

3.50g 75.69% C, 8.8% H, 15.51% O_x

$C_{6.31} O_{8.8} H_{0.97}$

75.69g C	1 mole C	12g C	= 6.31 mole C	/ 0.97 = 6.5	x2 = 13
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8.8g H	1 mole H	1g H	= 8.8 mole H	/ 0.97 = 9.07	x2 = 18
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15.51g O	1 mole O	16g O	= 0.97 mole O	/ 0.97 = 1	x2 = 2
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Sep 30-8:05 AM

PT 3.15

Isopropyl Alcohol $C_x H_y O_z$ + O₂ → 0.561g CO₂ + 0.306g H₂O

0.255g

emp. form.

$C_x H_y O_z + O_2 \rightarrow CO_2 + H_2O$

0.255g → 0.561g → 0.306g

Find X

0.561g CO ₂	1 mole CO ₂	44g CO ₂	= 0.01275 mole C	x
		1 mole CO ₂	12g C	
			0.0153g C	

Find Y

0.306g H ₂ O	1 mole H ₂ O	18g H ₂ O	= 0.034 mole H	y
		2 mole H	1g H	
			0.034g H	

Total C_xH_yO_z = 0.255g

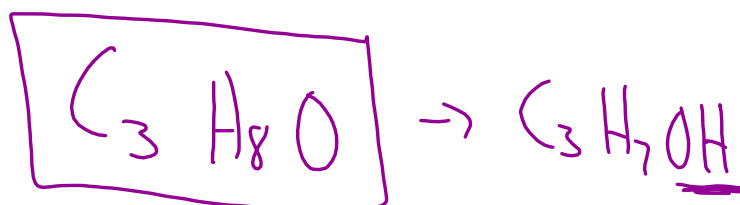
0.153g + 0.034g + 0.068g = 0.255g

0.068g O

0.068g O	1 mole O	16g O	= 0.00425 mole O	z
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Sep 30-8:21 AM

$$\begin{array}{ccc} \text{C} & \text{H} & \text{O} \\ \frac{0.01275}{0.00425} & \frac{0.034}{0.00425} & \frac{0.00425}{0.00425} \\ 3 & 8 & 1 \end{array}$$



Emp. form. Isopropyl Alcohol

Sep 30-8:41 AM

HW
3/52 a

Sep 30-8:45 AM