

## Muons in rhodium (Rh)

Z	A [g/mol]	$\rho$ [g/cm <sup>3</sup> ]	I [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
45 (Rh)	102.90550 (2)	12.410	449.0	0.19205	2.8633	0.0576	3.1069	4.8008	0.14
$T$	$p$ [MeV/c]	Ionization	Brems	Pair prod [MeV cm <sup>2</sup> /g]	Photonucl	Total	CSDA range [g/cm <sup>2</sup> ]		
10.0 MeV	$4.704 \times 10^1$	4.778				4.778	$1.190 \times 10^0$		
14.0 MeV	$5.616 \times 10^1$	3.775				3.775	$2.141 \times 10^0$		
20.0 MeV	$6.802 \times 10^1$	2.982				2.982	$3.949 \times 10^0$		
30.0 MeV	$8.509 \times 10^1$	2.338				2.338	$7.787 \times 10^0$		
40.0 MeV	$1.003 \times 10^2$	2.008				2.008	$1.243 \times 10^1$		
80.0 MeV	$1.527 \times 10^2$	1.527				1.527	$3.598 \times 10^1$		
100. MeV	$1.764 \times 10^2$	1.442				1.442	$4.949 \times 10^1$		
140. MeV	$2.218 \times 10^2$	1.358				1.358	$7.820 \times 10^1$		
200. MeV	$2.868 \times 10^2$	1.317				1.317	$1.232 \times 10^2$		
252. MeV	$3.421 \times 10^2$	1.310				1.310	<i>Minimum ionization</i>		
300. MeV	$3.917 \times 10^2$	1.313	0.000		0.000	1.313	$1.995 \times 10^2$		
400. MeV	$4.945 \times 10^2$	1.330	0.000		0.000	1.331	$2.751 \times 10^2$		
800. MeV	$8.995 \times 10^2$	1.412	0.001		0.000	1.413	$5.665 \times 10^2$		
1.00 GeV	$1.101 \times 10^3$	1.445	0.001		0.000	1.447	$7.063 \times 10^2$		
1.40 GeV	$1.502 \times 10^3$	1.498	0.002	0.000	0.001	1.501	$9.775 \times 10^2$		
2.00 GeV	$2.103 \times 10^3$	1.555	0.003	0.001	0.001	1.560	$1.369 \times 10^3$		
3.00 GeV	$3.104 \times 10^3$	1.620	0.004	0.003	0.001	1.629	$1.996 \times 10^3$		
4.00 GeV	$4.104 \times 10^3$	1.664	0.007	0.005	0.002	1.678	$2.600 \times 10^3$		
8.00 GeV	$8.105 \times 10^3$	1.765	0.016	0.016	0.003	1.801	$4.892 \times 10^3$		
10.0 GeV	$1.011 \times 10^4$	1.795	0.021	0.022	0.004	1.843	$5.989 \times 10^3$		
14.0 GeV	$1.411 \times 10^4$	1.839	0.033	0.036	0.005	1.913	$8.118 \times 10^3$		
20.0 GeV	$2.011 \times 10^4$	1.882	0.051	0.059	0.008	1.999	$1.118 \times 10^4$		
30.0 GeV	$3.011 \times 10^4$	1.927	0.083	0.102	0.011	2.124	$1.603 \times 10^4$		
40.0 GeV	$4.011 \times 10^4$	1.958	0.117	0.149	0.015	2.239	$2.062 \times 10^4$		
80.0 GeV	$8.011 \times 10^4$	2.025	0.264	0.357	0.030	2.677	$3.692 \times 10^4$		
100. GeV	$1.001 \times 10^5$	2.046	0.342	0.469	0.037	2.896	$4.410 \times 10^4$		
140. GeV	$1.401 \times 10^5$	2.077	0.503	0.701	0.051	3.332	$5.697 \times 10^4$		
200. GeV	$2.001 \times 10^5$	2.109	0.754	1.067	0.072	4.003	$7.338 \times 10^4$		
221. GeV	$2.214 \times 10^5$	2.118	0.843	1.195	0.080	4.237	<i>Muon critical energy</i>		
300. GeV	$3.001 \times 10^5$	2.145	1.182	1.679	0.109	5.116	$9.544 \times 10^4$		
400. GeV	$4.001 \times 10^5$	2.171	1.625	2.313	0.145	6.255	$1.131 \times 10^5$		
800. GeV	$8.001 \times 10^5$	2.234	3.456	4.915	0.293	10.898	$1.610 \times 10^5$		
1.00 TeV	$1.000 \times 10^6$	2.254	4.396	6.246	0.368	13.265	$1.776 \times 10^5$		
1.40 TeV	$1.400 \times 10^6$	2.285	6.282	8.902	0.521	17.992	$2.034 \times 10^5$		
2.00 TeV	$2.000 \times 10^6$	2.318	9.168	12.956	0.754	25.198	$2.314 \times 10^5$		
3.00 TeV	$3.000 \times 10^6$	2.356	13.986	19.693	1.153	37.191	$2.639 \times 10^5$		
4.00 TeV	$4.000 \times 10^6$	2.384	18.871	26.503	1.559	49.318	$2.872 \times 10^5$		
8.00 TeV	$8.000 \times 10^6$	2.452	38.567	53.879	3.240	98.139	$3.436 \times 10^5$		
10.0 TeV	$1.000 \times 10^7$	2.474	48.494	67.641	4.103	122.713	$3.618 \times 10^5$		
14.0 TeV	$1.400 \times 10^7$	2.508	68.295	95.100	5.875	171.780	$3.892 \times 10^5$		
20.0 TeV	$2.000 \times 10^7$	2.545	98.176	136.466	8.592	245.780	$4.182 \times 10^5$		
30.0 TeV	$3.000 \times 10^7$	2.587	147.920	205.292	13.288	369.088	$4.512 \times 10^5$		
40.0 TeV	$4.000 \times 10^7$	2.618	197.847	274.285	18.095	492.845	$4.746 \times 10^5$		
80.0 TeV	$8.000 \times 10^7$	2.693	397.871	550.454	38.165	989.185	$5.307 \times 10^5$		
100. TeV	$1.000 \times 10^8$	2.718	498.060	688.670	48.530	1237.979	$5.488 \times 10^5$		