

PAG 352 ES 43

DATI

1/1

$$m = 7,99 \text{ g}$$

$$\mu_A = 197$$

$$m = ?$$

$$N_p = ?$$

$$M_A = \mu_A \cdot u_{\text{ma}} \cdot N_A \rightarrow M_A = 197 \cdot 1,66 \cdot 10^{-27} \text{ Kg} \cdot 6,02 \cdot 10^{23}$$

$$M_A = 1968,66 \cdot 10^{-4} = 0,1968 \approx 0,2 \text{ Kg/mol}$$

$$m = \frac{M}{M_A} \rightarrow m = \frac{7,99 \text{ g}}{197 \text{ g/mol}} = 0,0406 \text{ mol} \approx 4,06 \cdot 10^{-2} \text{ mol}$$

$$m = \frac{N_p}{N_A} \rightarrow N_p = m N_A \rightarrow N_p = 4,06 \cdot 10^{-2} \text{ mol} \cdot 6,02 \cdot 10^{23} \text{ p/mol}$$