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Kimia Umuma) $(C_2H_5)_2O$ (diethyl ether).b) $(CH_3)_2CO$ (acetone).

c) dinitrogen pentoxide

d) Carbon disulfide.

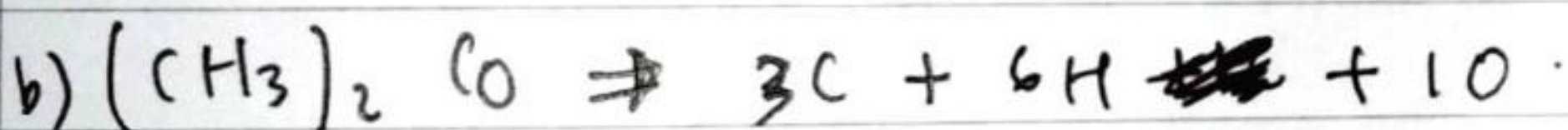
Jawab :



$$= 4(12,0107) + 10(1,00794) + 15,9994$$

$$= 48,0428 + ~~40,3176~~ + ~~15,9994~~ \cdot 10,0794 + 15,9994$$

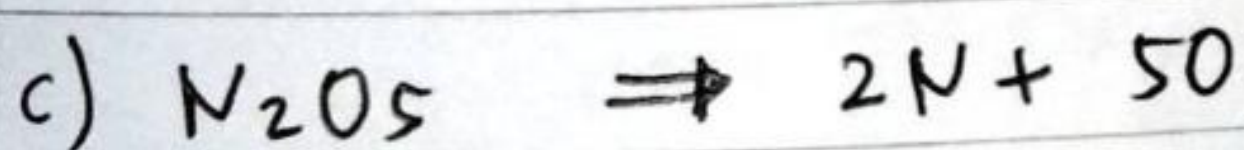
$$= ~~68,0136~~ \quad 74,1216 \text{ g/mol}$$



$$= 3(12,0107) + 6(1,00794) + 15,9994$$

$$= 36,0321 + 6,04764 + 15,9994$$

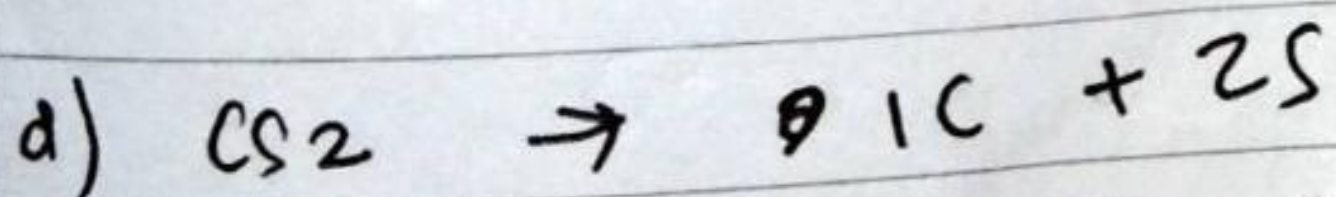
$$= 58,07914 \text{ g/mol}$$



$$= 2(14,0067) + 5(15,9994)$$

$$= 28,0134 + 79,997$$

$$= 108,0104 \text{ g/mol}$$



$$= 12,0107 + 2(32,065)$$

$$= 12,0107 + 64,13$$

$$= 76,1407 \text{ g/mol}$$

(2.)

a) 2 gr of oxygen gas

atom = 2 atom oksigen

Massa $O_2 = 2 \text{ gr}$ Ar $O = 16 \text{ gr/mol}$

$$Mr O_2 = 2 Ar O$$

$$= 2 \times 16$$

$$= 32 \text{ gr/mol}$$

Formula = O_2

$$n = \frac{\text{gr}}{Ar}$$

$$n = \frac{2 \text{ gr}}{32 \text{ gr/mol}}$$

$$n = 0,0625 \text{ mol}$$

b) 117,0 gr of table salt.

atom = 1 atom Na dan 1 atom Cl Formula = NaCl

massa NaCl = 117,0 gr

Mr = 58,5

$$n = \frac{\text{gr}}{Mr} = \frac{117,0 \text{ gr}}{58,5 \text{ gr/mol}} = 2 \text{ mol}$$

c) 19,0 gr of CS_2 Formula = CS_2

atom =

$$n = \frac{19 \text{ gr}}{76 \text{ gr/mol}} = 0,25 \text{ mol}$$

$$n = 0,25 \text{ mol}$$

No. _____

Date: _____

d). 3,8 gr of F_2 .

atom = 2 atom Flour

$$n = \frac{3,8 \text{ gr}}{112 \text{ gr/mol}} = 0,03 \text{ mol}$$

$$n = 0,03 \text{ mol}$$

Formula = Flour.

3. a) diethyl ether = $(C_2H_5)_2O$

$$\%C = \frac{4 \times 12,0107}{74,1216} \times 100\%$$

$$= 0,64816 \times 100\%$$

$$= 64,816\%$$

$$\%H = \frac{10 \times 1,00794}{74,1216} \times 100\%$$

$$= 0,1359 \times 100\%$$

$$= 13,59\%$$

$$\%O = \frac{1 \times 15,9994}{74,1216} \times 100\%$$

$$= 0,2158 \times 100\%$$

$$= 21,58\%$$

$$\text{H. } \cancel{64,816\% + 13,59\% + 21,58\%}$$

b) acetone = $(CH_3)_2CO$

$$\%C = \frac{2 \times 12,0107}{74,1216} \times 100\%$$

$$= 0,3240 \times 100\%$$

$$= 32,40\%$$

$$\%H = \frac{6 \times 1,00794}{74}$$

b) acetone = $(CH_3)_2CO$

$$\begin{aligned}\% C &= \frac{3 \times 12,0107}{58,07914} \times 100\% \\ &= 62,039\%\end{aligned}$$

$$\begin{aligned}\% H &= \frac{6 \times 1,00794}{58,07914} \times 100\% \\ &= 10,412\%\end{aligned}$$

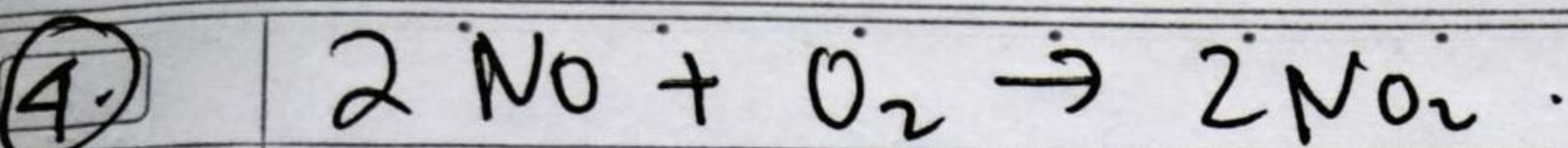
$$\begin{aligned}\% O &= \frac{1 \times 15,9994}{58,07914} \times 100\% \\ &= 27,54\%\end{aligned}$$

c) carbon disulfide (CS_2)

$$\begin{aligned}\% C &= \frac{1 \times 12,0107}{76,1407} \times 100\% \\ &= 15,77\%\end{aligned}$$

$$\begin{aligned}\% S &= \frac{2 \times 32,065}{76,1407} \times 100\% \\ &= 84,22\%\end{aligned}$$

4. ~~$V_{O_2} = 8L$~~
 ~~$V_{O_2} = 8L$~~



$$8 \text{ L NO} \times \frac{1 \text{ L O}_2}{2 \text{ L NO}} = 4 \text{ L O}_2$$

$$\begin{aligned} 2 \text{ NO}_2 &= 2 \times (4 \text{ L O}_2) \\ &= 8 \text{ L NO}_2 // \end{aligned}$$