

**Table 116: Muons in Beryllium oxide (BeO)**

$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
0.47979	3.010	93.2	0.10755	3.4927	0.0241	2.5846	2.9801	0.00
$T$	$p$ [MeV/c]	Ionization	Brems	Pair prod [MeV cm <sup>2</sup> /g]	Photonucl	Total	CSDA range [g/cm <sup>2</sup> ]	
10.0 MeV	$4.704 \times 10^1$	6.691				6.691	$8.277 \times 10^{-1}$	
14.0 MeV	$5.616 \times 10^1$	5.225				5.225	$1.511 \times 10^0$	
20.0 MeV	$6.802 \times 10^1$	4.085				4.085	$2.825 \times 10^0$	
30.0 MeV	$8.509 \times 10^1$	3.172				3.172	$5.642 \times 10^0$	
40.0 MeV	$1.003 \times 10^2$	2.711				2.711	$9.074 \times 10^0$	
80.0 MeV	$1.527 \times 10^2$	2.025				2.025	$2.668 \times 10^1$	
100. MeV	$1.764 \times 10^2$	1.897				1.898	$3.691 \times 10^1$	
140. MeV	$2.218 \times 10^2$	1.768				1.768	$5.886 \times 10^1$	
200. MeV	$2.868 \times 10^2$	1.693				1.694	$9.367 \times 10^1$	
300. MeV	$3.917 \times 10^2$	1.665			0.000	1.666	$1.534 \times 10^2$	
317. MeV	$4.096 \times 10^2$	1.665			0.000	1.665	<i>Minimum ionization</i>	
400. MeV	$4.945 \times 10^2$	1.671			0.000	1.671	$2.134 \times 10^2$	
800. MeV	$8.995 \times 10^2$	1.735	0.000		0.000	1.735	$4.483 \times 10^2$	
1.00 GeV	$1.101 \times 10^3$	1.764	0.000		0.000	1.764	$5.626 \times 10^2$	
1.40 GeV	$1.502 \times 10^3$	1.811	0.000		0.001	1.812	$7.862 \times 10^2$	
2.00 GeV	$2.103 \times 10^3$	1.863	0.001	0.000	0.001	1.864	$1.112 \times 10^3$	
3.00 GeV	$3.104 \times 10^3$	1.922	0.001	0.001	0.001	1.925	$1.640 \times 10^3$	
4.00 GeV	$4.104 \times 10^3$	1.963	0.001	0.001	0.002	1.967	$2.153 \times 10^3$	
8.00 GeV	$8.105 \times 10^3$	2.057	0.003	0.003	0.004	2.067	$4.131 \times 10^3$	
10.0 GeV	$1.011 \times 10^4$	2.086	0.004	0.004	0.005	2.099	$5.091 \times 10^3$	
14.0 GeV	$1.411 \times 10^4$	2.128	0.006	0.007	0.007	2.148	$6.973 \times 10^3$	
20.0 GeV	$2.011 \times 10^4$	2.170	0.010	0.011	0.009	2.201	$9.731 \times 10^3$	
30.0 GeV	$3.011 \times 10^4$	2.216	0.016	0.020	0.013	2.266	$1.421 \times 10^4$	
40.0 GeV	$4.011 \times 10^4$	2.248	0.023	0.029	0.018	2.318	$1.857 \times 10^4$	
80.0 GeV	$8.011 \times 10^4$	2.320	0.053	0.071	0.034	2.478	$3.523 \times 10^4$	
100. GeV	$1.001 \times 10^5$	2.343	0.068	0.094	0.042	2.547	$4.319 \times 10^4$	
140. GeV	$1.401 \times 10^5$	2.376	0.101	0.141	0.059	2.677	$5.850 \times 10^4$	
200. GeV	$2.001 \times 10^5$	2.411	0.152	0.215	0.083	2.862	$8.017 \times 10^4$	
300. GeV	$3.001 \times 10^5$	2.451	0.240	0.342	0.125	3.158	$1.134 \times 10^5$	
400. GeV	$4.001 \times 10^5$	2.479	0.331	0.474	0.166	3.451	$1.437 \times 10^5$	
800. GeV	$8.001 \times 10^5$	2.548	0.710	1.024	0.336	4.619	$2.435 \times 10^5$	
976. GeV	$9.758 \times 10^5$	2.568	0.882	1.274	0.412	5.136	<i>Muon critical energy</i>	
1.00 TeV	$1.000 \times 10^6$	2.570	0.906	1.309	0.422	5.208	$2.843 \times 10^5$	
1.40 TeV	$1.400 \times 10^6$	2.604	1.301	1.875	0.599	6.379	$3.536 \times 10^5$	
2.00 TeV	$2.000 \times 10^6$	2.641	1.907	2.742	0.867	8.158	$4.366 \times 10^5$	
3.00 TeV	$3.000 \times 10^6$	2.683	2.924	4.186	1.329	11.122	$5.412 \times 10^5$	
4.00 TeV	$4.000 \times 10^6$	2.713	3.957	5.651	1.799	14.120	$6.208 \times 10^5$	
8.00 TeV	$8.000 \times 10^6$	2.788	8.141	11.549	3.754	26.233	$8.254 \times 10^5$	
10.0 TeV	$1.000 \times 10^7$	2.812	10.257	14.520	4.761	32.351	$8.940 \times 10^5$	
14.0 TeV	$1.400 \times 10^7$	2.849	14.478	20.440	6.836	44.604	$9.988 \times 10^5$	
20.0 TeV	$2.000 \times 10^7$	2.890	20.861	29.370	10.024	63.145	$1.111 \times 10^6$	
30.0 TeV	$3.000 \times 10^7$	2.936	31.490	44.226	15.557	94.210	$1.240 \times 10^6$	
40.0 TeV	$4.000 \times 10^7$	2.970	42.174	59.131	21.235	125.511	$1.332 \times 10^6$	
80.0 TeV	$8.000 \times 10^7$	3.053	85.014	118.803	45.058	251.928	$1.552 \times 10^6$	
100. TeV	$1.000 \times 10^8$	3.080	106.490	148.674	57.406	315.650	$1.623 \times 10^6$	