

Muons in yttrium bromide (YBr₃)

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.43820	5.290	410.0	0.20773	3.0000	0.2831	3.0000	5.4697	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	4.906				4.906	1.150×10^0	
14.0 MeV	5.616×10^1	3.867				3.867	2.078×10^0	
20.0 MeV	6.802×10^1	3.050				3.050	3.844×10^0	
30.0 MeV	8.509×10^1	2.391				2.391	7.597×10^0	
40.0 MeV	1.003×10^2	2.055				2.055	1.214×10^1	
80.0 MeV	1.527×10^2	1.567				1.567	3.511×10^1	
100. MeV	1.764×10^2	1.481				1.481	4.827×10^1	
140. MeV	2.218×10^2	1.400				1.400	7.617×10^1	
200. MeV	2.868×10^2	1.361				1.362	1.198×10^2	
243. MeV	3.325×10^2	1.356				1.357	<i>Minimum ionization</i>	
300. MeV	3.917×10^2	1.361	0.000		0.000	1.362	1.934×10^2	
400. MeV	4.945×10^2	1.381	0.000		0.000	1.382	2.663×10^2	
800. MeV	8.995×10^2	1.469	0.001		0.000	1.470	5.467×10^2	
1.00 GeV	1.101×10^3	1.504	0.001		0.000	1.505	6.811×10^2	
1.40 GeV	1.502×10^3	1.559	0.001	0.000	0.001	1.561	9.418×10^2	
2.00 GeV	2.103×10^3	1.618	0.002	0.001	0.001	1.622	1.318×10^3	
3.00 GeV	3.104×10^3	1.684	0.004	0.003	0.001	1.691	1.921×10^3	
4.00 GeV	4.104×10^3	1.729	0.005	0.004	0.002	1.740	2.504×10^3	
8.00 GeV	8.105×10^3	1.830	0.013	0.013	0.003	1.860	4.719×10^3	
10.0 GeV	1.011×10^4	1.860	0.018	0.018	0.004	1.900	5.782×10^3	
14.0 GeV	1.411×10^4	1.903	0.027	0.030	0.006	1.965	7.851×10^3	
20.0 GeV	2.011×10^4	1.945	0.041	0.048	0.008	2.044	1.084×10^4	
30.0 GeV	3.011×10^4	1.990	0.068	0.084	0.012	2.154	1.561×10^4	
40.0 GeV	4.011×10^4	2.020	0.096	0.123	0.015	2.255	2.014×10^4	
80.0 GeV	8.011×10^4	2.087	0.217	0.295	0.030	2.629	3.654×10^4	
100. GeV	1.001×10^5	2.108	0.281	0.388	0.037	2.814	4.389×10^4	
140. GeV	1.401×10^5	2.138	0.412	0.579	0.052	3.182	5.725×10^4	
200. GeV	2.001×10^5	2.171	0.617	0.881	0.074	3.744	7.463×10^4	
270. GeV	2.704×10^5	2.198	0.863	1.235	0.100	4.396	<i>Muon critical energy</i>	
300. GeV	3.001×10^5	2.207	0.969	1.387	0.111	4.675	9.849×10^4	
400. GeV	4.001×10^5	2.233	1.333	1.912	0.148	5.626	1.180×10^5	
800. GeV	8.001×10^5	2.295	2.835	4.066	0.298	9.496	1.721×10^5	
1.00 TeV	1.000×10^6	2.316	3.608	5.169	0.375	11.468	1.912×10^5	
1.40 TeV	1.400×10^6	2.347	5.158	7.369	0.531	15.406	2.212×10^5	
2.00 TeV	2.000×10^6	2.380	7.530	10.729	0.768	21.408	2.541×10^5	
3.00 TeV	3.000×10^6	2.419	11.492	16.312	1.175	31.398	2.925×10^5	
4.00 TeV	4.000×10^6	2.446	15.509	21.956	1.588	41.500	3.201×10^5	
8.00 TeV	8.000×10^6	2.514	31.714	44.651	3.302	82.183	3.873×10^5	
10.0 TeV	1.000×10^7	2.537	39.884	56.062	4.183	102.666	4.090×10^5	
14.0 TeV	1.400×10^7	2.571	56.180	78.827	5.991	143.571	4.418×10^5	
20.0 TeV	2.000×10^7	2.607	80.777	113.127	8.764	205.276	4.766×10^5	
30.0 TeV	3.000×10^7	2.650	121.725	170.195	13.557	308.127	5.161×10^5	
40.0 TeV	4.000×10^7	2.681	162.829	227.404	18.465	411.379	5.441×10^5	
80.0 TeV	8.000×10^7	2.756	327.520	456.415	38.966	825.658	6.114×10^5	
100. TeV	1.000×10^8	2.781	410.019	571.032	49.557	1033.390	6.330×10^5	