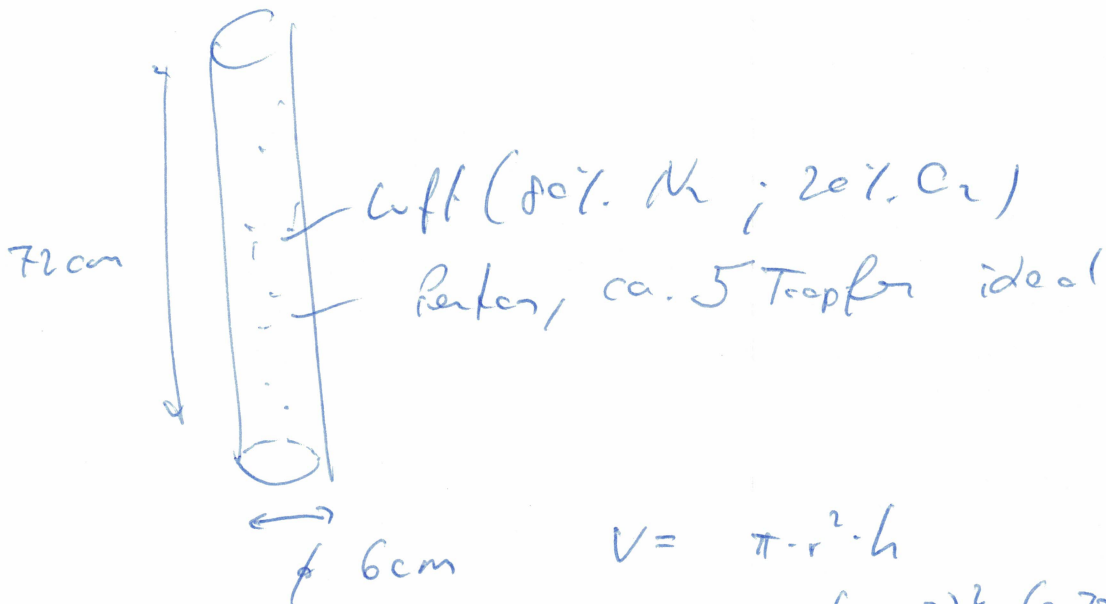


Pentosexplosion



$$V = \pi \cdot r^2 \cdot h$$

$$= 3.141 \cdot (0.03)^2 \cdot (0.72) = 0.00204 \text{ m}^3$$

| ~ 2 Liter |

ideales Gas ... 0°C → 22.4 l (273K)
24.04 l 293K

1 mol ~ 24 Liter
1/12 mol ← 2 Liter

davon 20% O₂ → 1/60 mol O₂ in der Probe
0.0166 mol



→ d.h. 8x weniger C₅H₈ als O₂

→ 1/480 mol ≈ 0.002 mol

→ M(C₅H₈) = 72 g/mol → ~0.15g

Dichte (Pentose) = 0.63 g/cm³

1 ml ~ 0.63g
~ 1/4 ml ← 0.15g (maximal!!!)