Table 290: Muons in Bromine liquid (Br_2)

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
35 (Br)	79.904 (1)	3.103	343.0	0.21683	3.0000	0.3408	3.0000	5.6468	0.00

T	p [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm^2]
		[MeV cm^2/g]					
10.0 MeV	4.704×10^1	5.027				5.027	1.124×10^0
14.0 MeV	5.616×10^1	3.963				3.963	2.030×10^0
20.0 MeV	6.802×10^1	3.125				3.125	3.753×10^0
30.0 MeV	8.509×10^1	2.448				2.448	7.418×10^0
40.0 MeV	1.003×10^2	2.103				2.103	1.185×10^1
80.0 MeV	1.527×10^2	1.601				1.601	3.432×10^1
100. MeV	1.764×10^2	1.513				1.513	4.720×10^1
140. MeV	2.218×10^2	1.429				1.429	7.453×10^1
200. MeV	2.868×10^2	1.390				1.390	1.172×10^2
243. MeV	3.325×10^2	1.385				1.385	*Minimum ionization*
300. MeV	3.917×10^2	1.390	0.000		0.000	1.390	1.894×10^2
400. MeV	4.945×10^2	1.410	0.000		0.000	1.410	2.608×10^2
800. MeV	8.995×10^2	1.499	0.001		0.000	1.500	5.354×10^2
1.00 GeV	1.101×10^3	1.535	0.001		0.000	1.536	6.671×10^2
1.40 GeV	1.502×10^3	1.590	0.001	0.000	0.001	1.593	9.226×10^2
2.00 GeV	2.103×10^3	1.650	0.002	0.001	0.001	1.654	1.292×10^3
3.00 GeV	3.104×10^3	1.717	0.004	0.002	0.001	1.724	1.883×10^3
4.00 GeV	4.104×10^3	1.762	0.005	0.004	0.002	1.774	2.455×10^3
8.00 GeV	8.105×10^3	1.864	0.013	0.013	0.003	1.893	4.629×10^3
10.0 GeV	1.011×10^4	1.894	0.017	0.018	0.004	1.934	5.674×10^3
14.0 GeV	1.411×10^4	1.937	0.026	0.029	0.006	1.998	7.708×10^3
20.0 GeV	2.011×10^4	1.980	0.040	0.047	0.008	2.076	1.065×10^4
30.0 GeV	3.011×10^4	2.025	0.066	0.082	0.012	2.185	1.534×10^4
40.0 GeV	4.011×10^4	2.055	0.093	0.120	0.015	2.284	1.982×10^4
80.0 GeV	8.011×10^4	2.122	0.211	0.287	0.030	2.651	3.605×10^4
100. GeV	1.001×10^5	2.143	0.273	0.377	0.037	2.831	4.335×10^4
140. GeV	1.401×10^5	2.173	0.401	0.563	0.052	3.190	5.665×10^4
200. GeV	2.001×10^5	2.206	0.601	0.858	0.074	3.739	7.401×10^4
281. GeV	2.811×10^5	2.236	0.877	1.256	0.104	4.473	*Muon critical energy*
300. GeV	3.001×10^5	2.242	0.943	1.351	0.111	4.647	9.797×10^4
400. GeV	4.001×10^5	2.268	1.296	1.862	0.148	5.574	1.176×10^5
800. GeV	8.001×10^5	2.330	2.758	3.959	0.299	9.348	1.724×10^5
1.00 TeV	1.000×10^6	2.351	3.510	5.033	0.376	11.270	1.919×10^5
1.40 TeV	1.400×10^6	2.382	5.018	7.176	0.532	15.109	2.224×10^5
2.00 TeV	2.000×10^6	2.415	7.325	10.448	0.770	20.960	2.560×10^5
3.00 TeV	3.000×10^6	2.454	11.181	15.886	1.178	30.699	2.952×10^5
4.00 TeV	4.000×10^6	2.481	15.090	21.384	1.592	40.548	3.235×10^5
8.00 TeV	8.000×10^6	2.549	30.860	43.490	3.310	80.210	3.923×10^5
10.0 TeV	1.000×10^7	2.571	38.811	54.604	4.193	100.181	4.146×10^5
14.0 TeV	1.400×10^7	2.606	54.670	76.779	6.006	140.062	4.482×10^5
20.0 TeV	2.000×10^7	2.642	78.608	110.188	8.786	200.225	4.838×10^5
30.0 TeV	3.000×10^7	2.685	118.459	165.776	13.592	300.512	5.243×10^5
40.0 TeV	4.000×10^7	2.715	158.463	221.502	18.513	401.194	5.530×10^5
80.0 TeV	8.000×10^7	2.791	318.748	444.574	39.070	805.184	6.220×10^5
100. TeV	1.000×10^8	2.816	399.040	556.220	49.690	1007.767	6.442×10^5