

$^{24}\text{Mg}$        $Z = 12$        $N = 12$       adopted link      ENSDF link

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

BE = 198.257 ( 0.000) MeV

|          | Energy T       | J+     | J-    | J-other | T1/2                 |
|----------|----------------|--------|-------|---------|----------------------|
| 24MG 1   | 0.000          | 0+     |       |         | 1 STABLE             |
| 24MG 2   | 1.369          | 2+     |       |         | 2 1.33 PS 6          |
| 24MG 3   | 4.123          | 4+     |       |         | 3 22 FS 2            |
| 24MG 4   | 4.238          | 2+     |       |         | 4 41 FS 4            |
| 24MG 5   | 5.235          | 3+     |       |         | 5 61 FS 7            |
| 24MG 6   | 6.011          | 4+     |       |         | 6 49 FS 5            |
| 24MG 7   | 6.432          | 0+     |       |         | 7 53 FS 8            |
| 24MG 8   | 7.349          | 2+     |       |         | 8 6 FS 2             |
| 24MG 9   |                |        | 7.555 | 1-      | 9 270 FS 55          |
| 24MG 10  |                |        | 7.616 | 3-      | 10 890 FS 140        |
| 24MG 11  | 7.748          | 1+     |       |         | 11 10 FS 3           |
| 24MG 12  | 7.812          | 5+     |       |         | 12 20 FS 4           |
| 24MG 13  | 8.114          | 6+     |       |         | 13 3.6 FS 10         |
| 24MG 14  |                |        | 8.358 | 3-      | 14 56 FS 8           |
| 24MG 15  |                |        | 8.437 | 1-      | 15 10 FS 2           |
| 24MG 16  | 8.439          | 4+     |       |         | 16 3.8 FS 11         |
| 24MG 17  | 8.655          | 2+     |       |         | 17 8.2 FS 21         |
| 24MG 18  |                |        | 8.864 | 2-      | 18 4.4 FS 15         |
| 24MG 19  | 9.003          | 2+     |       |         | 19 7.6 FS 14         |
| 24MG 20  |                |        | 9.146 | 1-      | 20                   |
| 24MG 21  | 9.284          | 2+     |       |         | 21 11 FS 2           |
| 24MG 22  |                |        |       | 9.300   | 22                   |
| 24MG 23  |                |        |       | 9.301   | 2+,3,4+ 23 7 FS 2    |
| 24MG 24  | 9.305          | 0+     |       |         | 24 173 FS 35         |
| S-alpha= | 9.317 ( 0.000) |        |       |         |                      |
| 24MG 25  |                |        |       | 9.458   | (3)+ 25 4 FS 2       |
| 24MG 26  |                |        |       | 9.516   | 1 (4+) 26 10 FS 5    |
| 24MG 27  |                |        |       | 9.528   | (6+) 27 9 FS 3       |
| 24MG 28  |                |        |       | 9.532   | 0 2+,3,4+ 28 11 FS 5 |
| 24MG 29  | 9.828          | 0&1 1+ |       |         | 29 330 AS 70         |
| 24MG 30  | 9.967          | 1 1+   |       |         | 30 76 AS 11          |

S-p = 11.693 ( 0.000)-----  
S-n = 16.531 ( 0.000)-----  
S-2p = 20.487 ( 0.000)-----  
S-2n = 29.676 ( 0.000)-----  
S-alpha= 9.317 ( 0.000)-----

S+p = -2.271 ( 0.000)  
S+n = -7.331 ( 0.000)  
S+2p = -7.785 ( 0.000)  
S+2n = -18.424 ( 0.000)  
S+alpha = -9.984 ( 0.000)

gap p = 9.421 ( 0.000)  
gap n = 9.201 ( 0.000)  
gap 2p = 12.701 ( 0.000)  
gap 2n = 11.253 ( 0.000)  
gap alpha = -0.668 ( 0.000)