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Measures and Conversion 108-109

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108 MEASURES AND CONVERSION

HERBICIDES - In general, adjuvants are not needed for PREemergence (soil-active) herbicide applications, and adjuvants are recommended or required for use with POSTemergence herbicide applications.

COC = crop oil concentrate, NIS = Nonionic surfactant

Callisto (*mesotrione*):

- Chemigation postemergence = 1 - 4 pt/A NIS or COC
- Spot-treatments postemergence:
 - NIS (0.25% finished spray volume) = 2 tsp or 0.3 oz/gal
 - COC (1% finished spray volume) = 2.5 Tbsp or 1.3 oz/gal

QuinStar (*quinclorac*): Chemigating postemergence

- 2 pt/A COC

Poast (*sethoxydim*): postemergence (grass herbicides don't have and preemergence activity)

It is **highly recommended** to use an adjuvant with grass herbicides.

- Boom or aerial applications - 2 pt/A COC
- Spot-treatment COC (1% finished spray volume) = 1.3 oz or 2.5 TBsp / gal

* * **Intensity One** (*clethodim*) is the **ONLY grass herbicide** that has 24C for chemigation!

It is **highly recommended** to use an adjuvant. If not included, you will have poor efficacy!

Chemigation postemergence = 1 – 4 pt/A NIS

Select Max, Intensity, and others (*clethodim*) **NOT for chemigation**

It is **highly recommended** to use an adjuvant with grass herbicides!

- SelectMax and Intensity One
 - Spot-treatment/Boom/Mist blower/Aerial, etc. postemergence = NIS at 0.25% v:v
- Intensity
 - Spot-treatment/Boom/Mist blower/Aerial, etc. postemergence = COC at 1% v:v

MEASURES AND CONVERSIONS CHART

Prepared by Hilary A. Sandler

Liquid Measures

1 oz = 2 tablespoons = 6 teaspoons = 29.6 ml
 1 cup = 8 oz
 1 pint = 2 cups = 16 oz
 1 quart = 2 pints = 4 cups = 32 oz
 1 gallon = 4 quarts = 8 pints = 16 cups = 128 oz
 1 cup = 237 ml
 1 pint = 473 ml = 0.473 liters
 1 quart = 946 ml = 0.946 liters
 1 gallon = 3.78 liters = 3,785 ml
 1 acre-foot water = 326,000 gallons
 0.1 inch water per acre = 2717 gallons
 1 fl. oz/gal = 7.81 ml/liter

Mass Conversions

1 oz = 28.4 grams
 1 lb = 454 g = 0.454 kg
 1 kg = 2.2 lb = 35.2 oz
 1 oz/gal = 7.49 g/liter

Temperature Conversions

$^{\circ}\text{F} = (9/5 ^{\circ}\text{C}) + 32$ (guesstimate: double $^{\circ}\text{C}$, add 30)
 $^{\circ}\text{C} = 5/9 (^{\circ}\text{F}-32)$ (guesstimate: subtract 30 and halve)

Length and Area Conversions

1 acre = 43,560 sq. ft = 0.405 hectares
 1 hectare = 2.47 acres
 1 meter = 1.09 yards = 3.28 feet = 39.4 inches
 1 yard = 3 feet = 36 inches = 0.914 meters
 1 cm = 0.39 inches
 1 inch = 2.54 cm
 1 rod = 16.5 ft
 1 sq. rod = 272.2 ft²
 1 square meter = 10.76 ft²
 1 cubic meter = 35.29 cubic feet = 1.30 cubic yards
 1 inch layer of sand per acre = 134 cubic yards

Other Conversions

pt/A * 0.473 = liters/A
 pt/A * 1.167 = liters/ha
 lb/A * 0.454 = kg/A
 lb/A * 1.12 = kg/ha
 gal/A * 3.78 = liter/A
 gal/A * 9.35 = liter/ha
 ton/A * 2,242 = kg/ha
 bbl/A * 0.112 = Mg/ha
 g/ft² * 0.958 = bbl/A
 1 fl. oz/A * 73.1 = ml/ha