

Table 7: Material constants

Black-body radiation at the ice point	BA.2482_6	<sub>(12)</sub>	$W_u/m_u^2$	
Molar volume of ideal gas	102.A553_0	<sub>(12)</sub>	$m_u^3/mol_u$	(standard state)
Density of air	0.2451_8	<sub>(12)</sub>	$g_u/m_u^3$	(standard state)
Speed of sound in air	337.479	<sub>(12)</sub>	$m_u/s_u$	(standard state)
Density of water	108.817B_A6	<sub>(12)</sub>	$g_u/m_u^3$	(maximum density)
Density of ice	B8.0	<sub>(12)</sub>	$g_u/m_u^3$	(0 °C)
Buoyancy of saltwater	6	$\times 10^2_{(12)}$	$N_u/m_u^3$	(specific gravity of 1.03)
Buoyancy of saltwater	6	$\times 10^2_{(12)}$	$P_u/m_u$	(pressure / water depth)
Ice point	169.49BA_9	<sub>(12)</sub>	$K_u$	(1 atmosphere )
Boiling point of water	217.B09B_0	<sub>(12)</sub>	$K_u$	(1 atmosphere )
Specific heat of water	0.6052_24	$\times 10^4_{(12)}$	$J_u/(g_u K_u)$	(by the definition of calorie)
Viscosity of water	1.2A29	$\times 10^{-3}_{(12)}$	$P_u s_u$	(25 °C)
Kinematic viscosity of water	1.207B	$\times 10^{-5}_{(12)}$	$m_u^2/s_u$	(25 °C)
Surface tension force of water	0.BB64_8	$\times 10^{-1}_{(12)}$	$N_u/m_u$	(25 °C)
Enthalpy of the formation of water	1.4500_1	$\times 10^8_{(12)}$	$J_u/mol_u$	(25 °C)
Gibbs energy of the formation of water	1.1757_B	$\times 10^8_{(12)}$	$J_u/mol_u$	(25 °C)
Maximum sensitivity light wavelength	611	$\times 10^{-8}_{(12)}$	$m_u/\Omega_1$	(by the definition of candela)
Maximum sensitivity photon energy	1.01	<sub>(12)</sub>	$e A_u \Omega_n/mol_n$	(by the definition of candela)
Maximum sensitivity photon energy	1.05	$\times 10^{-14}_{(12)}$	$J_u/mol_n$	