

## Muons in sodium chloride (NaCl)

	$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
	0.55509	2.170	175.3	0.15962	3.0000	0.2000	3.0000	4.4250	0.00
$T$	$p$ [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm <sup>2</sup> ]		
				[MeV cm <sup>2</sup> /g]					
10.0 MeV	$4.704 \times 10^1$	7.090				7.090		$7.865 \times 10^{-1}$	
14.0 MeV	$5.616 \times 10^1$	5.556				5.556		$1.430 \times 10^0$	
20.0 MeV	$6.802 \times 10^1$	4.358				4.358		$2.663 \times 10^0$	
30.0 MeV	$8.509 \times 10^1$	3.396				3.396		$5.298 \times 10^0$	
40.0 MeV	$1.003 \times 10^2$	2.909				2.909		$8.500 \times 10^0$	
80.0 MeV	$1.527 \times 10^2$	2.199				2.199		$2.481 \times 10^1$	
100. MeV	$1.764 \times 10^2$	2.071				2.071		$3.420 \times 10^1$	
140. MeV	$2.218 \times 10^2$	1.938				1.938		$5.426 \times 10^1$	
200. MeV	$2.868 \times 10^2$	1.867				1.867		$8.592 \times 10^1$	
283. MeV	$3.738 \times 10^2$	1.847			0.000	1.847			<i>Minimum ionization</i>
300. MeV	$3.917 \times 10^2$	1.847			0.000	1.848		$1.399 \times 10^2$	
400. MeV	$4.945 \times 10^2$	1.862			0.000	1.862		$1.939 \times 10^2$	
800. MeV	$8.995 \times 10^2$	1.954	0.000		0.000	1.955		$4.034 \times 10^2$	
1.00 GeV	$1.101 \times 10^3$	1.994	0.000		0.000	1.994		$5.047 \times 10^2$	
1.40 GeV	$1.502 \times 10^3$	2.057	0.001	0.000	0.001	2.058		$7.020 \times 10^2$	
2.00 GeV	$2.103 \times 10^3$	2.125	0.001	0.001	0.001	2.128		$9.884 \times 10^2$	
3.00 GeV	$3.104 \times 10^3$	2.203	0.002	0.001	0.001	2.208		$1.449 \times 10^3$	
4.00 GeV	$4.104 \times 10^3$	2.257	0.003	0.002	0.002	2.264		$1.896 \times 10^3$	
8.00 GeV	$8.105 \times 10^3$	2.379	0.006	0.006	0.004	2.396		$3.608 \times 10^3$	
10.0 GeV	$1.011 \times 10^4$	2.416	0.008	0.009	0.005	2.438		$4.435 \times 10^3$	
14.0 GeV	$1.411 \times 10^4$	2.469	0.013	0.014	0.006	2.502		$6.054 \times 10^3$	
20.0 GeV	$2.011 \times 10^4$	2.521	0.020	0.023	0.009	2.573		$8.416 \times 10^3$	
30.0 GeV	$3.011 \times 10^4$	2.577	0.033	0.040	0.013	2.663		$1.223 \times 10^4$	
40.0 GeV	$4.011 \times 10^4$	2.615	0.046	0.059	0.017	2.737		$1.594 \times 10^4$	
80.0 GeV	$8.011 \times 10^4$	2.700	0.105	0.142	0.032	2.979		$2.992 \times 10^4$	
100. GeV	$1.001 \times 10^5$	2.726	0.136	0.187	0.040	3.089		$3.651 \times 10^4$	
140. GeV	$1.401 \times 10^5$	2.765	0.200	0.280	0.056	3.301		$4.903 \times 10^4$	
200. GeV	$2.001 \times 10^5$	2.805	0.300	0.428	0.079	3.612		$6.640 \times 10^4$	
300. GeV	$3.001 \times 10^5$	2.851	0.471	0.676	0.119	4.118		$9.231 \times 10^4$	
400. GeV	$4.001 \times 10^5$	2.884	0.649	0.934	0.159	4.626		$1.152 \times 10^5$	
646. GeV	$6.457 \times 10^5$	2.939	1.097	1.584	0.257	5.878			<i>Muon critical energy</i>
800. GeV	$8.001 \times 10^5$	2.963	1.385	2.000	0.320	6.669		$1.868 \times 10^5$	
1.00 TeV	$1.000 \times 10^6$	2.989	1.765	2.547	0.403	7.704		$2.147 \times 10^5$	
1.40 TeV	$1.400 \times 10^6$	3.029	2.527	3.639	0.571	9.766		$2.607 \times 10^5$	
2.00 TeV	$2.000 \times 10^6$	3.071	3.696	5.308	0.826	12.902		$3.140 \times 10^5$	
3.00 TeV	$3.000 \times 10^6$	3.120	5.652	8.083	1.265	18.120		$3.791 \times 10^5$	
4.00 TeV	$4.000 \times 10^6$	3.155	7.638	10.893	1.711	23.396		$4.276 \times 10^5$	
8.00 TeV	$8.000 \times 10^6$	3.241	15.660	22.198	3.565	44.664		$5.492 \times 10^5$	
10.0 TeV	$1.000 \times 10^7$	3.269	19.710	27.887	4.519	55.385		$5.894 \times 10^5$	
14.0 TeV	$1.400 \times 10^7$	3.312	27.796	39.227	6.480	76.816		$6.504 \times 10^5$	
20.0 TeV	$2.000 \times 10^7$	3.359	40.015	56.319	9.491	109.184		$7.156 \times 10^5$	
30.0 TeV	$3.000 \times 10^7$	3.413	60.331	84.772	14.707	163.223		$7.900 \times 10^5$	
40.0 TeV	$4.000 \times 10^7$	3.451	80.733	113.306	20.056	217.546		$8.429 \times 10^5$	
80.0 TeV	$8.000 \times 10^7$	3.547	162.536	227.526	42.447	436.056		$9.703 \times 10^5$	
100. TeV	$1.000 \times 10^8$	3.579	203.536	284.696	54.034	545.845		$1.011 \times 10^6$	