

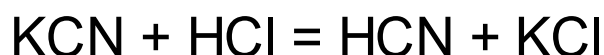
## Answer on Question #62710 - Chemistry - Inorganic Chemistry

### Task:

If a sample of 0.213 g of KCN is treated with an excess of HCl, calculate the amount of HCN formed, in grams.

### Solution:

The reaction of:



$$n(\text{KCN}) = n(\text{HCN});$$

$$\frac{m(\text{KCN})}{M(\text{KCN})} = \frac{m(\text{HCN})}{M(\text{HCN})};$$

$$\frac{0.213}{(39+12+14)} = \frac{m(\text{HCN})}{(1+12+14)};$$

$$m(\text{HCN}) = \frac{0.213 \times 27}{65} = 0.088(\text{g}).$$

### Answer:

$$m(\text{HCN}) = 0.088\text{g}.$$