

Baker County Weed Control

1050 S. Bridge
Mailing:
1995 3rd
Baker City, Oregon 97814

Weed Sure Appreciate Your Help

Jeffrey Pettingill, Baker County Weed Supervisor

Office : 541-523-0618
Cell: 541-519-0204
Fax: 541-524-7666
jpettingill@bakercounty.org

How to measure small rate per acre herbicides:

Have you ever read the label of a herbicide and have it tells you to mix at the rate of 1.0 ounce per acre Telar XP (Chlorsulfuron) or Escort XP (Metsulfuron, MSM, etc) , but you are trying to mix into a backpack of which you know will only take 1/10th of an ounce per backpack. You look at the supplied measuring device and see that it only goes as low as $\frac{1}{3}$ of an ounce.

Should you guess, the label suggests you weigh it out on a scale. I have reloading scale that measures in grains, not ounces (yes, I do know that there are 437 grains to an ounce).

Here is an easier way to make this happen:

What you need:

1. Your calibrated rate per acre of your small tank - Backpack sprayer, hand-can, or small ATV tank: for our example we are going to go with 35 gallon per acre (typical spray to wet application)
2. What is the rate per acre from the herbicide label.
3. Quart bottle - clear, with screw off lid - I like Gatoraid bottles as they have a larger mouth, Poweraid bottles and similar work as well. Make sure you peel the label off and mark 'Herbicide' on the bottle.
4. Calculator, pad, and writing stick.

1. Put 28 oz of water in the bottle
2. Add 1.0 oz of herbicide - Telar XP or Escort XP (MSM)
3. Add 1.0 oz of household Ammonia (yes the stuff you clean with - it helps dissolve the product in the water. If the solution stays cloudy, add a little more ammonia.)
4. Shake well until properly dissolved.
5. This now measures 30 oz of mixed product

Now the math: assuming that your backpack has a 3.5 gallon capacity (some are larger, hand cans are much less):

For all applications - take the size of your tank and divide by the calibrated rate per acre - in our case $3.5 \text{ gallon tank} \div 35 \text{ gallon per acre} = 0.10 \text{ acres treated per full back pack sprayer.}$

Take the 0.10 (1/10th of an acre) X 30 (the amount in the bottle) = 3.0 oz of mixed product in a full back pack sprayer. If you only put 1.0 gallon of water in the pack for a small area then take 1/3 of the amount.

Remember - Mix what you are going to spray, spray what you mixed....