# GUIDELINES FOR COUNTER® 20G INSECTICIDE USE WITH HERBICIDES

## Understanding the Difference Between Systemic and Non-Systemic Soil-Applied Insecticides

Corn production practices vary from field to field, and AMVAC® has a full line-up of granular soil insecticides to meet the specific growing conditions and needs for the acres you farm. AMVAC offers both systemic and non-systemic insecticides, so it is critical to understand the differences between these products when planning your soil insecticide program.

AZTEC®, SmartChoice® and **COUNTER® 20G** brand insecticides belong to the organophosphate (OP) insecticide class of chemistry. In addition, both AZTEC and SmartChoice include a second active ingredient, pyrethroid, for a dual mode of action to control corn soil insects. The OP and pyrethroid active ingredients in both AZTEC and SmartChoice insecticides are non-systemic in corn.

Since both AZTEC and SmartChoice are non-systemic, they do not interact negatively with either soil-applied or postemergence corn herbicides.

The OP chemistry in **COUNTER 20G** is unique in that it features systemic activity that controls insects below ground as well as insects in or on the corn plant during early season growth. Knowing which products are non-systemic versus systemic is very important in selecting preemergence and postemergence herbicide options for the specific AMVAC insecticide you apply.

However, because of its systemic nature within the corn plant, **COUNTER 20G** has the potential for interaction with certain herbicides and does have labeled herbicide use restrictions in corn.

While it is important to manage your herbicide program carefully when using **COUNTER 20G**, many corn herbicides may be applied prior to or following **COUNTER 20G** at-planting with crop safety. Always read and follow the **COUNTER 20G** product label before applying. Refer to the use recommendations and labeled restrictions on soil-applied and postemergence corn herbicides.

# Potential Herbicide Interactions With COUNTER 20G At-Plant

The potential interaction of **COUNTER 20G** with the acetolactate synthesis (ALS) inhibiting herbicide class has been well-known for years. In addition, there are a few herbicides belonging to the protoporphyrinogen oxidase (PPO) inhibiting herbicide class which restrict use of **COUNTER 20G** in corn. More recently, interactions with some of the herbicides that belong to the hydroxyphenyl-pyruvate-dioxygenase (HPPD) inhibiting herbicide class have been recorded. Not all herbicides in the HPPD class are restricted for postemergence applications to corn treated with **COUNTER 20G**.

Impact® Herbicide and other AMVAC herbicides containing the HPPD inhibitor found in Impact, DO NOT INTERACT with any in-furrow soil insecticides and may be safely applied following an at-plant application of COUNTER 20G in corn.

See our entire line of products at **AMVAC.com** 



# Guidelines for Herbicide<sup>1</sup> Use With COUNTER 20G Insecticide

### The following corn herbicides can be applied at timings listed below in a program with COUNTER 20G Insecticide:

| Manufacturer                       | Corn Herbicide          | Timing      | Manufacturer       | Corn Herbicide       | Timing      |
|------------------------------------|-------------------------|-------------|--------------------|----------------------|-------------|
|                                    | Impact®                 | POST        |                    | Axiom®               | PP/PRE      |
|                                    | ImpactZ®                | POST        |                    | Balance® Flexx       | PP/PRE/POST |
| AMVAC®                             | Impact Core®            | POST        |                    | Balance® Pro         | PP/PRE      |
|                                    | Sinate®                 | POST        | Bayer® CropScience | Buctril® 4EC         | POST        |
| Syngenta® Crop<br>Protection, Inc. | AAtrex 4L®              | PP/PRE/POST |                    | Degree® brands       | PP/PRE/POST |
|                                    | Acuron® brands          | PP/PRE      |                    | DiFlexx® brands      | PP/PRE/POST |
|                                    | Bicep II® Magnum brands | PP/PRE/POST |                    | Harness®             | PP/PRE/POST |
|                                    | Calibra®                | PP/PRE      |                    | Harness® Max         | PP/PRE      |
|                                    | Dual® brands            | PP/PRE/POST |                    | Harness® Xtra brands | PP/PRE/POST |
|                                    | Lumax® brands           | PP/PRE      |                    | Laudis®              | POST        |
|                                    | Lexar® brands           | PP/PRE      |                    | Roundup® brands      | PP/POST     |
|                                    | Princep®                | PP/PRE      |                    | Warrant®             | PP/PRE/POST |
|                                    | Sequence®               | PP/PRE/POST | FMC® C             | Aim®                 | PP/POST     |
|                                    | Breakfree® brands       | PP/PRE/POST |                    | Anthem® brands       | PP/PRE/POST |
|                                    | Durango®                | POST        |                    | Cadet®               | PP/POST     |
|                                    | Enlist® brands          | PP/PRE/POST | FMC® Corporation   | FirstShot®           | PP          |
|                                    | FulTime® brands         | PP/POST     |                    | Harmony® Extra       | PP          |
| C. I.                              | Keystone® brands        | PP/POST     |                    | T-Square®            | PP          |
| Corteva<br>Agriscience™            | Kyber®                  | PP          | Summit Agro®       | Restraint®           | PP/PRE/POST |
| Agriscience                        | Kyro®                   | POST        |                    | Shieldex®            | POST        |
|                                    | Resicore® brands        | PP/PRE      | Valent® USA        | Fierce®              | PP          |
|                                    | Stinger®                | POST        |                    | Fierce® MTZ          | PP          |
|                                    | Surpass®                | PP/PRE/POST |                    | Maverick™            | PP/PRE      |
|                                    | TopNotch®               | PP/PRE/POST |                    | Perpetuo™            | PP/PRE/POST |
| BASF® Ag<br>Products               | Armezon® brands         | PP/PRE/POST |                    | Resource®            | POST        |
|                                    | Liberty® 280            | PP/POST     |                    | Valor® SX            | PP          |
|                                    | Marksman®               | PRE/POST    |                    |                      |             |
|                                    | Outlook®                | PP/PRE/POST |                    |                      |             |
|                                    | Prowl® H₂O              | PP/PRE/POST |                    |                      |             |
|                                    | Status®                 | POST        |                    |                      |             |
|                                    | Zidua®                  | PP/PRE/POST |                    |                      |             |

#### The following corn herbicides cannot be applied at timings listed below with COUNTER 20G Insecticide:

| Manufacturer                      | Corn Herbicide     | Timing      | Manufacturer  | Corn Herbicide      | Timing      |
|-----------------------------------|--------------------|-------------|---|---------------------|-------------|
| AMVAC                             | Hornet®            | PP/PRE/POST | Bayer CropScience   | Capreno®            | PRE/POST    |
|                                   | Python®            | PP/PRE/POST |   | Corvus®             | PP/PRE/POST |
| Corteva<br>Agriscience            | Accent® brands     | POST        |   | Harness® Max        | POST        |
|                                   | Basis® brands      | PRE/POST    |   | TripleFLEX® brands  | PP/PRE/POST |
|                                   | Instigate®         | PP/PRE      |   | TriVolt®            | PP/PRE/POST |
|                                   | Leadoff®           | PP/PRE      | BASF Ag Products  | Sharpen®            | PP/PRE      |
|                                   | Matrix®            | PP/PRE/POST |   | Verdict®            | PP/PRE      |
|                                   | Prequel®           | POST        | FMC Corporation   | Crusher®            | PP/PRE      |
|                                   | Realm® Q           | PP/PRE/POST |   | Panoflex®           | PP/PRE      |
|                                   | Resicore®          | POST        |   | Solstice®           | POST        |
|                                   | Resolve® brands    | PP/PRE/POST | Gowan® Co., LLC   | Beacon®             | POST        |
|                                   | Require® Q         | PP/PRE/POST |   | Gambit®             | POST        |
|                                   | Revulin® Q         | POST        |   | Northstar®          | POST        |
|                                   | Steadfast® brands  | POST        |   | Peak®               | POST        |
|                                   | Stout <sup>®</sup> | POST        |   | Permit® brands      | POST        |
|                                   | SureStart® brands  | PP/PRE/POST |   | Sandea®             | POST        |
| Syngenta Crop<br>Protection, Inc. | Acuron® brands     | POST        |   | Spirit <sup>®</sup> | POST        |
|                                   | Calibra®           | POST        |   | Yukon®              | POST        |
|                                   | Callisto® brands   | POST        | Valent USA  | Maverick™           | POST        |
|                                   | Halex® GT          | POST        | ¹Read and follow label restriction  |                     |             |
|                                   | Lexar® brands      | POST        | at planting. Interactions of certain herbicides with Counter 20G may occur under adverse gr<br>conditions which can cause significant injury to corn. Labels can be found at the manufactur |                     |             |
|                                   | Lumax® brands      | POST        | websites. For more information about COUNTER 20G use with corn herbicides, contact your loc agricultural chemical retailer or AMVAC representative at 1-888-462-6822, or visit AMVAC.com.   |                     |             |

