

SPRAY FORMULATIONS - 2019

Products for Smaller Rose Gardens (25 or fewer plants)

<u>Problem / Solution</u>	<u>Toxicity</u>	<u>Amount/Gal</u>	<u>Notes</u>	<u>MOA*</u>
<u>Blackspot and Powdery Mildew</u>				
Bayer Disease Control for Roses	Caution	1 1/2 Tablespoons	Systemic action for 7 to 14 days	1
Daconil Fungicide Concentrate 29.6%	Warning	2 teaspoons	Control of blackspot. May burn foliage in hot weather.	6
Fertilome Liquid Systemic	Warning	2 Tablespoons	Effective for 10 days (same as Banner Maxx)	1
Fertilome Landscape & Garden Fungicide	Warning	6 teaspoons	Helps eradicate outbreak of blackspot (same as Daconil)	6
Immunox	Warning	2 Tablespoons	Multipurpose, Use every 10-14 days	1
Maneb (wetable powder)	Caution	1 1/2 Tablespoons	Helps eradicate blackspot, tends to leave a residue on foliage	6
Bonide Mancozeb Flowable with Zinc	Caution	1 3/4 Tablespoons	Controls/Eradicates blackspot and cercospora leaf spot	6
Ortho Garden Disease Control	Warning	2 teaspoons	Helps eradicate outbreak of blackspot (formerly labeled as Daconil)	6
Ortho Rose & Shrub Disease Control	Danger	1 Tablespoon	Use weekly for control (formerly labeled as Funginex)	1
Manzate	Caution	1 Tablespoon	Can be used at 3 day interval to eliminate blackspot	6
Bonide Infuse	Warning	2 Tablespoons	Effective for 10 to 14 days (same as Banner Maxx)	1
Bonide Mancozeb Flowable	Caution	1 Tablespoon	Helps eradicate outbreak of blackspot (same as Pentathlon)	6
Dithane M45 (wetable powder)	Caution	1 1/2 Tablespoons	Helps prevent and eradicate blackspot with little residue on foliage	6
Organicide Plant Doctor	Caution	1/2 to 1 1/8 Ounces	Plant host defense inducer primarily effective for downy mildew	6
OHP 6672 50% WP	Caution	1 teaspoon	Wetable powder generic Cleary's 3336F with same properties	2
Honor Guard PPZ	Warning	1/3 teaspoon	Generic Banner Maxx with systemic action for 14-21 days	1

Insects (Use only when necessary)

Bayer Advanced Complete Insect Killer	Caution	1 Tablespoon	Broad spectrum with long life (Merit + Talstar)	2&4
Bayer Rose & Flower Insect Killer Conc	Caution	1 Tablespoon	Broad spectrum with long life (Merit + Tempo)	2&4
Conserve SC	Caution	1/2 teaspoon	Spinosad , excellent for thrips, locally systemic	4
Bonide Captain Jack's Deadbug Conc	Caution	4 Tablespoons	Spinosad, good for thrip	4
Garden Safe Rose & Flower Insect Killer	Caution	Ready to Use	Broad spectrum for aphids, Japanese Beetles and mites	2
Orthene (9.4% EC)	Caution	2 Tablespoons	(Liquid) Use as needed to eliminate thrips, aphids, etc.	1
Orthene (97% WSP)	Caution	1/2 to 1 teaspoon	(Powder) Use as needed to eliminate thrips, aphids, etc.	1
Ortho Max Lawn & Garden Insect Killer	Caution	3 Tablespoons	Contact insecticide with some mite control. (Same as Talstar)	2
Ortho Malathion Plus	Warning	2 to 3 teaspoons	Works well for aphids	1
Spectracide Garden Insect Killer Conc	Caution	4 Tablespoons	Also available in RTU (Ready to Use)	2
Sevin (over the counter)	Caution	4 teaspoons	Broad spectrum product that will kill Japanese Beetles	1
Zenith 75 WSP	Caution	1/8 teaspoon	Generic form of Merit for aphids, whiteflies & Japanese Beetles	4

Spider Mites

Lucid (liquid)	Warning	1/4 teaspoon	Translaminar, kills adult mites only , use 1/2 tea/gal for severe case	3
Minx 2 (liquid)	Caution	1/4 teaspoon	Translaminar, kills adult mites only , use 1/2 tea/gal for severe case	3
TetraSan (wetable powder)	Caution	1/2 teaspoon	Translaminar that kills eggs and nymphs, combine with Avid	5
Forbid 4F	Caution	1/4 teaspoon	Miticide with translaminar activity for all life stages	6

Combination Sprays for Insects and Diseases

Bayer All in One Rose & Flower Care	Caution	4 TBSP/pint/plant	Pour pint around plant monthly. Also contains 9-14-9 fertilizer.	1
Bayer 2 in 1 Systemic Rose & Flower Care	Warning	Sprinkle 2 oz/plant	Granular 8-12-4 fertilizer with systemic insect control	1
Bayer 3-in-1	Caution	5 1/4 Tablespoons	Insect, disease and mite control all in one.	1,2&4
Bonide Rose Shield	Caution	3 Ounces	Systemic insect and disease prevention for 7-14 days	1,2&4
Bonide Rx 3 in 1	Caution	1 Ounce	Organic Neem Oil fungicide, insecticide, and miticide spray	6
Bonide Rx Systemic Drench	Caution	2 oz/quart/plant	Mix and pour fungicide and insecticide for up to 6 weeks	1&4
Fertilome Rose, Flower & Veg Spray	Caution	2 Tablespoons	Extract of Neem oil. Use as preventative for insects & disease.	6
Immunox Plus Insect & Disease Control	Caution	4 Tablespoons	All in one insect and disease control	1&2
Orthenex Insect & Disease Control	Danger	2 Tablespoons	All in one. Use only as needed.	1
Organicide 3 -n 1 Garden Spray	Caution	3 Ounces	Extract of Sesame oil (5%) with fish oil (95%)	6
Garden Safe Fungicide 3	Caution	2 Tablespoons	Organic all in one insect & disease control for 7-14 days.	6

Spray Adjuvants

Cadence	Caution	1/2 teaspoon	Penetrant/wetter/spreader for systemic and translaminar pesticides
Binde	Caution	1/2 - 1 teaspoon	Extender/sticker/spreader for all pesticides

<u>Weights and Measures</u>	<u>Definitions</u>
Equivalents	
3 tsp = 1 TBSP	TBSP = Tablespoon
2 TBSP = 1 Fluid Oz.	tsp = teaspoon
4 TBSP = 12 tsp = 1/4 Cup = 2 fluid oz.	Gal = Gallon
1 Cup = 16 TBSP = 8 Fluid Oz.	
32 TBSP = 2 Cups = 1 Pint	
64 TBSP = 4 Cups = 2 Pints = 1 Quart	
1 oz = 3 TBSP dry weight (approximately)	

<u>Toxicity Category</u>	<u>Signal Word</u>
I - Highly Toxic (1)	DANGER
II - Moderately Toxic	WARNING
III - Slightly Toxic	CAUTION
IV - Relatively non-toxic	CAUTION

Note (1) - Pesticides in this category with signal word DANGER (skull & crossbones)
 POISON in red are acutely toxic in oral, dermal and inhalation exposures. If signal word is DANGER by itself, it means that toxicity rating is based on eye and skin irritation.

Please Note: Before using any chemical always READ THE LABEL, wear protective clothing, and think safety.

* MOA (Mode of Activity) for detailed explanation see associated article at www.chattanoogaarose.org

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