



Requirements to Meet the Worker Protection Standard for Insecticides Registered for Use on Tobacco¹

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The Worker Protection Standard (WPS) was implemented in 1992. This regulation is administered by the U.S. Environmental Protection Agency, and in Florida is enforced by the Florida Department of Agriculture and Consumer Services. The WPS is designed to protect agricultural workers and pesticide handlers from exposure to pesticides.

This publication contains information on insecticides used on tobacco in Florida to assist farm owners, agricultural workers, and pesticide handlers in complying with the WPS. The following tables contain information on the products, registration numbers, common names, company names, signal words, restricted entry intervals, posting requirements, and personal protective equipment required for applicators and handlers of pesticides and early entry of workers into treated areas. This publication is not intended as a substitute for the pesticide label. For specific information on a particular product, please read and follow label requirements.

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The use of trade names in this publication is solely for the purpose of providing specific information. UF/IFAS does not guarantee or warranty the products named, and references to them in this publication does not signify our approval to the exclusion of other products of suitable composition.

Table 1. Worker notification requirements and Restricted Entry Intervals (REI) for insecticides used on tobacco in Florida. Consult the label for specific information.

| Trade Name (common name) | EPA Registration # Company | Signal Word | REI | Worker Notification Oral/Posted |
|--|-------------------------------|------------------|----------|---------------------------------------|
| Acephate 75SP AG (acephate) | 51036-236 Micro Flo | caution | 24 hrs. | either |
| Actara (Thiamethoxam) | 100-938 Syngenta | caution | 12 hrs. | |
| Admire 2 Flowable (imidacloprid) | 3125-422 Bayer | caution | 12 hrs. | either |
| Agree WG (<i>Bacillus thuringiensis</i> var. <i>aizawai</i> strain) | 70051-47 Certis | caution | 4 hrs. | either |
| Basamid (metam sodium) | 7969-99 BASF | warning | 24 hrs. | both |
| Cogen Condor (<i>Bacillus thuringiensis</i> subspecies <i>kurstaki</i> strain EG 2348) | 55638-7 Certis | caution | 4 hrs. | either |
| Ecogen Crymax (<i>Bacillus thuringiensis</i>) | 55638-34 Certis | caution | 4 hrs. | either |
| Dipel ES (<i>Bacillus thuringiensis</i>) | 73049-17 Valent | caution | 4 hrs. | either |
| Dipel DF (<i>Bacillus thuringiensis</i>) | 73049-39 Valent | caution | 4 hrs. | either |
| Fulfill (pymetrozine) | 100-192 Syngenta | caution | 12 hrs. | either |
| Furadan 4F (carbofuran) | 279-2876 FMC | danger | 48 hrs. | both |
| Golden Leaf Tobacco Spray (endosulfan) | 66222-63 Makhteshim-Agan | danger | 24 hrs. | either |
| Phaser (endosulfan) | 264-638 Bayer | | | |
| Thiodan 3EC (endosulfan) | 264-638 Bayer | | | |
| Lannate SP (methomyl) Lannate LV (methomyl) | 352-342 DuPont | danger | 48 hrs. | both |
| Lorsban 4E (chlorpyrifos) | 62719-220 Dow AgroSciences | warning | 24 hrs. | either |
| Mocap EC (ethoprop) | 264-458 Bayer | danger poison | 48 hrs. | both |
| Nemacur 3EC (fenamiphos) | 3125-283 Bayer | danger | 48 hrs. | either |
| Orthene 75 WSP (acephate) | 59639-26AA Valent | caution | 24 hrs. | either |
| Orthene 97 (acephate) | 59639-91 Valent | | | |
| Platinum (thiamethoxam) | 100-939 Syngenta | caution | 12 hours | |
| Provado 1.6F (imidacloprid) | 3125-457 Bayer | caution | 12 hrs. | either |
| Sevin 4F (carbaryl) | 264-349 Bayer | caution | 12 hrs. | either |
| Sevin XLR Plus (carbaryl) | 264-333 Bayer | | | |
| Sevin 80S (carbaryl) | 264-316 Bayer | warning | 12 hrs. | either |
| Tracer (spinosad) | 62719-267 Dow AgroSciences | caution | 4 hrs. | either |
| Vapam (metam sodium) | 5481-468 AmVac Chem | danger | 48 hrs. | both |
| XenTari WDG (<i>Bacillus thuringiensis</i>) | 73049-40 Valent | caution | 4 hrs. | either |

Table 2. Personal Protective Equipment (PPE) required for applicators and pesticide handlers and entry during the REI into treated areas. The PPE listed represents the minimum required. Consult the label for specific information on chemical-resistant clothing.

| Trade Name | Applicators and Other Handlers | Early Entry |
|---------------------------|---|---|
| Acephate 75SP AG | 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 |
| Actara | Long-sleeved shirt and long pants; chemical resistant gloves made of any waterproof material-Catagory A; shoes plus socks. | Coveralls; chemical resistant gloves made of any waterproof material-Catagory A; shoes plus socks. |
| Admire 2 Flowable | Long-sleeved shirt and long pants; waterproof gloves; shoes plus socks | Coveralls; waterproof gloves; shoes plus socks |
| Agree WG | 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 |
| Ecogen Condor | Long-sleeved shirt and long pants; shoes plus socks | Coveralls; waterproof gloves; shoes plus socks |
| Ecogen Crymax | Long-sleeved shirt and long pants; shoes plus socks | Coveralls; waterproof gloves; shoes plus socks |
| Dipel ES | Long-sleeved shirt and long pants; shoes plus socks | Coveralls; shoes plus socks; waterproof gloves |
| Dipel DF | Long-sleeved shirt and long pants; waterproof gloves; shoes plus socks | Coveralls; waterproof gloves; shoes plus socks |
| Fulfill | Long-sleeved shirt and long pants; waterproof gloves; shoes plus socks | Long-sleeved shirt and long pants; waterproof gloves; shoes plus socks |
| Furadan 4F | 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 when mixing or loading; respirator; when using closed systems, enclosed cabs or aircraft in a manner that meets WPS requirements, the PPE requirements may be reduced or modified | Coveralls; chemical-resistant gloves; shoes plus socks |
| Golden Leaf Tobacco Spray | Coveralls over long-sleeved shirt & long pants; chemical-resistant gloves, such as barrier laminate or vitron \geq 14 mils; chemical-resistant footwear plus socks; protective eyewear; chemical-resistant headgear for overhead exposure; a NOISH approved respirator with either an organic vapor removing cartridge (CTC-23C) or approved canister (CTC-14G) or NIOSH approved canister with organic vapor cartridge or canister with any R, P, or HE prefilter. | Coveralls over long pants & long-sleved shirt. Chemical-resistant footwear plus socks. Chemical-resistant gloves. Protective eyewear Chemical-resistant headgear for overhead exposure. |
| Lannate SP | Long sleeved shirts and long pants; chemical-resistant gloves; shoes plus socks; protective eyewear; chemical-resistant gloves Cat.A; exposure outdoors mist/dust filtering respirator (MSHA/NIOSH approval number TC-21C) | Coveralls; chemical-resistant Cat.A gloves, shoes plus socks; protective eyewear. |
| Lannate LV | Long-sleeved shirts and long pants; chemical-resistant gloves; shoes plus socks; protective eyewear; chemical-resistant gloves Cat.A; exposure outdoors mist/dust filtering respirator (MSHA/NIOSH approval number TC-21C) | Coveralls; chemical-resistant Cat.A gloves, shoes plus socks; protective eyewear. |

Table 2. Personal Protective Equipment (PPE) required for applicators and pesticide handlers and entry during the REI into treated areas. The PPE listed represents the minimum required. Consult the label for specific information on chemical-resistant clothing.

| Trade Name | Applicators and Other Handlers | Early Entry |
|-----------------|--|--|
| Lorsban 4E | Coveralls over short-sleeved shirt & short pants; chemical-resistant gloves; chemical-resistant shoes plus socks; protective eyewear; chemical-resistant headgear for overhead exposure; chemical-resistant apron when cleaning equipment or mixing and loading | Coveralls; chemical-resistant gloves; chemical-resistant shoes plus socks; Protective eyewear; chemical-resistant headgear for overhead exposures. |
| Mocap EC | Chemical-resistant suit; chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber or viton; chemical-resistant footwear plus socks; protective eyewear; chemical-resistant headgear for overhead exposures; organic vapor-removing or canister respirator (MSHA/NIOSH approved) | Chemical resistant suit; chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber or viton; chemical-resistant footwear plus socks; protective eyewear; chemical-resistant headgear for overhead exposures |
| Nemacur 3EC | Chemical-resistant protective suit; chemical-resistant gloves such as Barrier Laminate or Viton; chemical-resistant footwear plus socks; protective eyewear; chemical-resistant headgear for overhead exposure; dust/mist filtering respirator (MSHA/NIOSH approval number TC-21C) or NIOSH approval respirator with any N, R, P, or HE filter. | Chemical-resistant protective suit; chemical-resistant gloves such as barrier laminate or viton; chemical-resistant footwear plus socks; protective eyewear; chemical-resistant headgear for overhead exposure |
| Orthene 75S/WSP | 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 |
| Orthene 97 | | |
| Phaser 3 EC | Coveralls over long-sleeved shirt & long pants; chemical resistant gloves, such as barrier laminate or viton \geq 14 mils; chemical-resistant footwear plus socks; protective eyewear; chemical-resistant headgear for overhead exposure; respirator with either an organic vapor removing cartridge (CTC-23C) or approved canister (CTC-14G) or NIOSH approved canister with organic vapor cartridge or canister with any R, P, or HE prefilter. Mixers and/or loaders must wear a chemical-resistant apron and goggles or face shield in addition to all the protective equipment specified for applicators | Coveralls over long pants & long-sleeved shirt. Chemical-resistant footwear; protective eyewear; chemical-resistant headgear. |
| Platinum | Long-sleeved shirt and long pants; waterproof gloves; shoes plus socks | Coveralls; waterproof gloves; shoes plus socks |
| Provado 1.6F | Long-sleeved shirt and long pants; waterproof gloves; shoes plus socks | Coveralls; waterproof gloves; shoes plus socks |
| Sevin 4F | Long-sleeved shirt and long pants; chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC), or viton; shoes plus socks and chemical-resistant headgear for overhead exposure | Coveralls; chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC), or viton; shoes plus socks and chemical-resistant headgear for overhead exposure |
| Sevin XLR Plus | | |
| Sevin 80S | Long-sleeved shirt and long pants; waterproof gloves; shoes plus socks and chemical-resistant headgear for overhead exposure | Coveralls; waterproof gloves; shoes plus socks and chemical-resistant headgear for overhead exposure |

Table 2. Personal Protective Equipment (PPE) required for applicators and pesticide handlers and entry during the REI into treated areas. The PPE listed represents the minimum required. Consult the label for specific information on chemical-resistant clothing.

| Trade Name | Applicators and Other Handlers | Early Entry |
|-------------|---|--|
| Thiodan 3EC | Coveralls over long sleeved shirt & long pants; chemical-resistant gloves, such as barrier laminate or vitron \geq 14 mils; chemical resistant footwear plus socks; protective eyewear; chemical-resistant headgear for overhead exposure; respirator with either an organic vapor removing cartridge (CTC-23C) or approved canister (CTC-14G) or NIOSH approved canister with organic vapor cartridge or canister with any R, P, or HE prefilter. Mixers and/or loaders must wear a chemical-resistant apron and goggles or face shield in addition to all the protective equipment specified for applicators | Coveralls over long pants & long-sleved shirt. Chemical-resistant footwear; protective eyewear; chemical-resistant headgear. |
| Tracer | Long-sleeved shirt and long pants; shoes plus socks; waterproof gloves | Coveralls; waterproof gloves; shoes plus socks |
| Vapam | Coveralls over long-sleeved shirt and long pants; waterproof gloves; 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; a respirator with either an organic-vapor-removing cartridge with a prefilter approved for pesticides or canister approved for pesticides | While entry is restricted only the following handling tasks may be performed in a treated area: assessing/adjusting the soil seal; assessing pest control, application technique, or application efficacy; sampling air or soil for this period. All other tasks are prohibited until the entry restriction is over. Handlers performing the above tasks must wear: coveralls over long-sleeved shirt and long pants; waterproof gloves; chemical-resistant footwear and socks. Plus if pungent, rotten egg odor of this product can be detected handlers must wear: Face-sealing goggles, unless full-face respirator is worn; A respirator with either an organic-vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C) or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) |
| XenTari WDG | 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 |