

BALLAST WATER MANAGEMENT PLAN (MANUAL)

To meet the requirements of Regulation B-1 of
INTERNATIONAL CONVENTION FOR THE CONTROL AND MANAGEMENT
OF SHIP'S BALLAST WATER AND SEDIMENTS, 2004
AND THE IMO RESOLUTION MEPC. 127(53)
GUIDELINES FOR BALLAST WATER MANAGEMENT AND DEVELOPMENT
OF BALLAST WATER MANAGEMENT PLANS (G4)

APPROVED

13/DEC/2012

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$$\text{Cu} + 2\text{AgNO}_3 \rightarrow 2\text{Ag} + \text{Cu}(\text{NO}_3)_2$$

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$$3\text{CO} + 7\text{H}_2 \rightarrow \text{C}_3\text{H}_8 + 3\text{H}_2\text{O}$$

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$$\frac{8.3 \text{ mole H}_2\text{S} \times 2 \text{ mole H}_2\text{O}}{2 \text{ mole H}_2\text{S}} = 18.6 \text{ mole H}_2\text{O}$$

149 4g h₂o is your theoretical yield so percent yield 137 1g h₂o actual yield 149 4g h₂o x 100
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$$\text{C}_3\text{H}_6 + 3\text{O}_2 \rightarrow 3\text{CO} + 3\text{H}_2\text{O}$$

if the reaction of 21 3 grams of o₂ produces a 47 3 yield how many grams of co would be produced step one figure out how many moles of the limiting reagent you have
$$\frac{21.3 \text{ grams O}_2}{32 \text{ grams mole}} = 0.666 \text{ moles O}_2$$

21 3 grams 0 66 moles 32 g m

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calculated mass of the product expected $\times 100$ in this reaction a yield 80 is anticipated

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g Al $\times 1$ mol Al $\times 2$ mol Al_2O_3 $\times 101.964$ g Al_2O_3 302.3 g Al_2O_3 26.982 g Al 4 mol Al 1 mol Al_2O_3 c determine the percent yield
yield actual $\times 100$ 260.0 g $\times 100$ 86.01 theoretical 302.3 g

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