

Table 8.3. *Properties of gas radiators, STP*

Gas	Formula	η_0^a ($\times 10^{-4}$)	θ_{\max} (degrees)	dN/dl $\gamma\text{s/cm}$ (350–500 nm)	T_{cr} ($^{\circ}\text{C}$)	P_{cr} (atm)
Helium	He	0.35	0.48	0.027	−268	2.3
Neon	Ne	0.67	0.66	0.052	−229	26
Hydrogen	H ₂	1.38	0.95	0.11	−240	13
Oxygen	O ₂	2.72	1.33	0.21	−119	50
Argon	Ar	2.84	1.36	0.22	−122	48
Nitrogen	N ₂	2.97	1.40	0.23	−147	34
Methane	CH ₄	4.41	1.70	0.34	−83	46
Carbon dioxide	CO ₂	4.50	1.72	0.35	31	73
Ethylene	C ₂ H ₄	6.96	2.14	0.54	10	51
Ethane	C ₂ H ₆	7.06	2.15	0.55	32	49
Freon 13	CClF ₃	7.82	2.27	0.61	29	38
Sulfur hexafluoride	SF ₆	7.83	2.27	0.61	46	37
Propane	C ₃ H ₈	10.05	2.57	0.78	22	9
Freon 12	CCl ₂ F ₂	11.27	2.72	0.88	112	41
Freon 114	C ₂ Cl ₂ F ₄	14	3.03	1.09	146	32
Pentane	C ₅ H ₁₂	17.1	3.3	1.3	197	33