

CORN

PRECAUTIONS ON USE OF HERBICIDES CONTAINING ATRAZINE AND SIMAZINE NEAR GROUND OR SURFACE WATER

Herbicide products which contain **atrazine** (i.e. AAtrex, Acuron, Anthem ATZ, Atrazine, Bicep II Magnum, Brawl II ATZ, Breakfree NXT ATZ, Callisto Xtra, Cinch ATZ, Charger Max ATZ, Confidence Xtra, Degree Xtra, Expert, FulTime NXT, Guardsman Max, Harness Xtra, Keystone NXT, Lexar EZ, Lumax EZ, Marksman, Metal II AT, Parallel Plus, Simazat, Sterling Plus, Stratos, Trizmet II, Volley ATZ NXT, etc.) and **simazine** (Princep, Simazine, Simazat) have special label restrictions for use near ground or surface waters. Current label guidelines emphasize the use of low rates, buffer zones, and conservation tillage practices as methods for reducing the risk of contamination of water sources. The maximum rate of these herbicide products for early preplant, preplant incorporated, or preemergence applications depends on soil erodibility, as defined by the Natural Resources Conservation Service, and percent of ground covered with plant residue.

Rate Restrictions - For soils that are not highly erodible the maximum use rate for **atrazine** is 2.0 lb ai (active ingredient) per acre and for **simazine** is 2.0 lb ai per acre per season. For highly erodible soils the maximum rate is also 2.0 lb ai per acre for atrazine or simazine if conservation tillage is utilized and at least 30% of the soil is covered with plant residue. If ground cover is less than 30%, the maximum atrazine or simazine rate is 1.6 lb ai/A for highly erodible soils. The total amount of **atrazine** applied to a field should not exceed 2.5 lb ai/A; the total amount for **simazine** should not exceed 2.0 lb ai/A per calendar year. For atrazine the rate for postemergence applications should not exceed 2.0 lb ai/A if no previous atrazine applications were made.

Setbacks - Caution is needed when mixing, loading, or applying **atrazine** and **simazine** near sources of water. According to label directions, atrazine containing products should not be **mixed** or **loaded** within 50 feet of wells (including abandoned wells, drainage wells, or sink holes), rivers, intermittent streams, lakes, or reservoirs. This setback does not apply to the use of properly designed impervious pads and properly diked mixing/loading areas.

These products should not be **applied** within 50 feet of wells or sink holes, within 66 feet of points where field surface water enters permanent or intermittent streams or rivers, or within 200 feet around lakes or reservoirs. If applied to highly erodible soils, the 66 feet buffer area must be planted to a crop or seeded with grass. When atrazine or simazine is to be applied near tile riser pipes applicators can choose to:

1) use a 66 feet setback buffer around the tile riser pipes; 2) apply atrazine and simazine products if field is under no-tillage practices and high crop residue management is maintained; or 3) incorporate atrazine and simazine products in the soil to a depth of 2-3 inches.

Some situations will require a high level of management in order to comply with these restrictions. The maximum labeled rate of atrazine or simazine may not be sufficient to provide season-long control of some problem weeds. Therefore, more emphasis may be needed on using postemergence herbicides, tillage, or crop rotation to help manage such problem weeds as burcucumber, cocklebur, morningglory, giant ragweed, and velvetleaf.