EPA Proposes New Certification and Training Requirements for Certified Applicators


- **3-Year Recertification Cycle**
  - Commercial: 6 CEU core + 6 CEU per category
  - Private: 6 CEU “core” + 3 CEU per category if applicable (soil & non-soil fumigation & aerial)

- Minimum age for RUPs will be 18
Pesticide Names

• Chemical Name: Active ingredient
  Isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate

• Common Name: Shorter name that EPA recognizes as a substitute for the chemical name of a product
  (S)-Methoprene

• Trade Name: Brand or product name
  Altosid, Apex, Diacon, Dianex, Kabat, Minex, Precor, etc.
Purchase Using Common Names

• Short version of the sometimes very long & complex chemical name set by EPA

• **Examples:** carbaryl, imidacloprid, methoprene, malathion, glyphosate, 2,4-D, permethrin, chlorothalonil

• Purchase pesticides according to their common or chemical names!
Signal Words and Symbols

• **Signal words** indicate the relative acute (onset < 24 hours) toxicity to humans and animals

• Very low toxicity: **signal words not required**

• Almost all labels will have the warning “Keep Out of Reach of Children”

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**Danger-Poison** | **Warning**
---|---
**Danger** | **Caution**
### Signal Words

<table>
<thead>
<tr>
<th>Signal Word</th>
<th>Category</th>
<th>Toxicity</th>
<th>Oral LD$_{50}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danger-Poison</td>
<td>I</td>
<td>High</td>
<td>0-50 mg/kg &lt; 1 tsp</td>
</tr>
<tr>
<td>Peligro</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Danger/Peligro</td>
<td>I</td>
<td>High - Eye or skin damage concerns greater than acute lethal toxicity</td>
<td></td>
</tr>
<tr>
<td>Warning/Aviso</td>
<td>II</td>
<td>Moderate</td>
<td>50-500 mg/kg or skin/eye</td>
</tr>
<tr>
<td>Caution</td>
<td>III</td>
<td>Slight</td>
<td>&gt;500 mg/kg or skin/eye</td>
</tr>
</tbody>
</table>
Precautionary Statements Include…

• Hazards to humans & domestic animals

• Routes of entry statements
  – “May be fatal if swallowed or inhaled”

• Specific action statements
  – “Avoid contact with skin or clothing”

• Protective clothing and equipment (PPE) statements
Personal Protective Equipment (PPE): Mixers and loaders involved in ground application must wear coveralls over long-sleeved shirt and long pants, shoes plus socks, chemical-resistant gloves, and a NIOSH approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH approved respirator with any R, P, or HE filter. Applicators involved in ground ULV application must use an enclosed cab as described in the Engineering Controls section of this label and must wear long-sleeved shirt and long pants, shoes plus socks, and chemical-resistant gloves. Aerial applicators and pilots must use an enclosed cockpit and wear long-sleeved shirt, long pants, shoes, and socks.
STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Hold eyelids open and flush with a steady stream of water for 15 minutes. Get medical attention.

IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger, or if available, by administering syrup of Ipecac. Do not induce vomiting or give anything by mouth to an unconscious person.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.
Engineering Controls

- Tells you if any specific devices are required when handling the pesticide
- Are special precautions needed for a specific application method?

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**Engineering Controls**

Water soluble packets, when used correctly, qualify as a closed mixing/loading system under the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)]. Mixers and loaders using water soluble packets must wear the PPE required above for mixer/loaders, and have immediately available for use in emergency (such as a broken package, spill or equipment breakdown) additional PPE. These PPE include coveralls and chemical-resistant footwear and a NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any N, R, P, or HE filter.

When applicators use closed cab motorized ground equipment in a manner that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(e)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.
Environmental Hazard Statements

- Provides information on environmental impacts associated with the pesticide

**ENVIRONMENTAL HAZARDS**
This product is extremely toxic to aquatic and estuarine invertebrates.
Do not contaminate water by cleaning equipment or disposal of wastes.

**BEE CAUTION: MAY KILL HONEYBEES IN SUBSTANTIAL NUMBERS.**
This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

NEW! An EPA Bee Advisory Box
Protect Bees and Other Pollinators

There is a new pollinator protection label section from EPA. Watch for the bee hazard icon and follow all instructions carefully!
Physical or Chemical Hazards

- Describes any special, fire, explosive or chemical hazards
- **Flammable**: Do not use, pour, spill, or store near heat or open flame. Do not cut or weld container
- **Corrosive**: Store only in a corrosion-resistant tank

Hazard statements on different labels are not necessarily located in same place!
Emergency Contact Information

- Information found on most labels
- CHEMTREC is manned 24-hrs a day, 7 days a week!

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC
(800) 424-9300
For Medical Emergencies Only, Call (877) 325-1840
Remember...

- The **host or site** **must** be on the label, but the pest does not have to be listed.

- **Deviation:** Any application method not prohibited may be used: air, ground, etc.
  - except **chemigation**
Also Remember...

- **Deviation**: A pesticide may be applied at a **lower dose** than specified on the label, **but not at a higher dose**!

- **Deviation**: Pesticides may be combined with other substances **unless prohibited by the label**

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**TANK MIX COMBINATIONS**

Combination with other herbicides broadens the spectrum of weeds controlled. In addition, total vegetation control can be achieved with higher rates of LANDMARK™ MP plus residual type companion herbicides. To improve postemergence control of weeds, add surfactant at 0.25% by volume or at the manufacturer's recommended rate based on spray area.

LANDMARK™ MP may be applied with the recommended rates of other herbicides registered for this use. For application method and other use specifications, use the most restrictive directions for the intended combination.

Do not tank mix LANDMARK™ MP with DuPont™ HYVAR® X-L herbicide.
Public and Customer Communication

- Create a positive professional image
- Communicate what you are doing
- Stay current in pesticide issues and IPM
- Avoid troublesome phrases when communicating
Avoid Phrases Such as These

- environmentally
- friendly
- natural
- EPA-approved
- safe or safer
- safe for children and pets
- state-approved
- organic
- harmless
Explain to the Customer “what” and “why”

• *What* needs to be done to manage the mosquito problem

• Educate customer on mosquito species present and *why* they have a problem

• Explain your product selection, application technique, and anticipated results
How to Answer Consumer Questions

• Be prepared
• Company training exercises
  – Role-playing
• Copies of pesticide labels, SDSs, application records
• Admit when you don’t know the answer, don’t lie
Questions?