E = (Number of neutrons)×(Energy per neutron)

$E = 2.4 \times 10^{57}$ neutrons × 2 MeV/neutron.

$1 \text{ MeV} = 1.6 \times 10^{-6}$ ergs, than:

$E = 2.4 \times 10^{57} \times 2 \text{ MeV} \times 1.6 \times 10^{-6}$ ergs/MeV

$E = 2.4 \times 2 \times 1.6 \times 10^{51} = 7.7 \times 10^{51}$ ergs.

Answer: $E = 7.7 \times 10^{51}$ ergs (C)