

⁹⁹Rh Z = 45 N = 54 adopted link ENSDF link

Based on ENSDF from Oct 2022, and mass evaluation from 2020

BE = 849.439 (0.019) MeV

Qbeta+ = 2.041 (0.019) MeV

	Energy T	J+	J-	J-other	T1/2
99RH 1			0.000	1/2-	1 16.1 D 2
99RH 2	0.064	9/2+			2 4.7 H 1
99RH 3				0.200 (7/2)+	3
99RH 4				0.411	4
99RH 5			0.428	5/2-	5
99RH 6				0.464 (5/2,7/2)+	6
99RH 7	0.783	11/2+			7
99RH 8	0.842	13/2+			8 2.6 PS 15
99RH 9				0.851 (7/2)+	9
99RH 10				0.874 (5/2)+	10
99RH 11			0.979	9/2-	11
99RH 12				1.015 (5/2,7/2)	12
99RH 13				1.018 (7/2)	13
99RH 14				1.036 (1/2,3/2)	14
99RH 15				1.101 (1/2-,3/2)	15
99RH 16				1.111 (5/2+,7/2)	16
99RH 17				1.168 (5/2)+	17
99RH 18				1.367 (5/2+)	18
99RH 19				1.382 (3/2)	19
99RH 20				1.398	20
99RH 21				1.408 (5/2)	21
99RH 22				1.431	22
99RH 23				1.477 (3/2)	23
99RH 24				1.528 (3/2)+	24
99RH 25				1.536 (5/2,7/2)+	25
99RH 26				1.616	26
99RH 27				1.618	27
99RH 28				1.622	28
99RH 29				1.627	29
99RH 30				1.655 (17/2+)	30
99RH 31			1.661	13/2-	31
99RH 32	1.661	15/2+			32
99RH 33	1.702	17/2+			33 3.3 PS LT
99RH 34				1.737	34
99RH 35				1.761 (5/2,7/2)+	35
99RH 36				1.791	36
99RH 37				1.794	37

99RH 38						1.799			38
99RH 39						1.815	(3/2+,5/2+,7/2+)		39
99RH 40						1.882			40

99RH 41						1.921			41
99RH 42						1.969	(5/2,7/2)+		42
S-alpha=		1.988		(0.020)		-----			
99RH 43						2.040			43
99RH 44						2.052	(3/2,5/2,7/2)+		44
99RH 45						2.069			45
99RH 46						2.071			46
99RH 47						2.143	(3/2,5/2,7/2)+		47
99RH 48						2.181	(3/2)+		48
99RH 49						2.195	(19/2+)	6.3 PS	5
99RH 50						2.199	(3/2,5/2,7/2)+		50

99RH 51						2.268	(3/2,5/2,7/2)+		51
99RH 52				2.300		17/2-			52
99RH 53						2.343	(5/2,7/2)+		53
99RH 54						2.388	(5/2,7/2)+		54
99RH 55						2.505	(21/2+)		55
99RH 56						2.509	(17/2-)		56
99RH 57		2.594		21/2+					57
99RH 58						2.618	(5/2,7/2)+		58
99RH 59						2.620	(17/2-)		59
99RH 60						2.640	(5/2,7/2)+		60

99RH 61						2.710	(3/2,5/2,7/2)+		61
99RH 62						2.727			62
99RH 63						2.737	(5/2,7/2)+		63
99RH 64						2.759	(5/2,7/2)+		64
99RH 65						2.836	(3/2,5/2,7/2)+		65
99RH 66						2.860	(5/2,7/2)+		66
99RH 67		2.891		21/2+					67
99RH 68						2.957	(5/2,7/2)+		68
99RH 69						3.015	(21/2+)		69
99RH 70						3.047	(5/2,7/2)+		70

99RH 71				3.114		21/2-			71
99RH 72		3.150		23/2+					72
99RH 73				3.434		21/2-			73
99RH 74				3.548		21/2-			74
99RH 75		3.587		25/2+					75
99RH 76							3.634		76
99RH 77		3.699		23/2+					77
99RH 78				3.711		23/2-			78
99RH 79		3.879		25/2+					79
99RH 80				3.989		25/2-			80

99RH 81		4.006		25/2+					81

99RH 82				4.099	25/2-			82
99RH 83		4.250	27/2+					83
99RH 84		4.265	27/2+					84
99RH 85						4.327	(27/2)	85
99RH 86						4.329	(25/2-)	86
99RH 87				4.580	27/2-			87
99RH 88		4.628	29/2+					88
S-p = 4.649 (0.020)-----								
99RH 89		4.679	27/2+					89
99RH 90		4.691	29/2+					90

99RH 91		4.826	29/2+					91
99RH 92				4.917	29/2-			92
99RH 93		4.962	27/2+					93
99RH 94		5.114	29/2+					94
99RH 95				5.146	29/2-			95
99RH 96						5.320	(31/2+)	96
99RH 97		5.367	29/2+					97
99RH 98				5.448	31/2-			98
99RH 99		5.518	29/2+					99
99RH 100						5.694	(33/2+)	100

99RH 101		5.702	33/2+					101
99RH 102				5.786	33/2-			102
99RH 103		5.827	31/2+					103
99RH 104		5.973	31/2+					104
99RH 105				6.300	33/2-			105
99RH 106				6.666	35/2-			106
99RH 107		6.830	37/2+					107
99RH 108		6.879	35/2+					108
99RH 109				7.127	37/2-			109
99RH 110						7.282		110

99RH 111		7.303	37/2+					111
99RH 112						7.462		112
99RH 113				7.676	37/2-			113
99RH 114						7.872	(35/2+)	114
99RH 115				7.895	39/2-			115
99RH 116				8.019	41/2-			116
99RH 117						8.024		117
99RH 118						8.085	(37/2+)	118
99RH 119		8.320	41/2+					119
99RH 120						8.332		120

99RH 121						8.449		121
99RH 122				8.869	43/2-			122
99RH 123						9.337	(39/2)	123
99RH 124				9.483	43/2-			124
99RH 125						9.588		125
99RH 126						9.767		126

99RH 127				9.839	(5/2+)	127	30 KEV	6
99RH 128		9.958		45/2-		128		
99RH 129				9.974	(43/2-)	129		

S-p = 4.649 (0.020)-----
 S-n = 10.481 (0.023)-----
 S-2p = 12.938 (0.020)-----
 S-2n = 19.130 (0.040)-----
 S-alpha= 1.988 (0.020)-----

S+p = -6.917 (0.026)
 S+n = -8.078 (0.027)
 S+2p = -10.328 (0.020)
 S+2n = -17.970 (0.020)
 S+alpha = -1.643 (0.020)

gap p = -2.268 (0.033)
 gap n = 2.403 (0.035)
 gap 2p = 2.610 (0.028)
 gap 2n = 1.159 (0.045)
 gap alpha = 0.345 (0.028)