- 1. If 500 workers in a plant are exposed to the following concentrations of ammonia for the given number of hours, how many deaths will be expected?
  - a. 1000 ppm for 1 hr
  - b. 2000 ppm for 2 hr
  - c. 300 ppm for 3 hr
  - d. 50 ppm for 2 hr

2. You have decided to purchase 946 kg of liquid propane ( $C_3H_8$ ) to heat your house during the winter. You are concerned about tank rupture and the possibility of a vapor cloud explosion of all the propane. What would be the percent of the structure damage and glass breakage if the explosion happened? The overpressure required to cause the damage is 4826.3 Pa?