

## **EPA Worker Protection Standards for Commonly Used Pesticides for Flue-Cured Tobacco 2023**

T. David Reed, Extension Agronomist, Tobacco

The US-EPA Worker Protection Standard is a regulation that requires actions to be taken to protect agricultural workers from the risk of pesticide-related illness or injury. To protect your workers, you must be aware of the Worker Protection Standard (WPS) and know how to comply with its requirements. To plan effectively, you must also understand how compliance might affect your farming operation.

The Standard requires that employers provide for their workers and pesticide applicators in three areas. 1) Training on pesticide safety. Information about the specific pesticides used on the farm must be provided. Much of this information must be posted in a central location; including specifics on recent pesticide applications (location of application, name of the pesticide, EPA registration number and active ingredient, time and date of application, restricted entry interval, (REI) and the time when workers may reenter the field). 2) Protection against exposure must be ensured. Employers must provide personal protective equipment and be sure it is properly used and cleaned. They must also be sure that workers are warned about treated areas (through oral warning, posting of field, or both) and that workers do not enter treated fields during restricted entry intervals (with some very specific exceptions). This may require careful scheduling of pesticide application and field work so that they do not conflict. Personal protective equipment (PPE) requirements vary from pesticide to pesticide and may be different for applicator/handlers and mixer/loaders. Protective equipment is also required for entry into fields during the restricted-entry interval. Labels should be checked carefully for specific requirements. Restricted entry intervals also vary by pesticide, as stated on labels. 3) Employers must provide ways for their workers to mitigate or minimize the impacts of pesticide exposure. This includes making available decontamination sites and emergency assistance in case of exposure.

The following table lists products, registration numbers, common names, restricted entry intervals, and posting/notification requirements for commonly used pesticides and growth regulators labeled for tobacco. The label may include more detailed information regarding PPE requirements. The information in this table is presented in good faith as a **reference only**. This information does not take the place of the product label; changes to label information can occur without notice. ***Always read and follow label directions.*** The list does not contain all products labeled for use on tobacco, but should include the vast majority of products used on tobacco in Virginia.

**DISCLAIMER:** The following information and worker protection standards are presented in good faith for your reference. This information does not take the place of the product label; changes to product label information can occur without notice. Always read and follow label directions.

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Acephate 90 WDG</b> (acephate) EPA Reg. No. 34704-1051 Loveland Products	Caution	24 hrs.	long-sleeved shirt and long pants; waterproof gloves; shoes plus socks; chemical resistant headgear for overhead exposure	coveralls; waterproof gloves; shoes plus socks; chemical resistant headgear for overhead exposure	either	either
<b>Acephate 97UP</b> EPA Reg. No. 70506-8 UPL NA Inc.						
<b>Actara</b> (thiamethoxam) EPA Reg. No. 100-938 Syngenta Crop Protection	Caution	12 hrs.	long-sleeved shirt, waterproof gloves, shoes plus socks	coveralls, waterproof gloves, shoes plus socks	either	either
<b>Actigard® 50WG</b> (acibenzolar-S-methyl) EPA Reg. No. 100-922 Syngenta Crop Protection	Caution	12 hrs.	long-sleeved shirt and long pants; chemical-resistant gloves made of any waterproof material; shoes plus shoes	coveralls, chemical-resistant gloves made of any waterproof material shoes plus socks	either	either
<b>Admire® Pro</b> (imidacloprid) EPA Reg. No. 264-827 Bayer CropScience	Caution	12 hrs.	long-sleeved shirt and long pants; waterproof gloves; shoes plus socks	coveralls; waterproof gloves; shoes plus socks	either	either
<b>Agree®</b> ( <i>Bacillus thuringiensis</i> var. <i>aizawai</i> strain) EPA Reg. No. 70051-47 Certis USA	Caution	4 hrs.	long-sleeved shirt and long pants; waterproof gloves; shoes plus socks; protective eyewear; dust/mist filtering respirator	coveralls; waterproof gloves; shoes plus socks; protective eyewear	either	either

WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

113

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Agri-Mycin 17</b> (streptomycin sulfate) EPA Reg. No. 55146-96 Nufarm Americas Inc.	Caution	12 hrs.	long-sleeved shirt and long pants; chemical-resistant gloves made of any waterproof material; shoes plus socks	coveralls over long-sleeved shirt and long pants; chemical-resistant gloves made of any waterproof material; shoes and chemical-resistant footwear	either	either
<b>Agri-Mycin 50</b> (streptomycin sulfate) EPA Reg. No. 55146-98 Nufarm Americas Inc.	Caution	12 hrs.	long-sleeved shirt and long pants; chemical-resistant gloves made of any waterproof material; shoes plus socks; protective eyewear; NIOSH-approved particulate respirator with N, R, or P filter.	coveralls over long-sleeved shirt and long pants; chemical-resistant gloves made of any waterproof material; shoes and socks; protective eyewear.		
<b>Aim EC</b> (carfentrazone) EPA Reg. No. 279-3241 FMC Corporation	Caution	12 hrs.	long-sleeved shirt and long pants; waterproof gloves; shoes plus socks	coveralls; waterproof gloves; shoes plus socks	either	either

## WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Aliette WDG Fungicide</b> (aluminum tris (o-ethylphosphonate) EPA Reg. No. 264-516 Bayer CropScience	Caution	12 hrs.	long-sleeved shirt & long pants; waterproof gloves, shoes plus socks; protective eyewear	coveralls, waterproof gloves, shoes plus socks; protective eyewear	either	either
<b>Alias ® 2F</b> (imidacloprid) EPA Reg. No. 66222-203 ADAMA	Caution	12 hrs.	long-sleeved shirt and long pants, waterproof gloves, shoes plus socks, and chemical resistant headgear for overhead exposure	coveralls, chemical resistant gloves and shoes plus socks	either	either
<b>Anarchy ® 30SG</b> (acetamiprid) EPA Reg. No. 34704-1098 Loveland Products	Caution	12 hrs.	long-sleeved shirt and long pants, waterproof gloves, shoes plus socks, and chemical resistant headgear for overhead exposure	coveralls, chemical resistant gloves and shoes plus socks	either	either
<b>Anarchy 70WP</b> EPA Reg. No. 34704-1096						
<b>Assail ® 30SG</b> EPA Reg. No. 8033-36-70506	Caution	12 hrs.	long-sleeved shirt and long pants, waterproof gloves, shoes plus socks, and chemical resistant headgear for overhead exposure	coveralls, chemical resistant gloves and shoes plus socks	either	either
<b>Assail ® 70WP</b> EPA Reg. No. 8033-23-70506 UPL NA Inc.						
<b>Blackhawk</b> (spinosad) EPA Reg. No. 62719-523 Dow AgroSciences	Caution	4 hrs.	long-sleeved shirt and long pants; shoes plus socks; chemical-resistant gloves	coveralls; chemical-resistant gloves; shoes plus socks	either	either

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Boll Buster®</b> (ethephon) EPA Reg. No. 34704-856 Loveland Products	Danger	48 hrs.	coveralls over short-sleeved shirt and short pants; waterproof gloves; protective eyewear; chemical resistant footwear plus socks; chemical resistant headgear for overhead exposures; chemical resistant apron when cleaning equipment	coveralls over short-sleeved shirt and short pants; waterproof gloves; protective eyewear; chemical resistant footwear plus socks; chemical resistant headgear for overhead exposures	yes	yes
<b>Brigadier</b> (bifenthrin + imidacloprid) EPA Reg. No. 729-3332 FMC Corporation	Warning	12 hrs.	long-sleeved shirt and long pants; shoes plus socks	coveralls, chemical-resistant gloves, such as Barrier Laminate or Nitrile rubber or Neoprene rubber or Vitron, and shoes plus socks	either	either
<b>Capture LFR 1.5EC</b> (bifenthrin) EPA Reg. No. 279-3302 FMC Corporation	Warning	12 hrs.	long-sleeved shirt and long pants, chemical-resistance gloves, such as Barrier Laminate or Nitrile rubber or Vitron and shoes plus socks and protective eyewear	coveralls, chemical-resistant gloves, such as Barrier Laminate or Nitrile rubber or Neoprene rubber or Vitron, and shoes plus socks	either	either

## WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Command® 3ME</b> EPA Reg. No. 279-3158 FMC Corporation	Caution	12 hrs.	long-sleeved shirt and long pants; chemical-resistant gloves, such as Barrier Laminate, Butyl or Nitrile rubber, or Viton; shoes plus socks.	coveralls; chemical-resistant gloves, such as Barrier Laminate, Butyl or Nitrile rubber or Viton; and shoes plus socks.	either	either
<b>Coragen 1.67SC</b> (chlorantraniliprole) EPA Reg. No. 352-729 DuPont	None	4 hrs.	long-sleeved shirt and long pants; shoes plus socks	shirt, pants; and shoes	either	either
<b>Crymax®</b> ( <i>Bacillus thuringiensis</i> ) EPA Reg. No. 70051-86 Certis USA	Caution	4 hrs.	long-sleeved shirt and long pants; shoes plus socks; and dust/mist filtering respirator	coveralls; waterproof gloves; shoes plus socks; and protective eyewear	either	either

WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Deadline Bullets</b> (metaldehyde) EPA No. 5471-507 Amvac	Caution	12 hrs.	long-sleeved shirt and long pants; shoes plus socks	long-sleeved shirt; shoes plus socks	either	either
<b>Denim</b> (emamectin benzoate) EPA Reg. No. 100-903 Syngenta Crop Protection	Danger	48 hrs.	coveralls worn over long-sleeved shirt and long pants, chemical- resistant gloves, chemical-resistant footwear plus socks, protective eyewear, chemical-resistant apron when cleaning equipment, mixing or loading.	coveralls over long-sleeved shirt and long pants, chemical- resistant gloves, chemical- resistant footwear plus socks.	either	either
<b>Devrinol 2-XT</b> (napropamide) EPA Reg. No. 70506-301 UPL NA Inc.	Danger	12 hrs.	long-sleeved shirt and long pants; chemical-resistant gloves; shoes plus socks	coveralls; chemical-resistant gloves made of any waterproof material; shoes plus socks; protective eye wear.	either	either
<b>Devrinol DF-XT</b> (napropamide) EPA Reg. No. 70506-36 UPL NA Inc.	Caution	12 hrs.	long-sleeved shirt and long pants; chemical-resistant gloves, shoes plus socks	coveralls; chemical-resistant gloves made of any waterproof material; shoes plus socks; protective eye wear.	either	either
<b>Exirel</b> (cyantraniliprole) EPA Reg No. 279-9615 FMC Corporation	Caution	12 hrs.	long-sleeved shirt and long pants; chemical-resistant gloves, shoes plus socks	coveralls; chemical-resistant gloves made of any waterproof material; shoes plus socks; protective eye wear.	either	either

## WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Dipel® DF</b> ( <i>Bacillus thuringiensis</i> ) EPA Reg. No. 73049-39 Valent	Caution	4 hrs.	long-sleeved shirt and long pants; waterproof gloves; shoes plus socks; dust/mist filtering respirator	coveralls; waterproof gloves; shoes plus socks	either	either
<b>Dipel® ES</b> EPA Reg. No. 73049-17						
<b>Dipel 10G</b> EPA Reg. No. 73049-14						
<b>Drexalin Plus</b> (flumetralin) EPA Reg. No. 19713-510 Drexel Chemical	Caution	24 hrs.	long-sleeved shirt and long pants; socks, shoes, and chemical- resistant gloves made of any waterproof material such as Viton or barrier laminate and chemical- resistant apron when cleaning equipment, mixing or loading	long-sleeved shirt and long pants, socks; shoes, and chemical-resistant gloves made of any waterproof material, chemical-resistant headgear for overhead exposure	either	either
<b>Ethephon 6</b> (ethephon) EPA Reg. No. 66330-250 UPL NA Inc.	Danger	48 hrs.	coveralls over short-sleeved shirt and short pants; waterproof gloves; protective eyewear; chemical resistant footwear plus socks; chemical resistant headgear for overhead exposures; chemical resistant apron when cleaning equipment	coveralls over short-sleeved shirt and short pants; waterproof gloves; protective eyewear; chemical resistant footwear plus socks; chemical resistant headgear for overhead exposures	yes	yes
<b>Fair 85®</b> (C6 - C12 fatty alcohols) EPA Reg. No. 51873-7 Fair Products	Warning	24 hrs.	long-sleeved shirt and long pants; chemical resistant gloves such as Barrier Laminate or butyl rubber or nitrile rubber or neoprene or polyvinyl chloride or Viton; shoes plus socks; protective eyewear	coveralls; chemical resistant gloves such as Barrier Laminate or butyl rubber or nitrile rubber or neoprene or polyvinyl chloride or Viton; shoes plus socks; protective eyewear	either	either
<b>Fair Plus®</b> (maleic hydrazide) EPA Reg. No. 51873-2 Fair Products	Caution	12 hrs.	long-sleeved shirt and long pants; waterproof gloves; shoes plus socks; protective eyewear	coveralls; waterproof gloves; shoes plus socks; protective eyewear	either	either



Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>FireWall 17 WP</b> (streptomycin sulfate) EPA Reg. No. 80990-4 AgroSource Inc.	Caution	12 hrs.	long-sleeved shirt and long pants; chemical-resistant gloves made of any waterproof material; shoes plus socks; MSHA/NIOSH approved dust/mist respirator with any R, P, or HE filter	coveralls over long-sleeved shirt and long pants; chemical- resistant gloves made of any waterproof material; shoes plus socks	either	either
<b>FluPro</b> (flumetralin) EPA Reg. No. 400-600 UPL NA Inc.	Warning	24 hrs.	long-sleeved shirt and long pants; chemical-resistant gloves made of any waterproof material such as nitrile, butyl, neoprene, or barrier laminate; chemical resistant footwear plus socks	long-sleeved shirt and long pants; chemical-resistant gloves made of any waterproof material such as nitrile, butyl, neoprene, or barrier laminate; chemical resistant footwear plus socks; protective eyewear	either	either
<b>Forum</b> (dimethomorph) EPA Reg. No. 241-427 BASF Ag Products	Caution	12 hrs.	long-sleeved shirt and long pants; chemical-resistant gloves; shoes plus socks	long-sleeved shirt and long pants; chemical-resistant gloves; shoes plus socks	either	either

## WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
FST-7® (C10 fatty alcohol and maleic hydrazide) EPA Reg. No. 51873-6 Fair Products	Danger	24 hrs.	long-sleeved shirt and long pants; chemical resistant gloves such as Barrier Laminate or butyl rubber or nitrile rubber or neoprene or polyvinyl chloride or Viton; shoes plus socks; protective eyewear	coveralls; chemical resistant gloves such as Barrier Laminate or butyl rubber or nitrile rubber or neoprene or polyvinyl chloride or Viton; shoes plus socks; protective eyewear	either	either
Fulfill® 50WDG (pymetrozine) EPA Reg. No. 100-912 Syngenta Crop Protection	Caution	12 hrs.	coveralls; chemical-resistant waterproof gloves, shoes plus socks	coveralls; chemical-resistant gloves waterproof, shoes plus socks	either	either

WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Leven-38®</b> (C10 fatty alcohol and maleic hydrazide) EPA Reg. No. 19713-105 Drexel	Danger	24 hrs.	coveralls over short-sleeved shirt and short pants; waterproof gloves; chemical-resistant footwear plus socks; protective eyewear; chemical-resistant headgear for overhead exposure; chemical- resistant apron when cleaning equipment, mixing or loading	coveralls over short-sleeved shirt and short pants; chemical-resistant footwear plus socks; protective eyewear, chemical-resistant headgear for overhead exposure	either	either
<b>Lorsban® 4E</b> (chlorpyrifos) EPA Reg. No. 62719-220  <b>Lorsban Advanced</b> (chlorpyrifos) EPA Reg. No. 62719-591 Dow AgroSciences, LLC	Warning	24 hrs.	long-sleeved shirt and long pants; chemical resistant gloves; chemical resistant footwear plus socks, chemical resistant headgear for overhead exposure, a NIOSH approved dust-mist filtering respirator or NIOSH approved respirator with R, P, or HE filter	coveralls; waterproof and chemical-resistant gloves; chemical resistant footwear and chemical resistant headgear for overhead exposure	yes	yes
<b>MetaStar 2E</b> (metalaxyl) EPA Reg. 71532-91026 AgBiome Innovations.	Warning	48 hrs.	long-sleeved shirt & long pants; chemical resistant gloves, shoes plus socks; protective eyewear	coveralls; chemical-resistant gloves; shoes plus socks; protective eyewear	either	either
<b>Nimitz</b> (fluensulfone) EPA Reg. No. 66222-243 ADAMA	Caution	24 hrs.	long-sleeved shirt and long pants; chemical-resistant gloves such as barrier laminate or Viton >14 mils; shoes plus socks	Not specified on label	either	either

## WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Nuprid 2SC</b> (imidacloprid) EPA Reg. No. 228-572 Nufarm Americas, Inc	Caution	12 hrs.	long-sleeved shirt and long pants; waterproof gloves; shoes plus socks	coveralls; waterproof gloves; shoes plus socks	either	either
<b>Nuprid 4.6 Pro</b> EPA Reg. No. 228-527						
<b>Off-Shoot T®</b> (C8- C12 fatty alcohols) EPA Reg. No. 400-542 UPL NA Inc.	Danger	24 hrs.	long-sleeved shirt and long pants; waterproof gloves; shoes plus socks; protective eyewear	coveralls; waterproof gloves; shoes plus socks; protective eyewear	either	either
<b>Orondis Gold 200</b> (oxathiapiprolin) EPA Reg. No. 100-1571 Syngenta Crop Protection	Caution	4 hrs.	Long-sleeved shirt and long pants; shoes and socks.	Coveralls; shoes and socks.	either	either
<b>Orondis Gold Premix</b> (oxathiapiprolin) EPA Reg. No. 100-1614 Syngenta Crop Protection	Danger	48 hrs.	Protective eyewear, coveralls; shoes and socks, chemical-resistant gloves.	Protective eyewear, coveralls; shoes and socks, chemical- resistant gloves.	either	either
<b>Orondis Ultra A</b> (oxathiapiprolin) EPA Reg. No. 100-1572 Syngenta Crop Protection	Caution	4 hrs.	Long-sleeved shirt and long pants; chemical-resistant gloves; shoes plus socks.	Coveralls; chemical-resistant gloves; shoes and socks.	either	either
<b>Orondis Gold B</b> (mefenoxam) EPA Reg. No. 100-1202 Syngenta Crop Protection	Caution	0 hrs.	Long-sleeved shirt and long pants; chemical-resistant gloves; shoes plus socks.	Coveralls; chemical-resistant gloves; shoes and socks.	either	either
<b>Orondis Ultra B</b> (mandipropamid) EPA Reg. No. 100-1254 Syngenta Crop Protection	Caution	4 hrs.	Long-sleeved shirt and long pants; shoes and socks.	Coveralls; chemical-resistant gloves; shoes and socks.	either	either

WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

123

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Orthene® 75S</b> (acephate) EPA Reg. No. 59639-26  <b>Orthene ® 97</b> EPA Reg. No. 5481-8978 AMVAC Chemical Corp	Caution	24 hrs.	long-sleeved shirt and long pants; waterproof gloves; shoes plus socks; chemical resistant headgear for overhead exposure	coveralls; waterproof gloves; shoes plus socks; chemical resistant headgear for overhead exposure	either	either
<b>Pasada ® 1.6 F</b> (imidacloprid) EPA Reg. No. 66222-228 ADAMA	Caution	12 hrs.	long-sleeved shirt and long pants, waterproof gloves; shoes plus socks	coveralls; waterproof gloves; shoes plus socks	either	either
<b>Pic Plus</b> (chloropicrin) EPA Reg. No. 8853-6 Triest Ag Group Inc..	Danger	48 hrs. and gas conc. less than 0.1 ppm	coveralls or loose-fitting or well ventilated long-sleeved shirt and long pants; shoes and socks; full-face shield or safety glasses with brow and temple shields ( <b>Do Not</b> wear goggles); full-face respirator when air concentration exceeds 0.1 ppm	non-handlers prohibited	yes	yes
<b>Platinum ® 2SC</b> (thiamethoxam) EPA Reg. No. 100-939  <b>Platinum ® 75SG</b> EPA Reg. No. 100-1291 Syngenta Crop Protection	Caution	12 hrs.	long-sleeved shirt, waterproof gloves, shoes plus socks	coveralls, shirt, waterproof, gloves, shoes plus socks	yes	yes

## WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Plucker-Plus</b> C8 and C10 fatty alcohols Flumetralin EPA Reg. no. 19713-649 Drexel Chemical	Caution	24 hrs.	long-sleeved shirt and long pants, socks; shoes, and chemical-resistant gloves made of any waterproof material such as barrier laminate or viton, , chemical-resistant chemical-resistant headgear for overhead exposure, chemical resistant apron for cleaning equipment, mixing or loading	coveralls over short-sleeved shirt and short pants, protective eyewear, chemical-resistant gloves made of any waterproof material, socks, chemical-resistant footwear,	either	either
<b>Poast®</b> (sethoxydim) EPA Reg. No. 7969-58 BASF Ag Products	Warning	12 hrs.	coveralls over short-sleeved shirt and short pants; chemical resistant gloves ≥14 mils; chemical resistant footwear plus socks; protective eyewear; chemical resistant headgear for overhead exposure; chemical-resistant apron when cleaning equipment, mixing and loading	coveralls over short-sleeved shirt and short pants; chemical resistant gloves ≥14 mils; chemical resistant footwear plus socks; protective eyewear; chemical resistant headgear for overhead exposure	either	either

WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

125

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Presidio</b> (fluopicolide) EPA Reg. No. 59639-140 Valent U.S.A. Corporation	Caution	12 hr	Long-sleeved shirt and long pants; chemical-resistant gloves; shoes plus socks.	Coveralls; chemical-resistant gloves made of any waterproof material; socks and shoes.	either	either
<b>Prime+®</b> (flumetralin) EPA Reg. No. 100-640 Syngenta Crop Protection	Danger	24 hrs.	coveralls over short-sleeved shirt and short pants; chemical-resistant gloves such as Barrier Laminate or Viton; chemical-resistant foot-wear plus socks; protective eyewear; chemical resistant headgear for overhead exposure; chemical-resistant apron when cleaning equipment, mixing or loading	coveralls over short-sleeved shirt; short pants; chemical-resistant gloves such as Barrier Laminate or Viton; chemical-resistant footwear plus socks; protective eyewear; chemical-resistant headgear for overhead exposure	either	either
<b>Prowl® 3.3</b> (pendimethalin) EPA Reg. No. 241-337  <b>Prowl® H2O</b> (pendimethalin) EPA Reg. No. 241-418 BASF Ag Products.	Caution	24 hrs.	long-sleeved shirt and long pants; chemical-resistant gloves such as Barrier Laminate or Viton >14 mils; shoes plus socks	coveralls; chemical-resistant gloves such as Barrier Laminate or Viton >14 mils; shoes plus socks	either	either

## WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Quadris</b> (azoxystrobin) EPA Reg. No. 100-1098 Syngenta Crop Protection	Caution	4 hrs.	long-sleeved shirt and long pants; chemical-resistant gloves; shoes plus socks	coveralls; chemical-resistant gloves; shoes plus socks	either	either
<b>Revus</b> (mandipropamid) EPA Reg. No. 100-1254 Syngenta Crop Protection	Caution	4 hrs.	long-sleeved shirt and long pants; chemical-resistant gloves; shoes plus socks	coveralls; chemical-resistant gloves; shoes plus socks	either	either
<b>Ridomil Gold SL</b> ® (mefenoxam) EPA Reg. No. 100-1202 Syngenta Crop Protection	Caution	48 hrs.	long-sleeved shirt and long pants, chemical-resistant gloves, shoes plus socks	coveralls, chemical-resistant gloves, shoes plus socks	either	either
<b>Royaltac</b> (C10 fatty alcohol) EPA Reg. No. 400-135 UPL NA Inc.	Danger	24 hrs.	long-sleeved shirt and long pants; waterproof gloves; shoes plus socks; protective eyewear	coveralls; waterproof gloves; shoes plus socks; protective eyewear	either	either
<b>Royaltac-M</b> (C8- C12 fatty alcohols) EPA Reg. No. 400-451 UPL NA Inc.	Danger	24 hrs.	long-sleeved shirt and long pants; waterproof gloves; shoes plus socks; protective eyewear	coveralls; waterproof gloves; shoes plus socks; protective eyewear	either	either
<b>Royal MH-30</b> ® (maleic hydrazide) EPA Reg. No. 400-84 UPL NA Inc.	Caution	12 hrs.	long-sleeved shirt and long pants; waterproof gloves; shoes plus socks	coveralls; waterproof gloves; shoes plus socks	either	either
<b>Royal MH Xtra</b> (maleic hydrazide) <b>EPA Reg. No. 400-452</b> UPL NA Inc.	Caution	12 hrs.	long-sleeved shirt and long pants; waterproof gloves; shoes plus socks	coveralls; waterproof gloves; shoes plus socks	either	either



WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

127

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Satori Fungicide</b> (azoxystrobin) EPA Reg. No. 34704-1068 Loveland Products	Caution	4 hrs.	long-sleeved shirt and long pants; chemical-resistant gloves; shoes plus socks	coveralls; chemical-resistant gloves; shoes plus socks	either	either
<b>Sniper 2F</b> (bifenthrin) EPA Reg. No. 34704-858 Loveland Products, Inc.	Warning	12 hrs.	long-sleeved shirt and long pants, chemical-resistance gloves, such as Barrier Laminate or Nitrile rubber or Vitron and shoes plus socks and protective eyewear	coveralls, chemical-resistant gloves, such as Barrier Laminate or Nitrile rubber or Neoprene rubber or Vitron, and shoes plus socks	either	either
<b>Spartan ® 4F</b> (sulfentrazone) EPA Reg. No. 279-3220 FMC Corporation	Caution	12 hrs.	long-sleeved shirt and long pants; waterproof gloves; shoes plus socks	coveralls over long-sleeved shirt and long pants; water- proof gloves; shoes plus socks	either	either
<b>Spartan Charge</b> (sulfentrazone + carfentrazone) EPA Reg No. 279-3337 FMC Corporation	Caution	12 hrs.	long-sleeved shirt and long pants; chemical resistant gloves made of waterproof material such as polyethylene or polyvinyl chloride; shoes plus socks	coveralls over long-sleeved shirt and long pants; chemical resistant gloves; shoes plus socks	either	either
<b>Steward EC</b> (Indoxacarb) EPX Reg No. 279-9596 FMC Corporation	Caution	12 hrs.	long-sleeved shirt and long pants; waterproof gloves; shoes plus socks	coveralls over long-sleeved shirt and long pants; water- proof gloves; shoes plus socks	either	either

## WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Sucker Plucker®</b> (C8- C10 fatty alcohols) EPA Reg. No. 19713-35 Drexel Chemical	Danger	24 hrs.	coveralls over short-sleeved shirt and short pants; waterproof gloves; protective eyewear; chemical resistant footwear plus socks; chemical resistant headgear for overhead exposure; chemical resistant apron when cleaning equipment, mixing or loading	coveralls over short-sleeved shirt and short pants; waterproof gloves; protective eyewear; chemical resistant footwear plus socks; chemical resistant headgear for overhead exposure	either	either
<b>Sucker Stuff®</b> (maleic hydrazide) EPA Reg. No. 19713-1	Caution	12 hrs.	long-sleeved shirt and long pants; shoes plus socks; waterproof gloves	coveralls; waterproof gloves; shoes plus socks	either	either
<b>Super Sucker Stuff®</b> EPA Reg. No. 19713-20 Drexel Chemical						

WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Telone® II</b> (1,3-Dichloropropene) EPA Reg. No. 95290-1 Teleos Ag Solutions	Warning	5 days	see label for extensively detailed instructions for PPE	Non-handlers prohibited; see label for extensive instructions for handlers	yes	yes
<b>Terramaster 4EC</b> (etridiazole) EPA Reg. No. 400-422 UPL NA Inc.	Danger	12 hrs.	long-sleeved shirt and long-pants, chemical resistant gloves such as barrier laminate or viton, shoes plus socks, NIOSH approved respirator, chemical-resistant apron when mixing, etc.	coveralls, chemical-resistant gloves such as barrier laminate or viton, shoes plus socks, protective eyewear	yes	yes
<b>TMOXX ® 2SC</b> (thiamethoxam) EPA Reg. No. 100-939-51873 Fair Products	Caution	12 hrs.	long-sleeved shirt, waterproof gloves, shoes plus socks	coveralls, shirt, waterproof, gloves, shoes plus socks	yes	yes
<b>Tri-Pic 100®</b> (chloropicrin) EPA Reg. No. 8536-2-87994 Triest Ag Group.	Danger	48 hrs. and gas concen- tration less than 0.1 ppm	loose fitting or well ventilated long-sleeved shirt and long pants; shoes and socks; fullface shield or safety glasses with brow and temple shields. (Do NOT) wear goggles, full-face respirator when air concentration exceeds 0.1 ppm.	non-handlers prohibited	yes	yes

## WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Ultra Flourish</b> (mefenoxam) EPA Reg. No. 55146-73 NuFarm Agricultural Products	Warning	48 hrs.	long-sleeved shirt and long pants, chemical-resistant gloves, shoes plus socks, protective eyewear	coveralls, chemical-resistant gloves, shoe plus socks, protective eyewear	yes	yes
<b>Vapam HL®</b> (metam sodium) EPA Reg. No. 5481-468 Amvac Chemical Corporation	Danger	48 hrs.	coveralls over long-sleeved shirt and long pants; chemical-resistant gloves made of any waterproof material; chemical resistant footwear plus socks; chemical resistant headgear for overhead exposure; chemical resistant apron when cleaning equipment or when mixing, loading or transferring without dry- disconnect fittings; face-sealing goggles, unless full-face respirator is worn; respirator with organic-vapor- removing cartridge with a prefilter or canister approved for pesticides, or a NIOSH approved respirator with an organic (OV) cartridge or canister with any N, R, P, or HE prefilter.	coveralls over long-sleeved shirt and long pants; chemical- resistant gloves made of any waterproof material; chemical- resistant footwear plus socks	yes	yes
<b>Metam CLR®</b> EPA Reg. No. 45728-16 Taminco, Inc.						
<b>Sectagon 42®</b> EPA Reg. No. 61842-6 Tessenderlo Kerley, Inc.						
<b>Velum Prime</b> (fluopyram) EPA Reg. No. 264-1078 Bayer CropScience	Caution	12 hrs.	long-sleeved shirt and long pants; shoes plus socks	Coveralls over long-sleeved shirt and long pants, shoes plus socks, and chemical resistant gloves	either	either
<b>Verimark</b> (cyantraniliprole) EPA Reg. No. 279-9616 FMC	None	4 hrs.	long-sleeved shirt and long pants; shoes plus socks	Coveralls, shoes plus socks, and chemical resistant gloves	either	either

WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
Vydate C-LV (oxamyl) EPA Reg. No. 352-532 DuPont.	Danger	48 hr	Coveralls; chemical-resistant gloves such as barrier laminate or butyl rubber; chemical resistant footwear plus socks; protective eyewear; chemical-resistant headgear for overhead exposure; chemical-resistant apron when cleaning equipment, mixing, or loading; respirator with organic vapor-removing cartridge with prefilter approved for pesticides (prefix TC-23C) or canister approved for pesticides (prefix TC-14G) or NIOSH-approved respirator with organic vapor (OV) cartridge or canister with any R, P, or HE prefilter.	Coveralls; chemical-resistant gloves made of any waterproof material; socks and shoes.	either	either
Vydate L (oxamyl) EPA Reg. No. 352-372 DuPont.	Danger	48 hr	Coveralls over long-sleeved shirt and long pants; chemical-resistant gloves such as barrier laminate or butyl rubber or neoprene rubber or polyvinyl chloride (PVC) or viton or nitrile rubber; chemical resistant footwear plus socks; protective eyewear; chemical-resistant headgear for overhead exposure; chemical-resistant apron when cleaning equipment, mixing, or loading; respirator with organic vapor-removing cartridge with prefilter approved for pesticides (prefix TC-23C) or canister approved for pesticides (prefix TC-14G) or NIOSH-approved respirator with organic vapor (OV) cartridge or canister with any R, P, or HE prefilter.	Coveralls; chemical-resistant gloves made of any waterproof material; socks and shoes.	either	either

## WORKER PROTECTION STANDARDS FOR TOBACCO PRODUCTION

Product Trade Name (common name) EPA Reg. No. Company Name	Signal Word	Restricted Entry Interval (REI) <sup>1</sup>	Personal Protective Equipment (PPE) <sup>2</sup>		Worker Notification <sup>4</sup>	
			Applicators and Other Handlers	To Enter Treated Area Within REI <sup>3</sup>	Oral	Posted
<b>Warrior II</b> (lambda-cyhalothrin) EPA Reg. No. 100-1295 Syngenta	Warning	24 hrs.	long-sleeved shirt and long pants, chemical resistant gloves, shoes plus socks, protective eyewear	coveralls, chemical resistant gloves, shoes, plus socks	either	either
<b>XenTari®</b> ( <i>Bacillus thuringiensis</i> ) EPA Reg. No. 73049-40 Valent	Caution	4 hrs.	long-sleeved shirt and long pants; waterproof gloves; shoes plus socks; dust/mist filtering respirator (MSHA/NIOSH approved number prefix TC-21C)	coveralls; waterproof gloves; shoes plus socks	either	either

<sup>1</sup> Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

<sup>2</sup> Represents the minimum PPE required; more protective clothing can be worn. See product label for recommended chemical-resistant glove materials.

<sup>3</sup> Refer to "Early Entry Work Situations" in *The Worker Protection Standard for Agricultural Pesticides—How to Comply*, pages 59-61, "Short-Term Tasks," "Emergency Tasks," and "Specific Tasks Approved by EPA Through a Formal Exception Process." See pages 45-47 for information on "Restrictions During and After Applications" including exceptions: 1) "Early Entry With No Contact" and 2) "Early Entry With Contact for Short-Term, Emergency," or "Specially Excepted Tasks."

<sup>4</sup> **Notification on Farms, Forests, and Nurseries:** Refer to page 41, *The Worker Protection Standard for Agricultural Pesticides—How to Comply*. Unless the pesticide labeling requires both types of notification, notify workers either orally or by posting of warning signs at entrances to treated areas. You must inform workers which method of notification is being used.

**Both Oral Warning and Posted Signs:** Some pesticide labels require you to notify workers both orally and with signs posted at entrances to the treated area. If both types of notification are required, the following statement will be in the "Directions for Use" section of the pesticide labeling under the heading Agricultural Use Requirements: "Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas."