

Conversions

1 acre = 43,560 ft² = 2.471 hectares

1 mile = 5,280 ft = 1.608 km = 1760 yards

1 yard = 3 feet

1 gallon = 128 ounces (fl oz) = 8 pints = 4 quarts

0.5 pint = 1 cup = 8 ounces = 16 tablespoons = 48 teaspoons

1 pound = 16 ounces

1 inch = 2.54 centimeters = 25.4 millimeters

1000 milliliters = 1 liter

Pesticide questions

1. For control of bot flies: apply a 1% mixture of FlyBGone™.
(1 gallon of this pesticide added to 99 gallons of water makes 100 gallons of spray mixture).

Example – How much of FlyBGone™ do you need to make 120 gallons of spray mixture?

Example answer: 1 gallon and 3.2 cups

1a) 125 gallons of spray mixture? _____

1b) 145 gallons of spray mixture? _____

1c) 170 gallons of spray mixture? _____

1d) 185 gallons of spray mixture? _____

1e) 220 gallons of spray mixture? _____

2. For control of ghost ants: apply a spray mixture of 2 pints of Ant Disappear™ per 100 gallons of water.

Example – How much Ant Disappear™ do you need to make 90 gallons of spray mixture?

Example answer: 3 cups and 4.8 fl. oz.

2a) 85 gallons of spray mixture? _____

2b) 70 gallons of spray mixture? _____

2c) 65 gallons of spray mixture? _____

2d) 55 gallons of spray mixture? _____

2e) 30 gallons of spray mixture? _____

3) For control of ticks apply 3 ^{gallons} ~~pints~~ of Ew! Ticks™ into 97 gallons of water (for a total of 100 gallons of mixture).

Example - How much Ew! Ticks™ would you need to make 24 gallons of spray mixture? 11.5 fluid ounces (fl oz)

Example answer: 11.5 fluid ounces

3a) 20 gallons of spray mixture? _____

3b) 18 gallons of spray mixture? _____

3c) 15 gallons of spray mixture? _____

3d) 12 gallons of spray mixture? _____

3e) 5 gallons of spray mixture? _____

Calibration problems

1) When you use your 50-gallon capacity power sprayer, each 1-gallon of spray mixture in the tank is enough to cover 800 square feet. How many gallons of spray mixture will you need to cover 20,000 square feet?

2) With a full load of spray mixture (3 gallons) in your backpack sprayer, you are able to spray 2,400 square feet of lawn grass. How much spray mixture would you need to spray only 400 square feet of lawn grass?

- a) $\frac{1}{4}$ gallon b) $\frac{1}{2}$ gallon c) $\frac{3}{4}$ gallon d) 1 gallon

3) With a full load of spray mixture (3 gallons) in your backpack sprayer, you are able to spray 4,500 square feet of bare soil. How much spray mixture would you need to spray 750 square feet of bare soil?

- a) $\frac{1}{4}$ gallon b) $\frac{1}{2}$ gallon c) $\frac{3}{4}$ gallon d) 1 gallon

Amount of pesticide for a job

1) The label directions for Mosquito Death 50W call for an application rate of 2 pounds per acre. How many pounds of Mosquito Death 50W would you need to treat 5 acres at that rate?

2) The label directions for Mosquito Death 4E call for an application rate of 2 pints per acre. How many pints of Mosquito Death 4E would you need to treat $\frac{1}{4}$ acre at that rate?

3) If you calibrated your 100-gallon capacity sprayer to apply 20 gallons of spray mixture per acre AND the label directions for Mosquito Death 50W call for an application rate of 2 pounds per acre, how many **pounds** of Mosquito Death 50W should you put into your sprayer tank to treat 4 acres at that rate?

- a) 20 pounds b) 16 pounds c) 10 pounds d) 8 pounds

4) If you calibrated your 50-gallon capacity sprayer to apply 200 gallons of spray mixture per acre AND the label directions for Mosquito Death 4E call for an application rate of 2 pints per acre, how many **pints** of Mosquito Death 4E should you put into your sprayer tank to treat $\frac{1}{8}$ acre at that rate?

- a) 1 pint b) $\frac{1}{2}$ pint c) $\frac{1}{4}$ pint d) $\frac{3}{4}$ pint

Other questions

1) How many acres is...

Example – 10 hectares? 24.71 acres

1a) 18 hectares?

1b) 130,680 square feet (ft²)?

1c) 5 hectares?

2a) What does FIFRA stand for?

2b) What happened in 1947?

2c) What happened in 1970?

3) What does the EPA (Environmental Protection Agency) do?

4) What does the California DPR (Department of Pesticide Regulation) do?

5) Explain LD₅₀.

6) What is an example of a biorational pesticide?

a) Bti b) spinosad c) pyrethrin d) Bs e) All of them

Fyfanon EW label

1) What is the active ingredient?

a) Bti b) Mercaptothion c) Malathion d) Marathon

2) Can Fyfanon EW be used on crops?

3) What is the lb ai/acre (pounds of active ingredient) rate?

4) You are using a backpack sprayer for 2.9ft/second walking speed with a 50 ft swath and using the highest acceptable pounds active ingredient (lb ai)/acre. Your flow rate is 5 fl. oz. and you have 1 gallon containers. What is the **quantity of finished spray required?**

5) Do mosquitoes develop resistance to insecticides following repeated exposure to the same chemical class?

6) Fyfanon EW can be stored in containers other than its original container.
True or False

7) It is ok to store Fyfanon EW for long periods in a room that consistently reaches 85 degrees F.
True or False

8) If you are an applicator of Fyfanon EW you are required to wear long sleeved shirt and long pants, chemical resistant gloves 14mils or greater, and shoes plus socks.
True or False