

**.356, 125gr Hornady HAP, 3,8gr RS12, OAL 27,7**

WARNING: Since we have no control over equipment or data which may be used with this program, no responsibility is implied or assumed for results obtained through its use. Input data and results may be incorrect or wrong. Therefore the use of this data for loading ammunition can cause serious injury to personnel and material. The computer-results had to be checked against data available in current loading manuals.

**LOT-TO-LOT VARIATIONS OF POWDERS, PRIMER SUBSTITUTION AND COMPONENT CHANGE OFTEN RAISE PRESSURES TO UNSAFE LEVELS. THE USER MUST ASSUME THE ENTIRE RISK OF USING THIS DATA FOR LOADING PURPOSES.**

QuickLOAD® V.3.6.05 #532889, © Copyright 1987-2011 - H.Broemel, Babenhausen, Germany

<b>User Data:</b>	<b>Date:14-cze-2024</b>	<b>Time:20:07:42</b>	<b>File: 125 .356 hornady hap.dat</b>	
<b>Cartridge / Caliber</b>	<b>9 mm Luger (CIP)</b>	<b>Bullet</b>	<b>.356 ,125 ,Hornady HAP</b>	
Maximum Average Pressure, allowed	34084 psi. 235 MPa (Piezo CIP)	with flatbase		
Groove Caliber	0,355 in. 9,02 mm	Bullet Weight	125,0 gr.	8,1 gm
Case Capacity, overflow	13,78 gr. H2O 0,895 cm3	Bullet Length	0,571 in.	14,5 mm
Case Length	0,750 in. 19,05 mm	Bullet Seating Depth	0,230 in.	5,85 mm
Cartridge O.A. Length	1,091 in. 27,7 mm	Barrel/Tube Length	5,0 in.	127,0 mm
Shot Start / Init Pressure	2321 psi. 16,0 MPa	Estimated Cross Section Area of Bore	0,09805 in.2	0,6326 cm2
<b>Propellant type</b>	<b>ReloadSwiss RS 12 ?</b>			
Charge Weight	3,8 gr. 0,246 gm	Load Density	119,4 gr./in.3	0,472 gm/cm3
Heat of Explosion, Potential	262,4 J/gr. 4050 J/gm	Energy Density of Charge	31332 J/in.3	1912 J/cm3
Propellant Solid Density	404,63 gr./in.3 1,6 gm/cm3	Used Ratio of Specific Heats cp/cv	1,2364	
Burning Rate Factor Ba	2,5 1/s	Weighting Factor	0,75	
Burning Function Limit Z1	0,439	Prog.-/ Degressivity Factor a0	5,261	
Factor b	2,429	Bulk Density	155,8 gr./in.3	0,616 gm/cm3

**Calculated and Estimated Data:**

Bullet Shank Seating Depth	0,23 in. 5,85 mm	Capacity Displaced by Seated Bullet	0,0228 in.3	0,374 cm3
Useable Case Capacity	0,0318 in.3 0,521 cm3	Bullet Travel at Muzzle Exit	4,48 in.	113,8 mm
Loading Ratio("Density") / Filling	76.7 %	Charge Fraction Burnt at Shot Start	2,49 %	

**Predicted Data:**

Maximum Chamber Pressure	22185 psi. 153 MPa	Bullet Travel at Pmax	0,29 in.	7,3 mm
<b>at Muzzle Exit:</b>				
Bullet Velocity	1026 fps. 312,8 m/s	Pressure at Muzzle	2624 psi. 18 MPa	
Bullet Energy	292 ft.lbs. 396 Joule	Bullet Barrel Time	0,619 ms	
Propellant Burnt	100,0 %	Ballistic Efficiency	39,7 %	

Check Loading Manuals for Safe Minimum Charge Weight to Avoid Hazardous Ignition Conditions like Secondary Explosion Effects !  
 Real maximum (peak) of pressure is reached while bullet moves within barrel.  
 End of combustion reached before bullet's base passes muzzle.

