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Table 7.--Summary of some mineralogical and compositional characteristics of the calcium-poor meteorites

	CARBONACEOUS	PIGEONITE	HYPERSTHENE	BRONZITE	ENSTATITE
CHONDRITE	High-temperature material (subordinate; unequilibrated) Olivine[a/]: Mainly Fa 0.6-2, but grains up to Fa 91 (1, 2). Pyroxene in Murray chondrite[a/]: Mostly Fs < 10 (1); range for Murray chondrite is Fs 0.4-45.4 (2) Metal[b/]: Minor nickel-iron of variable composition (2, 3). Low-temperature material (dominant) Hydrated (3) ferromagnesian, layer-lattice silicates (2), including chrysotile (4).	High-temperature material (dominant, unequilibrated) Olivine, which contains inclusions of carbon (?) (4), and clinopyroxene ("pigeonite") is a characteristic accessory (~5 percent) mineral (4). Olivine: Variable composition, commonly Fa 32-40 (4, 14) In Grosnaja, mainly Fa 0-15, with subordinate grains to Fa 45 (1). Pyroxene: In Grosnaja, mainly Fs 0-6, with some grains to Fs 15 (1). Low-temperature material (subordinate) Hydrated (3) ferromagnesian silicates; similar to hydrated matrix of carbonaceous chondrites.	Olivine[c/]: All Fa 22-31 (6) L-group: Fa 21.6-24.6 (2) LL-group: Fa 26.3-29.0 (2) Pyroxene (rhombic): L-group: Fs 17.9-21.7 (2) LL-group: Fs 22.2-24.6 (2)	Olivine[c/]: Fa 14-20 (6) Fa 16.1-19.4 (2) Pyroxene (rhombic) Fs 14.7-17.2 (2)	Olivine: Absent (13) Pyroxene (rhombic and clino): About Fs 0 (4, 6, 13)
ACHONDRITE	High-temperature material (scarce) Metal[b/]: Locally present (3); (high-temperature silicates, as relict chondrules, also may be present locally). Low-temperature material (dominant) Hydrated (3) ferromagnesian silicates; the bituminous clay of the Orgueil achondrite (5), perhaps best described as a ferric chamosite (6).	Chassigny Olivine: Fa 33 (4) Enstatite and clinohypersthene are present as rare crystals (8). Contains small "nascent" chondrules of hypersthene, bordered by diopside, in turn enclosed by olivine (8). May be recrystallized olivine-pigeonite chondrite (4). Ureilites Olivine: Fa 21 (Novo Urei; 4); range of about Fa 10-20 (6). Pyroxene (clino): About Fs 20 (4).	Olivine (minor): Fa 27,28 (11) Pyroxene (rhombic): Fs 25-27 (11) Shaw meteorite (amphoterite) considered to be a recrystallized hypersthene chondrite; 15). Olivine: Fa 23.4 (15) Pyroxene: Fs 19.5 (15)	(Achondrite fragment in Breitscheid) Olivine: Fa 20 (12) Pyroxene (rhombic): Fs 18 (12)	Olivine (minor): About Fa 0 (4, 6) Pyroxene (rhombic and proto): About Fs 0 (4, 6)
STONY-IRON			Siderophyre Pyroxene (rhombic): about Fs 20 (4).	Pallasite Olivine: Fa 11-13 and Fa 17-20 (9) Lodranite Olivine: About Fa 13 (4) Pyroxene (rhombic): About Fs 17 (4)	

a/. Fe composition of olivine and pyroxene reported as mole percent fayalite (Fe_2SiO_4) and ferrosillite ($FeSiO_3$), respectively.
b/. Noted only for carbonaceous chondrites and achondrites.
c/. Unequilibrated hypersthene and bronzite chondrites contain olivine that ranges from Fa 0-40 (6, 10).

(1). Wood (1967a)
(2). Fredriksson and Keil (1964).
(3). Wiik (1956)
(4). Mason (1962a)
(5). Boström and Fredriksson (1966).
(6). Mason (1967a).
(7). Van Schmus and Wood (1967).
(8). Jéremine and others (1962).
(9). Mason (1963b).
(10). Dodd and Van Schmus (1965).
(11). Mason (1963d).
(12). Wlotzka (1963)
(13). Mason (1966).
(14). Mason (1963c).
(15). Fredriksson and Mason (1967).