

Table 1 – Post Emergent Herbicides for Sweet Corn (click on the Product name for a link to the full label)

Product (active ingredient)	Pre-harvest interval	Weeds controlled	Rate	Comments
Armezon (topramezone)	45 days	barn-yard grass, fall panicum, foxtails, crabgrass lambsquarter, ragweed and velvetleaf	0.75 fluid ounces	Best control will also occur if broadleaf weeds are less than 4" tall and grass weeds are less than 3" tall. It is also recommended that 0.25—0.5 lbs active ingredient of atrazine be added to improve weed control and residual. Weeds need to be actively growing and coverage is essential. In tall corn, I recommend drop nozzles be used in order to get the spray material down through the canopy and onto the weeds Adjuvants: Methylated seed oil (MSO) or petroleum-based or vegetable seed-based oil concentrate (COC, HSOC) at 0.5 to 1.0 gallon per 100 gallons of water [0.5% to 1.0% volume/volume (v/v)]. Nitrogen Fertilizer: nitrogen-based fertilizers include urea ammonium nitrate(UAN; 28% or 34%) at 1.25 to 2.5 gallons per 100 gallons of water (1.25% to 2.5% v/v) or a spray grade ammonium sulfate (AMS) at a minimum rate of 8.5 to 17 pounds per 100 gallons of water.
Armezon Pro (topramezone + dimethenamid-p)	50 days	Broadleaves and several annual grasses (barnyard grass, crabgrass, Giant Foxtail, Wild Proso Millet)	For sweet corn and popcorn label recommends 20 fluid ounces per acre	Best control will also occur if broadleaf weeds are less than 4" tall and grass weeds are less than 3" tall and actively growing. Applications can be made from corn emergence to 12-inches tall. DO NOT apply within 50 days of harvesting sweet corn ears. Adjuvants: ArmezonPRO Alone: Methylated seed oil (MSO) or petroleum-based or vegetable seed-based oil concentrate (COC, HSOC) at 0.5 to 1.0 gallon per 100 gallons of water [0.5% to 1.0% volume/volume (v/v)]. Tank Mixtures with Armezon Pro: Use nonionic surfactant (NIS) at 0.25 to 0.5 gallon per 100gallons of water [0.25% to 0.5% volume/volume (v/v)]. Oil-type adjuvants (COC, HSOC, and MSO) may be used in tank mixtures with Armezon PRO, however, combinations with these adjuvants can cause elevated necrosis within a few days after treatment and occasionally crop height reduction. Oil-type adjuvants are not recommended when tank mixing with atrazine. Nitrogen Fertilizer: nitrogen-based fertilizers include urea ammonium nitrate(UAN; 28% or 34%) at 1.25 to 2.5 gallons per 100 gallons of water (1.25% to 2.5% v/v) or a spray grade ammonium sulfate (AMS) at a minimum rate of 8.5 to 17 pounds per 100 gallons of water.
Accent Q (nicosulfuron plus a safener)		Mostly annual grasses	0.9 ounces per acre	Accent Q will provide post emergent control of most annual grasses (limited crabgrass control) and if applied alone has very little broadleaf control (Redroot pigweed). If additional broadleaf control is also needed, consider tank mixing Accent Q with another herbicide listed in the label (atrazine, Armezon). Applications of ACCENT® Q may be applied broadcast or with drop nozzles (post-directed) on sweet corn up to 12 inches tall or up to and including 5 leaf-collars (V5). For sweet corn 12 - 18 inches tall, apply only with drop nozzles. Do not apply to sweet corn taller than 18 inches or those which exhibit 6 or more leaf-collars (V6). DO NOT APPLY ACCENT® Q to corn previously treated with "Counter" 15G or to corn treated with "Counter" 20CR in-furrow or over the row at cultivation. Applications of ACCENT® Q to corn previously treated with "Counter" 20 CR or "Thimet" may cause unacceptable crop injury, especially on soils of less than 4% organic matter. DO NOT tank mix Accent Q with products containing bentazon (Basagran) or severe corn crop injury may occur. Adjuvants: Crop oil concentrate (COC) or Non-Ionic Surfactant (NIS) plus a sprayable grade ammonium nitrogen such as UAN or AMS. See label for specific rates and uses.

<u>Permit/Profine/Sandea</u> or other labeled formulations (halosulfuron)	30 days	Broadleaves (pigweed, velvetleaf, ragweed) and Yellow nutsedge	0.67 ounces per acre	<p>Apply Permit over the top or with drop nozzles from the spike through layby stage of the corn. Treat young actively growing broadleaf weeds 1 to 3 inches in height.</p> <p>Adjuvants: Nonionic Surfactant (NIS) is required in the spray solution. Use NIS at 0.25 to 0.5% v/v concentration (1 to 2 quarts per 100 gallons of spray solution). Do not use COC or MSO as the potential for injury is too great.</p> <p>Nitrogen fertilizers: May be added but are not necessary for post-emergent applications. Apply a high quality, granular spray grade ammonium sulfate at a rate of 2 to 4lb/A or a liquid nitrogen fertilizer solution (e.g. UAN 28%) at a rate of 2 to 4 quarts/A.</p> <p>Use of soil or foliar applied systemic organophosphate insecticides on PERMIT treated crops may increase the potential for crop injury and/or the severity of the crop injury. Do not apply SANDEA using air assisted (air blast) field crop sprayers</p>
<u>Stinger</u> (clopyralid)	30 days	Broadleaves (ragweed, wild buckwheat, Common cocklebur, Jerusalem artichoke, Canada thistle)	0.33 – 0.66 pints per acre	<p>Apply Stinger any time after sweet corn emergence through 18-inch tall sweet corn uniformly with ground equipment as a broadcast or directed spray in 10 to 20 gallons total spray volume per acre.</p> <p>Do not exceed 2/3 or 0.67 fluid ounces per year.</p> <p>Do not apply to sweet corn that is greater than 18" tall.</p> <p>Control of common cocklebur, common ragweed, giant ragweed, sunflower, other annual weeds and Jerusalem artichoke, apply 1/4 to 1/2 pint of Stinger per acre from weed emergence up to the 5-leaf stage of growth.</p> <p>I would recommend using Stinger alone and not in tank mixtures at this time.</p>

Table 2: Comparison of adjuvants and other additives used in post-emergent sweet corn herbicides. This is not a substitute for reading the herbicide labels. If multiple surfactants are recommended (COC, NIS and MSO) you only need to add one to your spray mixture. Including more than one will increase injury to the crop.

Herbicide	Crop Oil Concentrate (COC)	Non Ionic Surfactant (NIS)	Methylated seed oil (MSO)	Nitrogen (UAN or AMS)
Armezon	X		X	X
Armezon Pro (used alone)	X		X	X
Armezon Pro (in tank mixes)		X		X
Accent Q	X	X		X
Permit (or other labeled formulation of halosulfuron)		X		X
Callisto	X	X		