

Table 036: Muons in Krypton gas

Z	A [g/mol]	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
36 (Kr)	83.798 (2)	3.486×10^{-3}	352.0	0.07446	3.4051	1.7153	5.0743	12.5094	0.00
T	p [MeV/c]	Ionization	Brems	Pair prod [MeV cm ² /g]	Photonucl	Total	CSDA range [g/cm ²]		
10.0 MeV	4.704×10^1	4.909				4.909	1.152×10^0		
14.0 MeV	5.616×10^1	3.870				3.870	2.079×10^0		
20.0 MeV	6.802×10^1	3.053				3.053	3.844×10^0		
30.0 MeV	8.509×10^1	2.392				2.392	7.594×10^0		
40.0 MeV	1.003×10^2	2.055				2.055	1.213×10^1		
80.0 MeV	1.527×10^2	1.565				1.565	3.512×10^1		
100. MeV	1.764×10^2	1.479				1.479	4.829×10^1		
140. MeV	2.218×10^2	1.397				1.397	7.624×10^1		
200. MeV	2.868×10^2	1.360				1.360	1.199×10^2		
232. MeV	3.210×10^2	1.357				1.357	<i>Minimum ionization</i>		
300. MeV	3.917×10^2	1.366	0.000		0.000	1.366	1.934×10^2		
400. MeV	4.945×10^2	1.392	0.000		0.000	1.392	2.660×10^2		
800. MeV	8.995×10^2	1.504	0.001		0.000	1.505	5.419×10^2		
1.00 GeV	1.101×10^3	1.550	0.001		0.000	1.552	6.727×10^2		
1.40 GeV	1.502×10^3	1.624	0.001	0.000	0.001	1.627	9.242×10^2		
2.00 GeV	2.103×10^3	1.708	0.002	0.001	0.001	1.712	1.283×10^3		
3.00 GeV	3.104×10^3	1.805	0.004	0.002	0.001	1.813	1.850×10^3		
4.00 GeV	4.104×10^3	1.875	0.005	0.004	0.002	1.887	2.390×10^3		
8.00 GeV	8.105×10^3	2.042	0.013	0.013	0.003	2.072	4.402×10^3		
10.0 GeV	1.011×10^4	2.092	0.017	0.018	0.004	2.132	5.353×10^3		
14.0 GeV	1.411×10^4	2.164	0.026	0.029	0.006	2.225	7.188×10^3		
20.0 GeV	2.011×10^4	2.234	0.041	0.047	0.008	2.330	9.820×10^3		
30.0 GeV	3.011×10^4	2.307	0.066	0.082	0.012	2.468	1.399×10^4		
40.0 GeV	4.011×10^4	2.355	0.094	0.120	0.015	2.585	1.794×10^4		
80.0 GeV	8.011×10^4	2.459	0.211	0.288	0.030	2.990	3.229×10^4		
100. GeV	1.001×10^5	2.490	0.274	0.379	0.037	3.180	3.878×10^4		
140. GeV	1.401×10^5	2.533	0.402	0.566	0.052	3.554	5.067×10^4		
200. GeV	2.001×10^5	2.576	0.603	0.861	0.074	4.115	6.635×10^4		
300. GeV	3.001×10^5	2.623	0.946	1.356	0.110	5.037	8.828×10^4		
324. GeV	3.244×10^5	2.631	1.032	1.480	0.119	5.263	<i>Muon critical energy</i>		
400. GeV	4.001×10^5	2.654	1.302	1.870	0.147	5.973	1.065×10^5		
800. GeV	8.001×10^5	2.726	2.769	3.976	0.298	9.770	1.584×10^5		
1.00 TeV	1.000×10^6	2.748	3.524	5.054	0.374	11.701	1.770×10^5		
1.40 TeV	1.400×10^6	2.781	5.038	7.205	0.530	15.556	2.066×10^5		
2.00 TeV	2.000×10^6	2.816	7.355	10.490	0.767	21.429	2.393×10^5		
3.00 TeV	3.000×10^6	2.855	11.225	15.949	1.173	31.203	2.778×10^5		
4.00 TeV	4.000×10^6	2.882	15.150	21.468	1.585	41.086	3.056×10^5		
8.00 TeV	8.000×10^6	2.949	30.981	43.658	3.297	80.886	3.737×10^5		
10.0 TeV	1.000×10^7	2.971	38.962	54.815	4.176	100.925	3.958×10^5		
14.0 TeV	1.400×10^7	3.005	54.882	77.074	5.981	140.943	4.292×10^5		
20.0 TeV	2.000×10^7	3.041	78.910	110.610	8.748	201.310	4.647×10^5		
30.0 TeV	3.000×10^7	3.082	118.912	166.409	13.532	301.936	5.049×10^5		
40.0 TeV	4.000×10^7	3.112	159.067	222.346	18.431	402.957	5.335×10^5		
80.0 TeV	8.000×10^7	3.186	319.956	446.262	38.896	808.302	6.022×10^5		
100. TeV	1.000×10^8	3.211	400.550	558.330	49.470	1011.562	6.243×10^5		