

Where volume is in dm³ and the mass of the gas is measured in grams

$$\text{Volume of gas} = \frac{\text{Mr of gas}}{\text{Mass of gas}} \times 24$$

Calculations

3.5 USE OF AMOUNT OF SUBSTANCE IN RELATION TO VOLUMES OF GASES (chemistry only) (higher tier)

At the same temperature and pressure, equal numbers of moles of any gas will occupy the same volume

Room temperature and pressure, RTP

20°C and 1 atm

Volume of one mole of any gas at RTP is 24 dm³