

# Universal Constants Menu

This menu adds a listing of all the CODATA Fundamental Physical Constants from “<https://physics.nist.gov/cuu/Constants/>” website.

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alpha particle-electron mass ratio  
 $m_{\alpha} / m_e = 7294.29954142$

alpha particle mass  
 $m_{\alpha} = 6.6446573357e-27 \text{ kg}$

alpha particle mass energy equivalent  
 $m_{\alpha} \cdot c^2 = 5.9719201914e-10 \text{ J}$

alpha particle mass energy equivalent  
in MeV  
 $m_{\alpha} \cdot c^2 = 3727.3794066 \text{ MeV}$

alpha particle mass in u  
 $m_{\alpha} = 4.001506179127 \text{ u}$

alpha particle molar mass  
 $M(\alpha), M_{\alpha} = 4.0015061777e-3 \text{ kg/mol}$

alpha particle-proton mass ratio  
 $m_{\alpha} / m_p = 3.97259969009$

alpha particle relative atomic mass  
 $A_r(\alpha) = 4.001506179127$


Angstrom star  
 $\text{\AA}^* = 1.00001495e-10 \text{ m}$

atomic mass constant  
 $m_u = 1.66053906660e-27 \text{ kg}$

atomic mass constant energy equivalent  
 $m_u \cdot c^2 = 1.49241808560e-10 \text{ J}$

atomic mass constant energy equivalent  
in MeV  
 $m_u \cdot c^2 = 931.49410242 \text{ MeV}$

atomic mass unit-electron volt  
relationship  
 $(1 \text{ u}) \cdot c^2 = 9.3149410242e8 \text{ eV}$

Touch any of the listed constants to enter its value into the calculator. Use the “ Search” field to filter the constants that contains the letter or word typed into it.