

^{24}Na $Z = 11$ $N = 13$ adopted link ENSDF link

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

BE = 193.524 (0.000) MeV

Qbeta- = 5.516 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2
24NA 1	0.000	4+			1 14.997 H 12
24NA 2	0.472	1+			2 20.18 MS 10
24NA 3	0.563	2+			3 36 PS 6
24NA 4	1.341	2+			4 66 FS 21
24NA 5				1.345 (3)+	5 27 FS 7
24NA 6	1.347	1+			6 6.4 PS 5
24NA 7	1.512	5+			7 28 FS 6
24NA 8	1.846	2+			8 180 FS 35
24NA 9	1.885	3+			9 26 FS 5
24NA 10				1.961	10
24NA 11				1.977	11
24NA 12	2.513	3+			12 10 FS 5
24NA 13	2.562	4+			13 17 FS LT
24NA 14	2.904	3+			14 35 FS 8
24NA 15				2.978 (2+,3+)	15 17 FS LT
24NA 16				3.217 (4+,2+)	16 15 FS 6
24NA 17			3.372 2-		17 13 FS 3
24NA 18	3.413	1+			18 14 FS LT
24NA 19	3.589	1+			19 6 FS LT
24NA 20	3.628	3+			20 14 FS LT
24NA 21				3.656 (2+,1+)	21 14 FS LT
24NA 22	3.682	0+			22 14 FS LT
24NA 23				3.738	23
24NA 24			3.745 3-		24 17 FS LT
24NA 25				3.866	25
24NA 26				3.896 (1,2,3)-	26
24NA 27				3.936	27 17 FS LT
24NA 28				3.943	28 14 FS LT
24NA 29				3.977 (1-,2+)	29 21 FS LT
24NA 30			4.048 0-		30 70 FS 30
24NA 31				4.143 (4-)	31 20 FS LT
24NA 32	4.187	2+			32 14 FS LT
24NA 33				4.196 1+,2,3+	33 10 FS LT
24NA 34	4.207	2+			34 23 FS 6
24NA 35				4.220	35
24NA 36			4.442 2-		36 35 FS LT
24NA 37				4.459	37

24NA	38			4.526	3-			38		
24NA	39			4.562	1-			39	10 FS	LT
24NA	40					4.622	1+,2,3+	40	10 FS	LT

24NA	41					4.690		41	25 FS	LT
24NA	42			4.751	2-			42		
24NA	43					4.772		43		
24NA	44					4.891		44	50 FS	LT
24NA	45					4.908		45		
24NA	46					4.940	(1,3)-	46		
24NA	47					4.980		47		
24NA	48					5.031	2+,3,4+	48	20 FS	LT
24NA	49					5.045	(1,2,3)-	49	30 FS	LT
24NA	50			5.060	3-			50	50 FS	LT

24NA	51			5.117	1-			51		
24NA	52					5.160		52		
24NA	53					5.181		53		
24NA	54			5.192	3-			54	7 FS	LT
24NA	55			5.252	3-			55	50 FS	LT
24NA	56					5.308		56		
24NA	57			5.339	2-			57	14 FS	LT
24NA	58					5.397	(1,3)-	58		
24NA	59					5.408		59		
24NA	60					5.432		60		

24NA	61					5.455		61		
24NA	62			5.479	1-			62	50 FS	LT
24NA	63					5.572		63		
24NA	64					5.585		64		
24NA	65			5.628	2-			65	14 FS	LT
24NA	66					5.660		66		
24NA	67					5.720		67		
24NA	68					5.774		68		
24NA	69					5.789		69		
24NA	70					5.809	1+,2	70		

24NA	71					5.851		71		
24NA	72					5.863		72		
24NA	73					5.897		73		
24NA	74					5.918	1-,2,3+	74		
24NA	75					5.953		75		
24NA	76	5.967	2	0+				76	7 FS	LT
24NA	77	6.073		1+				77		
24NA	78					6.088		78		
24NA	79					6.176		79		
24NA	80					6.183		80		

24NA	81					6.222		81		
24NA	82	6.248		2+				82	10 FS	LT

24NA 83						6.251				83
24NA 84						6.257	1-,2-			84
24NA 85						6.306				85
24NA 86						6.578				86 14 FS LT
24NA 87						6.640				87
24NA 88						6.715				88
24NA 89						6.787				89
24NA 90						6.846				90

24NA 91						6.905				91
S-n =	6.959 (0.000)									
24NA 92		6.962		1+						92 411 EV 13
24NA 93						6.967				93
24NA 94						6.993	3-			94 1.3 EV 2
24NA 95										95 1.2 KEV 2
24NA 96										96
24NA 97										97
24NA 98						7.086	0-			98
24NA 99										99
24NA 100										100

24NA 101						7.151		1		101 5.5 KEV 5
24NA 102						7.163	0-			102 16 KEV 4
24NA 103										103
24NA 104						7.187	2-			104 5.5 KEV 10
24NA 105						7.192	0-			105 1.8 KEV 3
24NA 106		7.246		2+						106 2.0 KEV 8
24NA 107						7.246	1-			107 0.30 KEV 10
24NA 108										108
24NA 109										109
24NA 110						7.328	1-			110 2.6 KEV

24NA 111						7.337	1-			111 26 KEV 3
24NA 112						7.373	0-			112 7.8 KEV 7
24NA 113		7.386		2+						113 9 KEV 3
24NA 114										114
24NA 115										115
24NA 116										116
24NA 117		7.474		1+						117 35 KEV 4
24NA 118										118 0.8 KEV
24NA 119										119
24NA 120										120

24NA 121						7.532	1-			121 26 KEV 3
24NA 122						7.533	1-			122
24NA 123										123 60 KEV 6
24NA 124						7.655	3-			124 45 KEV 5
24NA 125										125 44 KEV 4
24NA 126										126 40 KEV 4
24NA 127										127 27 KEV 3

24NA 128				8.080	128
24NA 129				8.390	129
24NA 130				8.610	130

24NA 131				8.860	131
24NA 132				9.280	132
24NA 133				9.630	133

S-p = 10.553 (0.000)-----
 S-n = 6.959 (0.000)-----
 S-2p = 25.789 (0.012)-----
 S-2n = 19.379 (0.000)-----
 S-alpha= 10.825 (0.000)-----

S+p = -12.064 (0.000)
 S+n = -9.011 (0.001)
 S+2p = -18.370 (0.000)
 S+2n = -14.586 (0.004)
 S+alpha = -10.858 (0.000)

gap p = -1.511 (0.000)
 gap n = -2.052 (0.001)
 gap 2p = 7.419 (0.012)
 gap 2n = 4.794 (0.004)
 gap alpha = -0.032 (0.000)