

**Table 042: Muons in Molybdenum**

Z	A [g/mol]	$\rho$ [g/cm <sup>3</sup> ]	I [eV]	a	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
42 (Mo)	95.96 (2)	10.220	424.0	0.10525	3.2549	0.2267	3.2784	4.8793	0.14
T	p [MeV/c]	Ionization	Brems	Pair prod [MeV cm <sup>2</sup> /g]	Photonucl	Total	CSDA range [g/cm <sup>2</sup> ]		
10.0 MeV	$4.704 \times 10^1$	4.836				4.836	$1.175 \times 10^0$		
14.0 MeV	$5.616 \times 10^1$	3.820				3.820	$2.114 \times 10^0$		
20.0 MeV	$6.802 \times 10^1$	3.017				3.017	$3.901 \times 10^0$		
30.0 MeV	$8.509 \times 10^1$	2.366				2.366	$7.693 \times 10^0$		
40.0 MeV	$1.003 \times 10^2$	2.034				2.034	$1.228 \times 10^1$		
80.0 MeV	$1.527 \times 10^2$	1.547				1.547	$3.551 \times 10^1$		
100. MeV	$1.764 \times 10^2$	1.460				1.460	$4.885 \times 10^1$		
140. MeV	$2.218 \times 10^2$	1.377				1.377	$7.718 \times 10^1$		
200. MeV	$2.868 \times 10^2$	1.336				1.336	$1.216 \times 10^2$		
252. MeV	$3.421 \times 10^2$	1.329				1.330	<i>Minimum ionization</i>		
300. MeV	$3.917 \times 10^2$	1.333	0.000		0.000	1.333	$1.967 \times 10^2$		
400. MeV	$4.945 \times 10^2$	1.350	0.000		0.000	1.351	$2.712 \times 10^2$		
800. MeV	$8.995 \times 10^2$	1.433	0.001		0.000	1.434	$5.584 \times 10^2$		
1.00 GeV	$1.101 \times 10^3$	1.466	0.001		0.000	1.467	$6.962 \times 10^2$		
1.40 GeV	$1.502 \times 10^3$	1.518	0.001	0.000	0.001	1.521	$9.638 \times 10^2$		
2.00 GeV	$2.103 \times 10^3$	1.575	0.002	0.001	0.001	1.579	$1.351 \times 10^3$		
3.00 GeV	$3.104 \times 10^3$	1.639	0.004	0.003	0.001	1.647	$1.970 \times 10^3$		
4.00 GeV	$4.104 \times 10^3$	1.683	0.006	0.005	0.002	1.696	$2.568 \times 10^3$		
8.00 GeV	$8.105 \times 10^3$	1.782	0.015	0.015	0.003	1.816	$4.839 \times 10^3$		
10.0 GeV	$1.011 \times 10^4$	1.812	0.020	0.021	0.004	1.857	$5.928 \times 10^3$		
14.0 GeV	$1.411 \times 10^4$	1.854	0.031	0.034	0.006	1.925	$8.042 \times 10^3$		
20.0 GeV	$2.011 \times 10^4$	1.897	0.048	0.055	0.008	2.008	$1.109 \times 10^4$		
30.0 GeV	$3.011 \times 10^4$	1.942	0.078	0.096	0.011	2.128	$1.593 \times 10^4$		
40.0 GeV	$4.011 \times 10^4$	1.972	0.110	0.141	0.015	2.239	$2.051 \times 10^4$		
80.0 GeV	$8.011 \times 10^4$	2.040	0.248	0.337	0.030	2.656	$3.688 \times 10^4$		
100. GeV	$1.001 \times 10^5$	2.061	0.322	0.442	0.037	2.863	$4.413 \times 10^4$		
140. GeV	$1.401 \times 10^5$	2.092	0.472	0.660	0.051	3.277	$5.719 \times 10^4$		
200. GeV	$2.001 \times 10^5$	2.124	0.708	1.005	0.073	3.911	$7.393 \times 10^4$		
235. GeV	$2.352 \times 10^5$	2.138	0.848	1.205	0.086	4.278	<i>Muon critical energy</i>		
300. GeV	$3.001 \times 10^5$	2.160	1.111	1.583	0.109	4.964	$9.658 \times 10^4$		
400. GeV	$4.001 \times 10^5$	2.186	1.528	2.181	0.146	6.041	$1.148 \times 10^5$		
800. GeV	$8.001 \times 10^5$	2.248	3.249	4.635	0.295	10.428	$1.646 \times 10^5$		
1.00 TeV	$1.000 \times 10^6$	2.269	4.134	5.891	0.370	12.665	$1.820 \times 10^5$		
1.40 TeV	$1.400 \times 10^6$	2.300	5.908	8.397	0.524	17.130	$2.091 \times 10^5$		
2.00 TeV	$2.000 \times 10^6$	2.333	8.622	12.222	0.759	23.937	$2.386 \times 10^5$		
3.00 TeV	$3.000 \times 10^6$	2.372	13.155	18.578	1.160	35.266	$2.728 \times 10^5$		
4.00 TeV	$4.000 \times 10^6$	2.399	17.751	25.004	1.568	46.722	$2.974 \times 10^5$		
8.00 TeV	$8.000 \times 10^6$	2.467	36.284	50.836	3.259	92.848	$3.569 \times 10^5$		
10.0 TeV	$1.000 \times 10^7$	2.489	45.626	63.823	4.128	116.068	$3.761 \times 10^5$		
14.0 TeV	$1.400 \times 10^7$	2.523	64.260	89.734	5.912	162.431	$4.051 \times 10^5$		
20.0 TeV	$2.000 \times 10^7$	2.560	92.382	128.770	8.646	232.359	$4.359 \times 10^5$		
30.0 TeV	$3.000 \times 10^7$	2.603	139.197	193.719	13.371	348.891	$4.708 \times 10^5$		
40.0 TeV	$4.000 \times 10^7$	2.633	186.186	258.826	18.209	465.855	$4.955 \times 10^5$		
80.0 TeV	$8.000 \times 10^7$	2.709	374.443	519.440	38.413	935.006	$5.549 \times 10^5$		
100. TeV	$1.000 \times 10^8$	2.733	468.740	649.870	48.850	1170.195	$5.740 \times 10^5$		