

LG HB4

18650 15Ah

$$778 \text{ cm}^2$$

$$h_{\text{-cat}} = [2] \cdot 50 \mu\text{m}$$

$$P_{\text{-cat}} = 0,26$$

$$C_{\text{-cat}} = 133 \frac{\text{mAh}}{\text{g}}$$

$$g_{1\text{-cat}} = \frac{1500 \text{ mAh}}{133 \frac{\text{mAh}}{\text{g}}} = 11,28 \text{ g}$$

$$V_{\text{cat}_2} = 778 \text{ cm}^2 \cdot 50 \mu\text{m} = 3,89 \text{ cm}^3$$

$$d_{1\text{-cat}} = \frac{11,28 \text{ g}}{3,89 \text{ cm}^3} = 2,9 \text{ g/cm}^3$$

$$d_{2\text{-cat}} = \frac{11,28 \text{ g}}{3,89 (1-0,26)} = 3,92 \text{ g/cm}^3$$

LG HG2

18650

3Ah

$$929 \text{ cm}^2$$

$$h_{\text{-cat}} = [2] \cdot 52 \mu\text{m}$$

$$P_{\text{-cat}} = 0,17$$

$$C_{\text{-cat}} = 189 \frac{\text{mAh}}{\text{g}}$$

$$g_{1\text{-cat}} = \frac{3000 \text{ mAh}}{189 \frac{\text{mAh}}{\text{g}}} = 15,87 \text{ g}$$

$$d_{1\text{-cat}} = \frac{15,87 \text{ g}}{9,66 \text{ cm}^3} = 1,64 \text{ g/cm}^3$$

$$d_{2\text{-cat}} = \frac{15,87 \text{ g}}{9,66 \cdot (1-0,17)} = 1,9 \text{ g/cm}^3$$

$$V_{\text{-cat}_1} = 9,66 \text{ cm}^3$$

$$V_{\text{-cat}_2} = 929 \text{ cm}^2 \cdot 52 \mu\text{m} = 4,18 \text{ cm}^3$$

$$\frac{15,87 \text{ g}}{4,18 \text{ cm}^3} = 3,79 \text{ g/cm}^3$$

$$\frac{15,87 \text{ g}}{4,18 \cdot (1-0,17)} = 3,98 \text{ g/cm}^3$$

Samsung 25R

18650

25Ah

$$1036 \text{ cm}^2$$

$$h_{\text{-cat}} = [2] \cdot 38 \mu\text{m}$$

$$P_{\text{-cat}} = 0,09$$

$$C_{\text{-cat}} = 179 \frac{\text{mAh}}{\text{g}}$$

$$g_{1\text{-cat}} = \frac{2500 \text{ mAh}}{179 \frac{\text{mAh}}{\text{g}}} = 13,97 \text{ g}$$

$$d_{1\text{-cat}} = \frac{13,97 \text{ g}}{3,87} = 3,55 \text{ g/cm}^3$$

$$d_{2\text{-cat}} = \frac{13,97 \text{ g}}{3,87 \cdot (1-0,09)} = 3,9 \text{ g/cm}^3$$

$$V_{\text{-cat}_1} = 7,87 \text{ cm}^3$$

$$V_{\text{-cat}_2} = 3,935 \text{ cm}^3$$

Samsung 48G

27700

4,8Ah

$$989 \text{ cm}^2$$

$$h_{\text{-cat}} = [2] \cdot 71 \mu\text{m}$$

$$P_{\text{-cat}} = 0,13$$

$$C_{\text{-cat}} = 199 \frac{\text{mAh}}{\text{g}}$$

$$g_{1\text{-cat}} = \frac{4500 \text{ mAh}}{199 \frac{\text{mAh}}{\text{g}}} = 22,61 \text{ g}$$

$$d_{1\text{-cat}} = \frac{22,61 \text{ g}}{14,0438 \text{ cm}^3} = 1,61 \text{ g/cm}^3$$

$$d_{2\text{-cat}} = \frac{22,61 \text{ g}}{14 \cdot (1-0,13)} = 1,98 \text{ g/cm}^3$$

$$V_{\text{-cat}_1} = 14,0438 \text{ cm}^3$$

$$V_{\text{-cat}_2} = 989 \text{ cm}^2 \cdot 71 \mu\text{m} = 7,02 \text{ cm}^3$$

$$\frac{22,61 \text{ g}}{7,02} = 3,22 \text{ g/cm}^3$$

$$\frac{22,61 \text{ g}}{7,02 \cdot (1-0,13)} = 3,94 \text{ g/cm}^3$$