## SMALL GRAIN PRE-HARVEST

<table>
<thead>
<tr>
<th>Herbicide</th>
<th>Product/A (ai/A)</th>
<th>Weeds</th>
<th>When to Apply</th>
<th>Remarks and Paragraphs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glyphosate&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Up to 0.75 lb ae See Remarks.</td>
<td>Annual and perennial grass and broadleaf weeds including Canada thistle.</td>
<td>Wheat and barley: Hard-dough stage, 30% or less grain moisture. Allow a 7 day PHI.</td>
<td>Do not apply more than 0.75 lb ae/season. Do not apply on wheat or barley grown for seed because reduced germination/vigor may occur. Apply 0.75 lb ae/A or more for Canada thistle control. May be applied with 2,4-D or dicamba for improved broadleaf weed control. Add AMS fertilizer at 8.5 lb/100 gal. Refer to label for adjuvant use and application information.</td>
</tr>
<tr>
<td>2,4-D&lt;sup&gt;d&lt;/sup&gt; ester</td>
<td>1.5 to 3 pt 4EC/SL (0.75 to 1.5 lb)</td>
<td>Broadleaf weeds.</td>
<td>Wheat and oat: Dough stage to harvest. Allow a 14 day PHI.</td>
<td>Do not feed straw to livestock. Use only 2,4-D brands labeled for preharvest application. Drift to broadleaf crops is especially hazardous at this time.</td>
</tr>
<tr>
<td>Dicamba&lt;sup&gt;d&lt;/sup&gt; + 2,4-D&lt;sup&gt;d&lt;/sup&gt;</td>
<td>0.5 to 1 pt + 1 to 2 pt 4EC/SL (0.25 to 0.5 lb + 0.5 to 1 lb)</td>
<td>Wheat: Hard-dough stage and green color is gone from the nodes (joints) of the stem. Allow a 7 day PHI.</td>
<td>Wheat: Hard-dough stage and grain with less than 30% moisture. Allow a 3 day PHI.</td>
<td>Do not apply Sharpen to cereals grown for seed because reduced germination/vigor may occur. Apply with MSO adjuvant at 1.5 pt/A + AMS at 8.5 to 17 lbs/100 gal or 28% N at 1.25 to 2.5 gal/100 gal. Apply with glyphosate for additional weed control weed and desiccation. Sharpen has no grass activity. Refer to label for crop rotation intervals. Caution: MRL’s have not been established for cereal grain exportation to international markets.</td>
</tr>
</tbody>
</table>

<sup>a</sup> HRS = Hard Red Spring, Durum, and Winter Wheat and Feed Barley Only.

<sup>d</sup> 2,4-D ester and 2,4-D ester ester are both 2,4-D esters.

<sup>e</sup> Dicamba and 2,4-D are both synthetic auxins.

<sup>f</sup> Sharpen (saflufenacil<sup>14</sup>) is a synthetic auxin.

---

**Dosage and Application Notes:**

- **Glyphosate:**
  - Up to 0.75 lb ae/gal
  - 0.38 ae = 16 fl oz
  - 0.57 ae = 24 fl oz
  - 0.75 ae = 32 fl oz

- **2,4-D ester:**
  - 1.5 to 3 pt 4EC/SL
  - 0.75 to 1.5 lb
  - 3/4.17 = 12 fl oz
  - 4.5/5.41 = 24 fl oz
  - 5/6.1 = 32 fl oz

- **Dicamba + 2,4-D:**
  - 0.5 to 1 pt + 1 to 2 pt 4EC/SL
  - 0.25 to 0.5 lb + 0.5 to 1 lb
  - 3/4.25 = 11 fl oz
  - 4.5/5.5 = 18 fl oz
  - 5/6.1 = 24 fl oz

- **Sharpen (saflufenacil):**
  - 1 to 2 fl oz
  - 0.36 to 0.72 oz
  - 1 to 2 fl oz
  - 0.36 to 0.72 oz

---

**Important Notes:**

- **Application Timing:**
  - Wheat and barley: Hard-dough stage, 30% or less grain moisture.
  - Wheat and oat: Dough stage to harvest.
  - Allow a 7 day PHI.

- **Adjuvant Use:**
  - Add AMS fertilizer at 8.5 lb/100 gal.
  - Refer to label for adjuvant use and application information.

- **Crop Rotation Intervals:**
  - Refer to label for crop rotation intervals.

---

**Warning:**

- Do not apply more than 0.75 lb ae/season.
- Do not apply on wheat or barley grown for seed because reduced germination/vigor may occur.
- May be applied with 2,4-D or dicamba for improved broadleaf weed control.
- Add AMS fertilizer at 8.5 lb/100 gal.
- Refer to label for adjuvant use and application information.

---

**References:**

- A3-7 B2 B8 D8 T3-10
- B3 T5-7 T11
- A3 A7 B6 C4 T1-3 T5-7 Y9
- B12