

Answer on Question #76884, Chemistry / General Chemistry

Question:

I am planning on applying a nitrogen based fertilizer to my paddocks. I know I require 90 g/m^2 and that my paddock is 0.1 km^2 . How many kg of fertilizer will I need?

Solution:

$$1 \text{ km} = 1,000 \text{ m}$$

$$1 \text{ km}^2 = 1,000,000 \text{ m}^2$$

$$0.1 \text{ km}^2 = 100,000 \text{ m}^2$$

$$\text{Mass of fertilizer: } 90 \cdot 100,000 = 9,000,000 \text{ g} = 9,000 \text{ kg}$$

Answer:

9,000 kg