

Table 139: Muons in Ceric sulfate dosimeter solution

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.55279	1.030	76.7	0.07666	3.5607	0.2363	2.8769	3.5212	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	7.909				7.909	6.989×10^{-1}	
14.0 MeV	5.616×10^1	6.170				6.170	1.278×10^0	
20.0 MeV	6.802×10^1	4.819				4.819	2.391×10^0	
30.0 MeV	8.509×10^1	3.739				3.739	4.779×10^0	
40.0 MeV	1.003×10^2	3.193				3.193	7.693×10^0	
80.0 MeV	1.527×10^2	2.398				2.398	2.261×10^1	
100. MeV	1.764×10^2	2.255				2.255	3.123×10^1	
140. MeV	2.218×10^2	2.102				2.102	4.968×10^1	
200. MeV	2.868×10^2	2.013				2.014	7.896×10^1	
300. MeV	3.917×10^2	1.980			0.000	1.980	1.292×10^2	
317. MeV	4.096×10^2	1.979			0.000	1.979	<i>Minimum ionization</i>	
400. MeV	4.945×10^2	1.986			0.000	1.986	1.797×10^2	
800. MeV	8.995×10^2	2.062	0.000		0.000	2.062	3.774×10^2	
1.00 GeV	1.101×10^3	2.096	0.000		0.000	2.097	4.735×10^2	
1.40 GeV	1.502×10^3	2.152	0.000		0.001	2.153	6.616×10^2	
2.00 GeV	2.103×10^3	2.214	0.001	0.000	0.001	2.216	9.361×10^2	
3.00 GeV	3.104×10^3	2.284	0.001	0.001	0.001	2.288	1.380×10^3	
4.00 GeV	4.104×10^3	2.333	0.002	0.001	0.002	2.338	1.812×10^3	
8.00 GeV	8.105×10^3	2.445	0.004	0.004	0.004	2.457	3.476×10^3	
10.0 GeV	1.011×10^4	2.479	0.005	0.005	0.005	2.494	4.283×10^3	
14.0 GeV	1.411×10^4	2.529	0.008	0.008	0.007	2.551	5.868×10^3	
20.0 GeV	2.011×10^4	2.578	0.012	0.013	0.009	2.613	8.190×10^3	
30.0 GeV	3.011×10^4	2.632	0.019	0.023	0.013	2.688	1.196×10^4	
40.0 GeV	4.011×10^4	2.669	0.027	0.034	0.018	2.748	1.564×10^4	
80.0 GeV	8.011×10^4	2.752	0.062	0.083	0.034	2.931	2.971×10^4	
100. GeV	1.001×10^5	2.778	0.080	0.110	0.042	3.010	3.644×10^4	
140. GeV	1.401×10^5	2.817	0.118	0.165	0.059	3.159	4.941×10^4	
200. GeV	2.001×10^5	2.857	0.178	0.252	0.083	3.371	6.779×10^4	
300. GeV	3.001×10^5	2.903	0.281	0.400	0.125	3.710	9.605×10^4	
400. GeV	4.001×10^5	2.936	0.388	0.555	0.167	4.045	1.219×10^5	
800. GeV	8.001×10^5	3.015	0.832	1.197	0.337	5.381	2.073×10^5	
1.00 TeV	1.000×10^6	3.041	1.062	1.529	0.423	6.055	2.423×10^5	
1.01 TeV	1.009×10^6	3.042	1.072	1.543	0.427	6.083	<i>Muon critical energy</i>	
1.40 TeV	1.400×10^6	3.080	1.525	2.190	0.600	7.394	3.020×10^5	
2.00 TeV	2.000×10^6	3.122	2.235	3.202	0.868	9.427	3.737×10^5	
3.00 TeV	3.000×10^6	3.170	3.426	4.886	1.330	12.814	4.644×10^5	
4.00 TeV	4.000×10^6	3.205	4.638	6.594	1.800	16.238	5.336×10^5	
8.00 TeV	8.000×10^6	3.291	9.543	13.473	3.758	30.066	7.118×10^5	
10.0 TeV	1.000×10^7	3.319	12.024	16.937	4.766	37.047	7.716×10^5	
14.0 TeV	1.400×10^7	3.362	16.975	23.840	6.844	51.021	8.633×10^5	
20.0 TeV	2.000×10^7	3.408	24.464	34.250	10.036	72.159	9.617×10^5	
30.0 TeV	3.000×10^7	3.462	36.935	51.573	15.576	107.546	1.074×10^6	
40.0 TeV	4.000×10^7	3.501	49.471	68.950	21.262	143.185	1.155×10^6	
80.0 TeV	8.000×10^7	3.596	99.760	138.518	45.123	286.998	1.348×10^6	
100. TeV	1.000×10^8	3.627	124.977	173.343	57.492	359.440	1.410×10^6	