

^{42}Cl $Z = 17$ $N = 25$ [link to full NNDC output](#)

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 350.527 (0.060) MeV

Qbeta- = 9.591 (0.060) MeV

	Energy T	J+	J-	J-other	T1/2
42CL 1				0.000 (2-)	1 6.8 S 3
42CL 2				0.118 (3-)	2
42CL 3				0.522 (4-)	3
42CL 4				0.589 (1-,2,3+)	4
42CL 5				0.639 (1-,2,3+)	5
42CL 6				0.842 (1-,2,3+)	6
42CL 7				1.026 (1-,2,3+)	7
42CL 8	1.267	1+			8
42CL 9				1.386	9
42CL 10				1.550	10
42CL 11				1.577	11
42CL 12				1.684	12
42CL 13				1.711	13
42CL 14				1.835	14
42CL 15	2.123	1+			15
42CL 16				2.221	16
42CL 17				2.241 (1+)	17
42CL 18				2.403	18
42CL 19	3.030	1+			19

S-p = 13.112 (0.060)-----
 S-n = 5.596 (0.091)-----
 S-2p = 31.295 (0.165)-----
 S-2n = 13.417 (0.068)-----
 S-alpha= 12.635 (0.094)-----

S+p = -14.467 (0.060)
 S+n = -7.399 (0.086)
 S+2p = -25.528 (0.060)
 S+2n = -11.695 (0.149)
 S+alpha = -13.007 (0.060)

gap p = -1.355 (0.085)
 gap n = -1.803 (0.125)
 gap 2p = 5.768 (0.175)
 gap 2n = 1.721 (0.163)
 gap alpha = -0.372 (0.111)