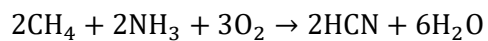


Question #85171, Chemistry / General Chemistry | for completion

When 27.8 g of NH₃ gas was used up in the following reaction and reportedly produced 36.4 g HCN what is the percent of yield of HCN. 2CH₄+2NH₃+3O₂

Solution:

Formula have been corrected



$$m(\text{HCN}) = \frac{27.8\text{g} \cdot 2 \cdot 27.02\text{g}}{2 \cdot 17.03\text{g}} = 44.1\text{g}$$

$$\% \text{ yield (HCN)} = \frac{36.4\text{ g}}{44.1\text{ g}} \cdot 100\% = 82,54\%$$

Answer: % yield (HCN) = 82,54%

Answer provided by www.AssignmentExpert.com