

Sound Conversion Chart

$$\text{dBA} = 33.2 * \text{LOG}_{10}(\text{Sones}) + 28$$

dB (SPL)	Source (with distance)
194	Theoretical limit for a sound wave at 1 atmosphere environmental pressure; pressure waves with a greater intensity behave as shock waves.
180	Krakatoa volcano explosion at 1 mile in air [1] ↗
160	M1 Garand being fired at 1 meter (3 ft)
150	Jet engine at 30 m (100 ft)
140	Low Caliber Rifle being fired at 1m (3 ft); the engine of a Formula One car at 1 meter (3 ft)
130	Threshold of pain; civil defense siren at 100 ft (30 m)
120	Train horn at 1 m (3 ft). Perforation of eardrums.
110	Football stadium during kickoff at 50 yard line; chainsaw at 1 m (3 ft)
100	Jackhammer at 2 m (7 ft); inside disco
90	Loud factory, heavy truck at 1 m (3 ft)
80	Vacuum cleaner at 1 m (3 ft), curbside of busy street, PLVI of City
70	Busy traffic at 5 m (16 ft)
60	Office or restaurant inside
50	Quiet restaurant inside
40	Residential area at night
30	Theatre, no talking
20	Whispering
10	Human breathing at 3 m (10 ft)
0	Threshold of human hearing (with healthy ears); sound of a mosquito flying 3 m (10 ft) away

Sones	dB	Sones	dB	Sones	dB	Sones	dB	Sones	dB	Sones	dB
1.00	28.00	13.00	64.98	25.00	74.41	37.00	80.06	49.00	84.11	61.00	87.27
2.00	37.99	14.00	66.05	26.00	74.98	38.00	80.45	50.00	84.41	62.00	87.51
3.00	43.84	15.00	67.05	27.00	75.52	39.00	80.82	51.00	84.69	63.00	87.74
4.00	47.99	16.00	67.98	28.00	76.05	40.00	81.19	52.00	84.97	64.00	87.97
5.00	51.21	17.00	68.85	29.00	76.55	41.00	81.54	53.00	85.25	65.00	88.19
6.00	53.83	18.00	69.68	30.00	77.04	42.00	81.89	54.00	85.52	66.00	88.41
7.00	56.06	19.00	70.45	31.00	77.51	43.00	82.23	55.00	85.78	67.00	88.63
8.00	57.98	20.00	71.19	32.00	77.97	44.00	82.56	56.00	86.04	68.00	88.84
9.00	59.68	21.00	71.90	33.00	78.41	45.00	82.89	57.00	86.30	69.00	89.05
10.00	61.20	22.00	72.57	34.00	78.85	46.00	83.20	58.00	86.55	70.00	89.26
11.00	62.57	23.00	73.21	35.00	79.26	47.00	83.51	59.00	86.79	71.00	89.46
12.00	63.83	24.00	73.82	36.00	79.67	48.00	83.82	60.00	87.03	72.00	89.66