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$$\times \frac{1000\ mL\ soln}{L\ soln} \times \frac{1\ mol\ H_2SO_4}{98\ g\ H_2SO_4}$$

$$\times \frac{1\ mol\ H_2SO_4}{98\ g\ H_2SO_4} = 500\ M$$

$$\frac{}{\left(2\ g\ H_2O \Big/ \frac{18\ g\ H_2O}{mol\ H_2O}\right)} = 0.900 = X_{H_2SO_4}$$

$$\frac{1.37\ mol\ C}{55.5\ mol\ H_2O}$$

.0241

$$\frac{\left(\% \times \frac{55.5}{1.37}\right) mol\ H_2O}{L\ soln} \text{ or } \frac{51.04\ mol\ H_2O}{L\ soln}$$

$$) + (51.04\ mol\ H_2O \times 18.0\ g\ H_2O/mol\ H_2O)$$
$$soln$$

$$.41\ g\ soln/mL\ soln$$

$$\frac{)}{+ 1000\ g\ H_2O} \times 100 = 34.95\%$$