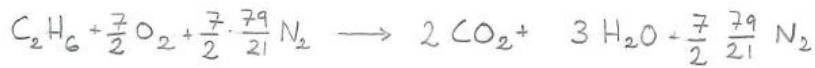


(För-2) a) 75 %_{vol} metan , 25 %_{vol} etan förbränns.



$$\Rightarrow 1 \text{ Nm}^3 \text{ CH}_4: \lambda_{0,1} = 2 + 2 \cdot \frac{79}{21} = 9,52 \text{ Nm}^3, \quad g_{0,1} = 1 + 2 + \frac{2 \cdot 79}{21} = 10,52 \text{ Nm}^3$$

$$1 \text{ Nm}^3 \text{ C}_2\text{H}_6: \lambda_{0,2} = \frac{7}{2} + \frac{7}{2} \cdot \frac{79}{21} = 16,67 \text{ Nm}^3, \quad g_{0,2} = 2 + 3 + \frac{7 \cdot 79}{2 \cdot 21} = 18,17 \text{ Nm}^3$$

$$\therefore \lambda_0 = 0,75 \cdot \lambda_{0,1} + 0,25 \cdot \lambda_{0,2} = 11,3 \text{ Nm}^3 / \text{Nm}^3 \text{ bränsle}$$

$$g_0 = 0,75 \cdot g_{0,1} + 0,25 \cdot g_{0,2} = 12,4 \text{ Nm}^3 / \text{Nm}^3 \text{ bränsle}$$

b) Ved av fukthalt 40% . Diagram DoD s.26

$$\Rightarrow \lambda_0 = 2 \text{ m}^3/\text{kg}, \quad g_0 = 3 \text{ m}^3/\text{kg}$$

c) Olja med effektivt värmevärde på 41,6 MJ/kg , DoD s.25

$$\Rightarrow \lambda_0 = 11,03 \text{ Nm}^3/\text{kg} \quad g_0 = 10,36 \text{ Nm}^3/\text{kg}$$