

Answer on Question #67389 - Chemistry -General Chemistry

How many grams of neon gas occupy 0.5 L at RTP? {NE: 20

Solution:

$$n(\text{Ne}) = \frac{V(\text{Ne})}{V_m} = \frac{0.5}{22.711} = 0.022 \text{ mol}$$

$$m(\text{Ne}) = n(\text{Ne}) \times M(\text{Ne}) = 0.022 \times 20 = 0.44 \text{ g}$$

Answer:

0.44 grams.