

Material	Longitudinal Velocity		Shear Velocity		Acoustic Impedance
	$\frac{v_l}{\text{sec}} \times 10^6$	$\frac{\lambda_m}{\text{sec}}$	$\frac{v_s}{\text{sec}} \times 10^6$	$\frac{\lambda_m}{\text{sec}}$	$\frac{\text{gm}}{\text{cm}^2 \text{ sec}} \times 10^5$
Air	.013	.33	-	-	.0004
Aluminum	.25	6.3	.12	3.1	17.0
Alumina Oxide	.39	9.9	.23	5.8	32.0
Beryllium	.51	12.9	.35	8.9	23.0
Boron Carbide	.43	11.0	-	-	26.4
Brass	.17	4.3	.08	2.0	36.7
Cadmium	.11	2.8	.059	1.5	24.0
Copper	.18	4.7	.089	2.3	41.6
Glass (crown)	.21	5.3	.12	3.0	18.9
Glycerin	.075	1.9	-	-	2.42
Gold	.13	3.2	.047	1.2	62.6
Ice	.16	4.0	.08	2.0	3.5
Inconel	.22	5.7	.12	3.0	47.2
Iron	.23	5.9	.13	3.2	45.4
Iron (cast)	.18	4.6	.10	2.6	33.2
Lead	.085	2.2	.03	.7	24.6
Magnesium	.23	5.8	.12	3.0	10.0
Mercury	.057	1.4	-	-	19.6
Molybdenum	.25	6.3	.13	3.4	64.2
Monel	.21	5.4	.11	2.7	47.6
Neoprene	.063	1.6	-	-	2.1

Nickel	.22	5.6	.12	3.0	49.5
Nylon, 6-6	.10	2.6	.043	1.1	2.9
Oil (SAE 30)	.067	1.7	-	-	1.5
Platinum	.13	3.3	.067	1.7	69.8
Plexiglass	.11	2.7	.043	1.1	3.1
Polyethylene	.07	1.9	.02	.5	1.7
Polystyrene	.093	2.4	.04	1.1	2.5
Polyurethane	.070	1.9	-	-	1.9
Quartz	.23	5.8	.087	2.2	15.2
Rubber, Butyl	.07	1.8	-	-	2.0
Silver	.14	3.6	.06	1.6	38.0
Steel, mild	.23	5.9	.13	3.2	46.0
Steel, stainless	.23	5.8	.12	3.1	45.4
Teflon	.06	1.4	-	-	3.0
Tin	.13	3.3	.07	1.7	24.2
Titanium	.24	6.1	.12	3.1	27.3
Tungsten	.20	5.2	.11	2.9	101.0
Uranium	.13	3.4	.08	2.0	63.0
Water	.0584	1.48	-	-	1.48
Zinc	.17	4.2	.09	2.4	29.6