SI Base Units

MEASURE	*SI UNIT*	*SYMBOL*	*DEFINITION*
mass	kilo*gram*	*kg*	quantity of matter
length	*meter*	*m*	distance between 2 points
temperature	*kelvin*	*K*	average kinetic energy
amount	*mole*	*mol*	6.0221415×10^{23}
time	*second*	*s*	interval between 2 occurrences
electric current	*ampere*	*A*	flow of electrons
luminous intensity	*candela*	*cd*	brightness

Common SI Derived Units

MEASURE	*UNIT*	*ABBREV.*	*BASE UNITS*	*DEFINITION*
volume (V)	cubic meter	m^3	m^3	length in 3-dimensions
density (D)	kg/L	ρ (*"rho"*)	kg/m^3	mass per volume
concentration	mol/L	*M*	mol/m^3	amount per volume
force	newton	N	$kg \cdot m/s^2$	attraction between 2 bodies
work	Joule	J	$N \cdot m$	force acting through a distance
energy	Joule	J	$kg \cdot m^2/s^2$	Total E = kinetic + potential
frequency	Hertz	Hz	s^{-1}	cycles per second
activity (radioactivity)	Becquerel	Bq	s^{-1}	decays per second
pressure	Pascal	Pa	N/m^2	force per area
electric:				
charge	Coulomb	C	$s \cdot A$	charge of 1-A current in 1-sec
potential	Volt	V	W/A	electric potential difference
resistance	Ohm	Ω	V/A	electrical resistance

Other non-SI Units and Equalities

MEASURE	*CONVERSIONS*
mass	1 ounce (oz.) = 28.349 g; 1 pound (lbs) = 453.59 g; 2.2046 lbs = 1 kg;
length	1 mile (mi) = 1.6093 km; 1 inch (in) = 2.54 cm *(exact)*; 1 Ångstrom = 10^{-10} cm
volume	1.0567 quart (qt.) = 1 Liter (L); 1 gal = 3.7854 L; 1 mL = 1 cm^3
temperature	K = °C + 273.15
energy	1 calorie (cal) = 4.1840 J; 1,000 cal = 1 kcal = 1 ("food") Calorie
pressure	1 atmosphere (atm) = 101,325.0 Pa = 760.00 mm Hg (torr) = 1.0133 bar = 14.696 lb/in^2