
GUIDELINE FOR SPOT SPRAYING INVASIVE WEEDS

How much Milestone VM for a 3 gallon tank?

The mix amount is dependent on your spray volume and your application rate. Please follow the following step by step procedure which will allow you to calibrate your spray volume.

STEP 1

- **When calibrating liquid or granular spraying equipment, read the entire label of herbicide in use.**
- **After reading, decide on dosage listed on the label that fits the needs for controlling that particular invasive weed.**

STEP 2

- **Clean sprayer and nozzle thoroughly.**
- **Fill spray tank with clean water.**
- **Using water only, check to assure nozzle forms a uniform spray pattern. If uneven, clean nozzle or replace as needed.**
- **Adjustable nozzles should be set and marked for that spray pattern.**

STEP 3:

- **Measure an area 18.5 feet by 18.5 feet, which is equal to 1/128th of an acre.**
- **If possible, this should be done in the field which you will be spraying.**

STEP 4:

- **Spray an area using a gentle side-to-side sweeping motion maintaining a constant pressure.**
- **Record the number of seconds to spray the area.**
- **It will take 4 – 6 passes for complete coverage.**
- **REPEAT 2X AND USE AVERAGE OF TIMES**

STEP 5:

- **Spray into a container for the average time calculated in STEP 4.**
- **Maintain constant pressure.**

STEP 6:

- **Measure number of fluid ounces of water collected in STEP 5.**
- **The number of fluid ounces is equal to the number of gallons of water per acre the sprayer is delivering.**
- **Volume sprayed in fluid ounces = GPA (water)**

STEP 7:

- **Find your spray volume in gallons per acre (GPA) calculated in STEP 6.**
- **Read across chart to determine amount of herbicide to add to each gallon of water based on the recommended herbicide application rate.**

CHART 1: Milestone VM (in cc) per 1 gallon of water

GPA	5 FL OZ PER ACRE	7 FL OZ PER ACRE
20	7.5	10.5
30	5.0	7.0
40	3.8	5.3
50	3.0	4.2
60	2.5	3.5
70	2.0	3.0
80	1.9	2.3
90	1.7	2.3
100	1.5	2.1

CONVERSION: (1 tsp = 5cc) (30cc = 1 FL OZ) (1cc = 1 ml) (3 tsp = 1 Tbsp)
(2 Tbsp = 1 FL OZ)

CHART 2: Milestone VM (in FL OZ) per 20 gallons of water

GPA	5 FL OZ PER ACRE	7 FL OZ PER ACRE
20	5.0	7.0
30	3.3	4.7
40	2.5	3.5
50	2.0	2.8
60	1.7	2.3
70	1.4	2.0
80	1.3	1.8
90	1.1	1.6
100	1.0	1.4

CONVERSION: Surfactant – Milestone rate x 3 Methylated Seed Oil (MSO)

EXAMPLE: 7 oz/ac x 3 = 21 oz MSO

Example: Milestone VM for 3 gallon tank

- **Spray volume is 40 GPA**
- **You want to apply 5 FL OZ of Milestone VM per acre**
- **Chart 1 – 40 GPA application rate for 5 FL OZ = 3.8cc**
- **Multiply 3.8cc x 3 (gallons of water) = 11.4cc 3 gallon mix**

Common Conversion Charts

1 ACRE =	43,560 SQ. FT.
31.5' X 31.5' =	1,000 SQ. FT.
1 GALLON =	128 OZ.
1 GALLON =	4 QTS.
1 GALLON =	8 PINTS
1 PINT =	16 FL. OZ.
1 QUART =	32 FL. OZ.

***MALTA STAR*THISTLE – short brownish/ purple spines located at base of yellow flower.**



YELLOW STARHISTLE – long white spines at base of yellow flower.



RUSSIAN KNAPWEED – roots typically dark brown/ black. Cone shaped pink, white, or lavender flower.



WHITETOP – leaves gray-green. Flowers small and four petaled.



BULL THISTLE – leaves are larger than native species. Deep purple flower heads.



Spot Spraying Reference Guide Provided by:

**Gila River NRC
Coronado RC&D
UA Cooperative Extension**



***The Arizona Water Protection Fund
Commission has funded all or a portion of
this project.***