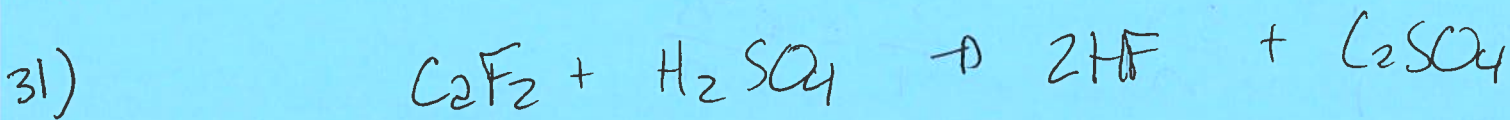


Limiting Reagent Homework

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$$m = 1.00 \text{ g}$$
$$M = 78.08 \text{ g/mol}$$

moles

$$n = \frac{1}{78.08}$$
$$= 0.013 \text{ mol}$$

LR

$$m = 15.5$$
$$M = 98.09 \text{ g/mol}$$

$$n = \frac{15.5}{98.09}$$
$$= 0.16 \text{ mol}$$



$$m = 100.11 \text{ g}$$
$$M = 138.13 \text{ g/mol}$$

moles

$$n = \frac{m}{M}$$
$$= \frac{100.11}{138.13}$$

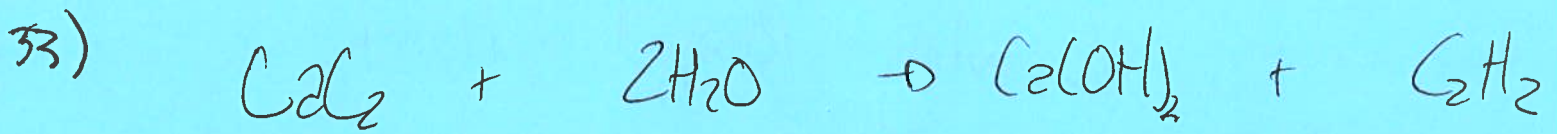
$$= 0.72 \text{ mol}$$

LR

$$m = 90.4 \text{ g}$$
$$M = 32.05 \text{ g/mol}$$

$$n = \frac{m}{M}$$
$$= \frac{90.4}{32.05}$$

$$= 2.82 \text{ mol}$$



$n = 5.5 \text{ mol}$

$n = 3.75 \text{ mol}$

Ratio

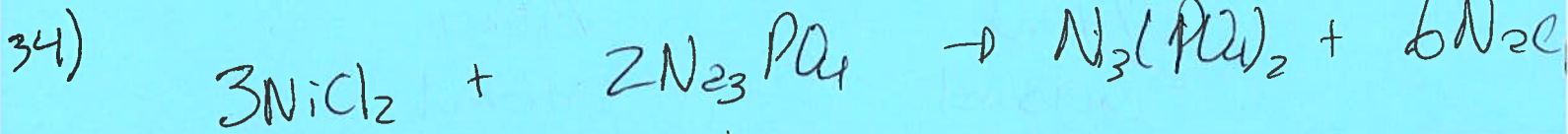
$\frac{1}{1} = \frac{5.5}{n}$

$\frac{2}{1} = \frac{3.75}{n}$

$n = 5.5$

$n = 1.88 \text{ mol}$

LR



$m = 10 \text{ g}$

$m = 10 \text{ g}$

$M = 129.59 \text{ g/mol}$

$M = 163.94 \text{ g/mol}$

moles

$n = m/M$

$n = m/M$

$n = 10/129.59$

$n = 10/163.94$

$n = 0.077 \text{ mol}$

$n = 0.061 \text{ mol}$

Ratio

$\frac{3}{1} = \frac{0.077}{n}$

$\frac{2}{1} = \frac{0.061}{n}$

$n = 0.026$

$n = 0.031 \text{ mol}$

LR