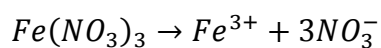


Answer on Question #70279 – Chemistry – General Chemistry

Task

What mass in grams of iron (III) nitrate will supply 0.100g of iron(III) ions?

Solution



Molar mass of iron (III) nitrate is 241.86 g/mol.

Molar mass of *Fe* is 55.847 g/mol.

$$v(Fe^{3+}) = \frac{m(Fe)}{M(Fe)} = \frac{0.100}{55.847} = 0.00179 \text{ mol} = v(Fe(NO_3)_3).$$

$$m(Fe(NO_3)_3) = v(Fe(NO_3)_3) \cdot M(Fe(NO_3)_3) = 0.00179 \cdot 241.86 = 0.433 \text{ g}.$$

Answer

0.433 g.

Answer provided by <https://www.AssignmentExpert.com>