

Table 2.5 Average values of heat conductivity λ of certain rocks [in W/(m K)]

Rock	From published data ^a		After Sharma (2002)
	No. of samples	Average heat conductivity	Average heat conductivity
Sand	1,149	1.79	1.1–2.1
Siltstone	476	1.58	–
Argillite, clay schist	783	1.67	2.09
Clay	660	1.43	0.8–1.5
Marl	217	1.78	–
Limestone	781	2.37	3.44
Chock	21	1.63	–
Granite	383	2.68	3.07
Granodiorite	83	2.79	2.63
Porphyrite	137	1.74	–
Diorite	78	2.10	2.5
Andesites, andesite-basalt	81	1.87	2.26
Basalt	98	2.11	1.69
Diabase	67	2.50	2.2
Gabbro	116	2.47	2.57
Schist	181	2.55	–
Gneiss	88	2.41	2.7–3.1
Amphibolite	47	2.39	3.33
Gneiss-granite	35	2.04	–
Quartzite	–	5.00	5.03
Anhydrite	–	–	5.43
Harzburgite	106	2.69	–
Dunites	23	2.77	–
Olivine gabbro	55	2.65	–
Gabbro-norite	36	2.22	–

^a Compiled using data from (Birch et al. 1942; Dakhnov and Dyakonov 1952; Lubimova et al. 1964; Magnitsky 1965; Clark 1966; Lubimova 1968b; Dmitriev et al. 1969; Aliev and Mekhtiev 1970; Kutas and Gordienko 1971; Mekhtiev et al. 1971, 1972, 1973; Starikova and Lubimova 1973; Lubimova and Smirnova 1974; Aliev et al. 1977; Zinger and Kotrovsky 1979; Gillis et al. 1993; Cannat et al. 1995; Kelemen et al. 2004)