

Guy-Lussac's (No Name) Law - One Problem

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A gas is at a pressure of 1.35 atm and a temperature of 125degC. If I increase the temperature to 250.degC, what is the new pressure (in atm) ?

$$P_1 = 1.35 \text{ atm}$$

$$P_2 = P_1 \left(\frac{T_2}{T_1} \right)$$

$$T_1 = 125^\circ\text{C} + 273 = 398 \text{ K}$$

$$P_2 = (1.35 \text{ atm}) \left(\frac{523 \text{ K}}{398 \text{ K}} \right)$$

$$T_2 = 250^\circ\text{C} + 273 = 523 \text{ K}$$

$$P_2 = 1.773 \text{ atm}$$

$$P_2 = ?$$

$$P_2 = 1.77 \text{ atm}$$

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