

## Personal Protective Equipment Reference Guide for Low-Volume Citrus Applicators<sup>1</sup>

CH203

S. H. Futch, L. L. Stelinski, L. M. Diepenbrock, and J. D. Burrow

Product* (EPA registration #)	<b>Agri-Flex</b> ® (100-1350)	<b>Agri-Mek® SC</b> (100-1351)	<b>Danitol® 2.4 EC</b> (59639-35)	<b>Delegate WG®</b> (62719-541)	Dimethoate 4EC (19713-231)  Applicators & other handlers	Exirel <sup>TM</sup> (352–859)	Imidan 70- W® (10163-169)	
Minimum spray volume/acre	Aerial: 10 gallons Ground: sufficient for thorough coverage	Aerial: 10gal/acre (for CRM and ACP)	Aerial: 5 gallons Ground: 50–500 gallons	Ground: 2 gallons	Aerial: 5-10 gallons Ground (concentrate): sufficient for thorough coverage	Ground: 30 gallons, or less than 2 gallons when particle size >90 microns	Ground: 125 gallons	
Long-sleeved shirt and long pants	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Coveralls	N/R	Yes	N/R	Yes	N/R	N/R	N/R	
Chemical-resistant gloves**	Yes	Yes	Yes	N/R	Yes	Yes	When mixing and loading	
Shoes and socks	Yes	Yes <sup>a</sup>	Yes	Yes	Yes <sup>a</sup>	Yes	Yes	
Protective eyewear	N/R	N/R	Yes	N/R	Yes	N/R	N/R	
Chemical-resistant headgear	N/R	N/R	N/R	N/R	N/R	N/R	N/R	
Chemical-resistant apron	N/R	N/R	N/R	N/R	When mixing, loading, or cleaning up spills or equipment	N/R	When mixing and loading	
Respirator	N/R	N/R	N/R	N/R	Yes	N/R	N/R	
REI <sup>b</sup>	12 hours	12 hours	24 hours	4 hours	10 days	12 hours	3 days	
PHI <sup>b</sup>	7 days	7 days	1 day	1 day	15 days	1 day	7 days	
RUP <sup>b</sup>	Yes	Yes	Yes	No	Yes	No	No	
Field posting (Worker protection stds require posting if REI > 48 hrs)	N/R	N/R	N/R	N/R	Yes	N/R	Yes	

<sup>\*</sup>Labels vary between products and manufacturers. Read and follow directions on product label. Other formulations of same ingredients are also registered.

bREI (restricted entry interval); PHI (preharvest interval); RUP (restricted-use pesticide); N/R (not required)

## THE LABEL IS THE LAW!

Refer to the label for specific crop use requirements.

This guide does not supersede the label.

EPA SLN: Danitol ® FL-09003; Delegate ® FL-09009; Micromite FL-090090 001; Mustang FL-090011 for ULV ground, FL-100002 for ULV by air; Imidan FL-01006

<sup>\*\*</sup>Type of chemical-resistant gloves varies per the label

<sup>&</sup>lt;sup>a</sup>Chemical-resistant footwear plus socks

## PERSONAL PROTECTIVE EQUIPMENT REFERENCE GUIDE FOR LOW-VOLUME CITRUS APPLICATORS

Product* (EPA registration #)	<b>Malathion 5</b> (9779-5)	<b>Malathion 5EC</b> (19713- 217)	Micromite® 80 WGS (400-487) Applicators & other handlers	Movento MPC® (264-1065)	<b>Mustang®</b> (279-3126)		Portal® XLO (71711-40)	Sevin® XLR PLUS (61842-37)	Sivanto 200 SL <sup>TM</sup> (264-1141)
					<b>Handlers</b> (diluted)	Handlers (concentrate)			
Minimum spray volume/acre	Non ULV: 30 gallons Aerial: 5 gallons	Ground: 3 gal; Aerial: 2 gal	Aerial: 5-20 gallons Ground: 2-5 gal, droplet size of 90 microns or larger	Aerial: 10 gallons Ground: 30 gallons	Ground: 100 gallons	Aerial: 2 gallons Ground: 2 gallons, droplet size of 90 microns or greater	Aerial: 10 gallons Ground: 100 gallons	Ground: sufficient volume for coverage; Aerial: 10 gal	Aerial: 2 gallons Ground: 2.5 gallons
Long-sleeved shirt and long pants	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Coveralls	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Chemical-resistant gloves**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Shoes and socks	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Protective eyewear	Yes	Yes	N/R	N/R	N/R	Yes	Yes	N/R	N/R
Chemical-resistant headgear	For air blast applicators	N/R	N/R	N/R	N/R	N/R	For overhead exposure	N/R	N/R
Chemical-resistant apron	For mixing and loading ULV formulations	For mixing and loading ULV formulations	N/R	N/R	N/R	N/R	No	When mixing, loading, or cleaning up spills or equipment	N/R
Respirator	N/R	N/R	N/R	N/R	N/R	N/R	yes when handling	mixers and loaders supporting aerial applications	N/R
REI <sup>b</sup>	12 hours	12 hours	12 hours	24 hours	12 hours	12 hours	12 hours	12 hours	4 hours
PHI <sup>b</sup>	7 days	7 days	21 days	1 day	1 day	1 day	14 days	5 days	1 day
RUP <sup>b</sup>	No	No	Yes	No	Yes	Yes	No	No	No
Field posting	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R

<sup>1.</sup> This document is CH203, one of a series of the Horticultural Sciences Department, UF/IFAS Extension, Original publication date September 2009, Revised August 2018

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. For more information on obtaining other UF/IFAS Extension publications, contact your county's UF/IFAS Extension office.

<sup>2.</sup> S. H. Futch, multi-county citrus Extension agent; L. L. Stelinksi, associate professor; L.M. Diepenbrock, associate professor, Department of Entomology; and J. D. Burrow, Extension program manager, Citrus Research and Education Center; UF/IFAS Extension Gainesville, FL 32611.