Question #85327, Chemistry / General Chemistry | for completion

Iodine is prepared both in the laboratory and commercially by adding Cl2(g) to an aqueous solution containing sodium iodide.

 $2Nal(aq)+Cl2(g)\rightarrow l2(s)+2NaCl(aq)$

How many grams of sodium iodide, NaI, must be used to produce 27.1g of iodine, I2?

Solution:

 $m(NaI) = \frac{149.89 \text{ g/mol} \times 2 \times 27.1\text{g}}{126.9 \text{ g/mol} \times 2} = 32.00 \text{ g}$

Answer: 32.00 g

Answer provided by www.AssignmentExpert.com