IMR-3031	34.2	35.2	36.2	37.2	37.7	38.2
IMR-4895	34.7	36.4	38.1	39.8		
Varget	35.8	36.9	38.0	39.1	39.6	
IMR-4064	35.0	36.2	37.4	38.6	39.2	
Viht N140	33.3	35.1	36.9	38.7		
BigGame	38.0	39.3	40.6	41.9		
RE-15	35.0	36.3	37.6	38.9		
760	41.5	42.5	43.5	44.5		
XMR-4350	41.3	42.1	42.9	43.7		
Energy/ft.lbs.	1439	1520	1603	1689	1732	1776

	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	IMR-4895	38.1	3800	1603
Hunting Load	Varget	39.1	3900	1689

INDICATES MAXIMUM LOAD – USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

22-250 Ackley Improved continued

#1410 .224" 52 gr. HPBT MatchKing
C.O.A.L. 2.390"



#1400 .224" 53 gr. HP MatchKing
C.O.A.L. 2.390"



Powder↓/Velocity→	3400	3500	3600	3700	3800	3900	4000
IMR-3031	31.2	32.4	33.6	34.8	36.0	37.2	
IMR-4895	32.0	33.3	34.6	35.9	37.2		
Varget		33.8	35.2	36.6	38.0		
IMR-4064		34.9	35.9	36.9	37.9	38.9	39.9
BigGame		36.3	37.5	38.7	39.9	41.1	
RE-15		34.2	35.5	36.8	38.1	39.4	
XMR-4350	38.8	39.8	40.8	41.8	42.8		
Energy/ft.lbs.	1360	1442	1525	1611	1699	1790	1883

	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	IMR-4064	38.9	3900	1790

Sierra does not recommend MatchKing bullets for hunting applications.

INDICATES MAXIMUM LOAD – USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

22-250 Ackley Improved continued

#1350 .224" 55 gr. SMP
C.O.A.L 2.360"



#1390 .224" 55 gr. HPBT
C.O.A.L 2.360"



#1355 .224" 55 gr. FMJBT
C.O.A.L 2.385"



#1360 .224" 55 gr. SPT
C.O.A.L 2.385"



#1365 .224" 55 gr. SBT
C.O.A.L 2.385"



#1455 .224" 55 gr. BlitzKing
C.O.A.L 2.400"



Powder+ / Velocity →	3400	3500	3600	3700	3800	3850
IMR-3031	33.1	34.2	35.3	36.4	37.5	
IMR-4895	33.9	34.8	35.7	36.6	37.5	
Varget	34.7	35.5	36.3	37.1		
IMR-4064	33.9	35.0	36.1	37.2	38.3	
Viht N140	32.6	33.9	35.2	36.5		
BigGame	35.1	36.5	37.9	39.3	40.7	41.4
RE-15		34.8	36.1	37.4	38.7	
760	39.1	40.3	41.5	42.7	43.9	44.5
XMR-4350	39.3	40.2	41.1	42.0	42.9	
Energy/ft.lbs.	1412	1496	1583	1672	1763	1811

	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	IMR-4895	36.6	3700	1672
Hunting Load	IMR-3031	37.5	3800	1763

INDICATES MAXIMUM LOAD – USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

22-250 Ackley Improved continued

#1375 .224" 60 gr. HP
C.O.A.L 2.400"



#1370 .224" 63 gr. SMP
C.O.A.L 2.390"



Powder+Velocity →	3300	3400	3500	3600	3700
IMR-4064		34.0	35.2	36.4	
BigGame	37.3	38.5	39.7		
RE-15	33.4	34.7	36.0	37.3	
IMR-4831	38.4	39.6	40.8	42.0	43.2
XMR-3100	40.8	41.8	42.8	43.8	
H4831 SC	41.6	42.7	43.8	44.9	
Energy/ft.lbs.	1523	1617	1714	1813	1915
	Powder	Grains	Velocity	Ft. lbs.	
Accuracy Load	IMR-4831	43.2	3700	1915	
Hunting Load	IMR-4831	43.2	3700	1915	

#1380 .224" 69 gr. HPBT MatchKing
C.O.A.L 2.500"
requires 1 x 10" twist barrel or faster



Powder+Velocity →	3000	3100	3200	3300	3400	3500
IMR-4895	30.3	31.8	33.3			
BigGame	34.0	35.2	36.4	37.6	38.8	40.0
760	34.2	35.9	37.6	39.3		
IMR-4350	35.6	36.8	38.0			
RE-19		38.2	39.5	40.8	42.1	
IMR-4831		37.4	38.7	40.0	41.3	
XMR-3100		39.7	40.8	41.9	43.0	
H4831 SC	37.7	39.1	40.5	41.9	43.3	
Energy/ft.lbs.	1379	1472	1569	1668	1771	1877
	Powder	Grains	Velocity	Ft. lbs.		
Accuracy Load	IMR-4350	38.0	3200	1569		

Sierra does not recommend MatchKing bullets for hunting applications.

INDICATES MAXIMUM LOAD – USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.

22-250 Ackley Improved continued

#9390 .224" 80 gr. HPBT MatchKing
 C.O.A.L 2.610"
 requires 1 x 8" twist barrel or faster



Powder↓/Velocity→	2900	3000	3100	3200	3300
XMR-4350	33.1	34.5	35.9		
H4350 EXT	31.7	33.3	34.9	36.5	
RE-19	33.6	35.1	36.6	38.1	39.6
IMR-4831	36.4	37.6	38.8	40.0	41.2
XMR-3100	35.6	36.9	38.2	39.5	40.8
H4831 SC	34.2	35.8	37.4	39.0	40.6
RE-22			37.5	38.9	40.3
Energy/ft.lbs.	1494	1599	1707	1819	1934

	Powder	Grains	Velocity	Ft. lbs.
Accuracy Load	RE-22	37.5	3100	1707

Sierra does not recommend MatchKing bullets for hunting applications.

INDICATES MAXIMUM LOAD – USE CAUTION
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.