

1)

$$C = 92,3\%$$

$$H = 7,7\%$$

$$C = \frac{92,3 \text{ g}}{12 \text{ g/mol}} = 7,691 \text{ mol} \quad 7,691 / 7,691 = 1$$

$$H = \frac{7,7 \text{ g}}{1 \text{ g/mol}} = 7,7 \text{ mol} \quad 7,7 / 7,691 = 1$$

$= CH$

2) $Na = 32,4\%$

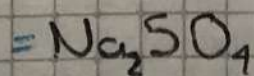
$$S = 22,5\%$$

$$O = 45,1\%$$

$$Na = \frac{32,4 \text{ g}}{23 \text{ g/mol}} = 1,408 \text{ mol} \quad 1,408 / 0,703 = 2$$

$$S = \frac{22,5 \text{ g}}{32,1 \text{ g/mol}} = 0,703 \text{ mol} \quad 0,703 / 0,703 = 1$$

$$O = \frac{45,1 \text{ g}}{16 \text{ g/mol}} = 2,818 \text{ mol} \quad 2,818 / 0,703 = 4$$



$$3) C = 48\%$$

$$H = 4\%$$

$$N = 22,4\%$$

$$S = 12,8\%$$

$$O = 12,8\%$$

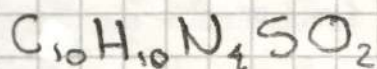
$$C = \frac{48g}{12g/mol} = 4 \quad \text{mol } 4 / 0,4 = 10$$

$$H = \frac{4g}{1g/mol} = 4 \quad \text{mol } 4 / 0,4 = 10$$

$$N = \frac{22,4g}{14g/mol} = 1,6 \quad \text{mol } 1,6 / 0,4 = 4$$

$$S = \frac{12,8g}{32g/mol} = 0,4 \quad \text{mol } 0,4 / 0,4 = 1$$

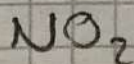
$$O = \frac{12,8g}{16g/mol} = 0,8 \quad \text{mol } 0,8 / 0,4 = 2$$



4)

$$0,039g \times \frac{1g}{14g/mol} = 0,005 \quad \text{mol } 0,005 / 0,005 = 1$$

$$0,181g \times \frac{1g}{16g/mol} = 0,011 \quad \text{mol } 0,011 / 0,011 = 2$$



$$5) \text{Na} = 21,6 \%$$

$$\text{Cl} = 33,3 \%$$

$$\text{O} = 45,1 \%$$

$$\text{Na} = \frac{21,6 \text{ g}}{23 \text{ g/mol}} = 0,939 \quad \text{mol} \quad 0,939 / 0,938 = 1$$

$$\text{Cl} = \frac{33,3 \text{ g}}{35} = 0,938 \quad \text{mol} \quad 0,938 / 0,938 = 1$$

$$\text{O} = \frac{45,1 \text{ g}}{16 \text{ g/mol}} = 2,818 \quad \text{mol} \quad 2,818 / 0,938 = 3$$

