

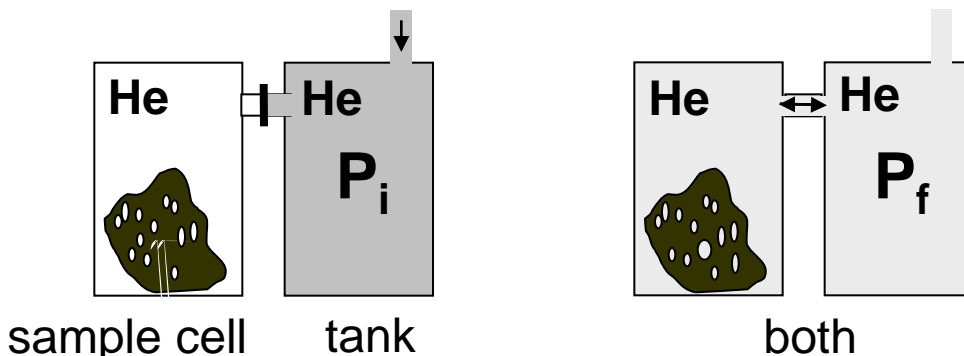
Helium pycnometry reference sheet

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Instrument: Quantachrome Multipycnometer

$$V_{\text{fragment}} = V_{\text{sample cell}} - V_{\text{tank}} \left(\frac{P_{\text{initial}}}{P_{\text{final}}} - 1 \right)$$



Sample cells

| | |
|---------------|-------------------------------------------------------------|
| Large volume | 148.483 cm ³ ; depth 7.3 cm; inner diam. 4.85 cm |
| Medium volume | 58.003 cm ³ ; depth 3.8 cm; inner diam. 3.95 cm |
| Small volume | 28.827 cm ³ ; depth 3.6 cm; inner diam. 2.45 cm |
| Micro volume | ³ ; depth 2.3 cm; inner diam. 1.55 cm |

| | |
|---------------|------------------------------|
| | 3 |
| Medium | 40.367 cm³ |
| Small | 11.281 cm³ |
| Micro | 2.642 cm³ |

Note: Aluminum inserts should be measured to obtain correct grain volume to subtract from Sample cell volume. Approx. volumes are from mass/Al density.