Table 024: Muons in Chromium

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
24 (Cr)	51.9961 (6)	7.180	257.0	0.15419	2.9896	0.0340	3.0451	4.1781	0.14

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	5.542				5.542	1.014×10^0
14.0 MeV	5.616×10^1	4.354				4.354	1.836×10^0
20.0 MeV	6.802×10^1	3.422				3.422	3.408×10^0
30.0 MeV	8.509×10^1	2.670				2.670	6.761×10^0
40.0 MeV	1.003×10^2	2.287				2.287	1.083×10^1
80.0 MeV	1.527×10^2	1.725				1.725	3.160×10^1
100. MeV	1.764×10^2	1.623				1.623	4.358×10^1
140. MeV	2.218×10^2	1.522				1.522	6.914×10^1
200. MeV	2.868×10^2	1.469				1.469	1.094×10^2
273. MeV	3.633×10^2	1.456			0.000	1.456	*Minimum ionization*
300. MeV	3.917×10^2	1.457			0.000	1.457	1.779×10^2
400. MeV	4.945×10^2	1.471	0.000		0.000	1.472	2.463×10^2
800. MeV	8.995×10^2	1.550	0.000		0.000	1.551	5.109×10^2
1.00 GeV	1.101×10^3	1.583	0.001		0.000	1.584	6.385×10^2
1.40 GeV	1.502×10^3	1.636	0.001	0.000	0.001	1.638	8.866×10^2
2.00 GeV	2.103×10^3	1.693	0.002	0.001	0.001	1.697	1.246×10^3
3.00 GeV	3.104×10^3	1.758	0.003	0.002	0.001	1.764	1.823×10^3
4.00 GeV	4.104×10^3	1.803	0.004	0.003	0.002	1.812	2.382×10^3
8.00 GeV	8.105×10^3	1.905	0.010	0.010	0.003	1.928	4.514×10^3
10.0 GeV	1.011×10^4	1.936	0.013	0.013	0.004	1.967	5.541×10^3
14.0 GeV	1.411×10^4	1.980	0.019	0.022	0.006	2.027	7.543×10^3
20.0 GeV	2.011×10^4	2.024	0.030	0.035	0.008	2.098	1.045×10^4
30.0 GeV	3.011×10^4	2.071	0.049	0.061	0.012	2.194	1.511×10^4
40.0 GeV	4.011×10^4	2.102	0.070	0.090	0.016	2.278	1.958×10^4
80.0 GeV	8.011×10^4	2.173	0.157	0.215	0.031	2.577	3.606×10^4
100. GeV	1.001×10^5	2.195	0.204	0.282	0.039	2.720	4.361×10^4
140. GeV	1.401×10^5	2.227	0.300	0.422	0.054	3.003	5.760×10^4
200. GeV	2.001×10^5	2.261	0.449	0.644	0.076	3.431	7.628×10^4
300. GeV	3.001×10^5	2.299	0.706	1.015	0.115	4.136	1.028×10^5
370. GeV	3.706×10^5	2.319	0.892	1.286	0.141	4.639	*Muon critical energy*
400. GeV	4.001×10^5	2.326	0.971	1.401	0.153	4.852	1.251×10^5
800. GeV	8.001×10^5	2.392	2.069	2.985	0.309	7.756	1.897×10^5
1.00 TeV	1.000×10^6	2.414	2.634	3.797	0.388	9.234	2.133×10^5
1.40 TeV	1.400×10^6	2.447	3.768	5.417	0.550	12.183	2.510×10^5
2.00 TeV	2.000×10^6	2.482	5.505	7.893	0.795	16.677	2.929×10^5
3.00 TeV	3.000×10^6	2.522	8.409	12.009	1.217	24.158	3.425×10^5
4.00 TeV	4.000×10^6	2.551	11.355	16.171	1.646	31.723	3.785×10^5
8.00 TeV	8.000×10^6	2.623	23.245	32.913	3.425	62.207	4.669×10^5
10.0 TeV	1.000×10^7	2.646	29.243	41.333	4.340	77.563	4.956×10^5
14.0 TeV	1.400×10^7	2.682	41.207	58.130	6.219	108.240	5.391×10^5
20.0 TeV	2.000×10^7	2.721	59.272	83.442	9.102	154.538	5.852×10^5
30.0 TeV	3.000×10^7	2.766	89.347	125.555	14.091	231.760	6.377×10^5
40.0 TeV	4.000×10^7	2.798	119.546	167.777	19.203	309.324	6.749×10^5
80.0 TeV	8.000×10^7	2.878	240.561	336.801	40.578	620.818	7.644×10^5
100. TeV	1.000×10^8	2.904	301.190	421.400	51.630	777.125	7.931×10^5