

SPRAY FORMULATIONS - 2008

<u>Problem/ Solution</u>	<u>Toxicity</u>	<u>Amount/Gal</u>	<u>Notes</u>	<u>MOA*</u>
<u>Blackspot and Powdery Mildew</u>				
Ortho Rose & Shrub Disease Control	Danger	1 Tablespoon	Use weekly for control (formerly known as Funginex)	1
Bayer Disease Control for Roses	Caution	1 1/2 Tablespoons	Systemic action for up to 14 days	1
Immunox	Warning	2 Tablespoons	Multipurpose, Use every 10-14 days	1
Cleary's 3336F Plus	Caution	1 teaspoon	Systemic action for 7-10 days	2
Compass (50 WDG)	Caution	1/4 teaspoon	Translaminar action for 14 days, alternate with another product	5
Banner Maxx (14.3%)	Warning	1/3 teaspoon	Systemic action for 14-21 days	1
Honor Guard PPZ	Warning	1/3 teaspoon	Systemic action for 14-21 days	1
Eagle 20 EW	Caution	1/3 - 2/3 teaspoons	Systemic that is a safer alternative to Banner Maxx	1
Zyban	Caution	1/2 Tablespoon	Same active ingredients as Cleary's 3336F and Manzate	2&6
Fertilome Liquid Systemic	Warning	2 Tablespoons	Effective for 10 days (same active ingredient as Banner)	1
Daconil Ultrex (WDG)	Danger	1/2 Tablespoon	May burn foliage when used in hot weather	6
Fertilome Lawn & Garden Fungicide	Warning	6 teaspoons	Same active ingredient as Daconil, may burn foilage in hot weather	6
Alliette	Caution	1 1/2 Tablespoons	Treatment for Downy Mildew	6

Blackspot

Mancozeb Flowable	Caution	1 Tablespoon	Also somewhat effective for Downy Mildew	6
Pentathlon (same as Manzate)	Caution	1 Tablespoon	Can be used at 3 day interval to eliminate disease	6
Maneb (wetttable powder)	Caution	1 1/2 Tablespoons	Tends to leave a residue on foliage	6

Severe Powdery Mildew

Rubigan (Fenarimol)	Caution	1/4 teaspoon	For severe case use 1/2 teaspoon/gallon every 14 days	1
E-Rase Concentrate	Caution	4 teaspoons	Will remove Powdery Mildew from foliage, will not control	

Botrytis (blooms develop brown edges and appear to rot, primarily in spring and fall)

Chipco 26019	Caution	1 to 2 teaspoons	Use 1 teaspoon to prevent and 2 teaspoons to eradicate	3
Decree 50% WDG	Warning	1 teaspoon	Use every 14 days during cool, wet weather	1

Insects (Use only when necessary)

Orthene (75% SP)	Caution	2 teaspoons	(Powder) Use as needed to eliminate thrips, aphids, etc.	1
Orthene (9.4% EC)	Caution	2 Tablespoons	(Liquid) Use as needed to eliminate thrips, aphids, etc.	1
Malathion EC	Caution	2 teaspoons	Recommended for aphids	1
Mavrik Aquaflo	Caution	1/4 teaspoon	Use for aphids & thrips. Use 1/2 teaspoon for severe infestation	2
Bayer Rose & Flower Insect Killer	Caution	1 Tablespoon	Broad spectrum with long life (contains Merit & Tempo)	2&4
Merit 75 WSP	Caution	1/8 teaspoon	Excellent systemic for thrips, whiteflies, & Japanese Beetles	4
Talstar Flowable or Bifen I/T	Caution	1/2 Tablespoon	Contact miticide and insecticide	2
Tempo	Caution	1/8 teaspoon	Effective for aphids, thrips, Japanese Beetles	2
Conserve SC	Caution	1/2 teaspoon	Excellent for thrips, slightly systemic	4
Sevin (over the counter)	Caution	4 teaspoon	Japanese Beetles, mix with Tempo to prevent resistance by other insects	1

Spider Mites

Avid	Warning	1/4 teaspoon	Translaminar, kills adult mites only, use 1/2 tea/gal for severe case	3
Stirrup M		1/4 teaspoon	Add to any miticide that attacks adults to increase effectiveness	
Floramite	Caution	1/4 - 1/2 teaspoon	Kills adult mites and eggs, use with Avid up to 3 times per year	3
TetraSan	Caution	1/2 teaspoon	Translaminar that kills eggs and nymphs, combine with Avid	5
Forbid 4F	Caution	1/4 teaspoon	Miticide/Ovicide with translaminar activity for all life stages.	6
Akari 5SC	Warning	2 teaspoon	Contact miticide that addresses all life stages	3

Combination Sprays for Insects and Diseases

Orthenex Insect & Disease Control	Danger	2 Tablespoons	All in one. Good for small gardens	1
Bayer 3-in-1	Caution	5 1/4 Tablespoons	Insect, disease and mite control all in one. Good for small gardens	1,2&4
Fertilome Rose, Flower & Veg Spray	Caution	2 Tablespoons	Extract of Neem oil. Use as preventative for insects & disease.	6
Immunox Plus	Caution	4 Tablespoons	All in one. Good for small gardens	1&2

Weights and Measures

<u>Equivalents</u>	<u>Definitions</u>
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.chattanooga.org

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