Air, (20°C, 1 atm.), [STP]	62.0	90.0	(1.815)	36.66	[30420]	(1.205)[1.29]	(273)[293]
H_2O	60.1	84.9	1.991	36.08	36.1	1.00	1.33
CO_2	62.4	90.5	(1.819)	36.2	[18310]	[1.977]	[410]
Shielding concrete [h]	67.4	99.9	1.711	26.7	10.7	2.5	—
Borosilicate glass (Pyrex) [ℓ]	66.2	97.6	1.695	28.3	12.7	2.23	1.474
SiO_2 (fused quartz) [m]	67.0	99.2	1.697	27.05	11.7	2.32 [m]	1.458
Methane (CH_4)	54.7	74.0	(2.417)	46.5	[64850]	0.423[0.717]	[444]
Ethane (C_2H_6)	55.73	75.71	(2.304)	45.66	[34035]	0.509(1.356) [n]	(1.038) [n]
Propane (C_3H_8)	—	—	(2.262)	—	—	(1.879)	
Isobutane ($(CH_3)_2CHCH_3$)	56.3	77.4	(2.239)	45.2	[16930]	[2.67]	[1900]
Octane, liquid ($CH_3(CH_2)_6CH_3$)	—	—	2.123	—	—	0.703	
Paraffin wax ($CH_3(CH_2)_nCH_3$, $\langle n\rangle \approx 25$)	—	—	2.087	—	—	0.93	
Nylon, type 6	—	—	1.974	—	—	1.14	
Polycarbonate (Lexan)	—	—	1.886	—	—	1.200	
Polyethylene terephthlate (Mylar) ($C_5H_4O_2$)	60.2	85.7	1.848	39.95	28.7	1.39	—
Polyethylene (monomer $CH_2=CH_2$)	56.9	78.8	2.076	44.8	≈47.9	0.92–0.95	—
Polyimide film (Kapton)	—	—	1.820	—	—	1.420	
Polymethylmethacralate (Lucite, Plexiglas) (monomer ($CH_2=C(CH_3)CO_2CH_3$))	59.2	83.6	1.929	40.55	≈34.4	1.16–1.20	≈1.49
Polystyrene, scintillator (monomer $C_6H_5CH{=}CH_2$)	58.4	82.0	1.936	43.8	42.4	1.032	1.581
Polytetrafluoroethylene (Teflon) (monomer $CF_2=CF_2$)	—	—	1.671	—	—	2.20	
Polyvinyltolulene, scintillator (monomer 2-$CH_3C_6H_4CH{=}CH_2$)	—	—	1.956	—	—	1.032	
Barium fluoride (BaF_2)	92.1	146	1.303	9.91	2.05	4.89	1.56
Bismuth germanate (BGO) ($Bi_4Ge_3O_{12}$)	97.4	156	1.251	7.98	1.12	7.1	2.15
Cesium iodide (CsI)	—	—	1.243	—	—	4.51	
Lithium fluoride (LiF)	62.00	88.24	1.614	39.25	14.91	2.632	1.392
Sodium fluoride (NaF)	66.78	97.57	1.69	29.87	11.68	2.558	1.336
Sodium iodide (NaI)	94.8	152	1.305	9.49	2.59	3.67	1.775
Silica Aerogel [o]	65.5	95.7	1.83	29.85	≈150	0.1–0.3	$1.0+0.25\rho$
NEMA G10 plate [p]	62.6	90.2	1.87	33.0	19.4	1.7	—