GLYPHOSATE TANK MIXES TO BROADEN THE WEED CONTROL SPECTRUM

Tank mixing additional herbicides with Glyphosate is a common practice in Australian farming systems to broaden the spectrum of weeds controlled by Glyphosate.

Glyphosate is a very effective broad-spectrum weed killer, being particularly strong on grass weeds, however the addition of other herbicides can help the product control more difficult to kill broadleaf weeds or make the overall spray job more efficacious and economical.

The information below provides a summary of common mix partners in fallow, pre sowing and general weed control situations. These products are generally compatible with most GOOD QUALITY glyphosate formulations including the Kenso brands: Ken-Up Dry 680, Max-Out 540, Ken-Up Gold 500 CT and Ken-Up 450 CT.

Growers and their advisors should be aware that some glyphosate formulations contain insufficient built in surfactants or inferior and cheaper surfactant types. This can lead to poor results, particularly when conditions are tough, as well as major incompatibility issues. Growers should insist on a quality statement and assurance before purchasing an unknown brand.

### COMMON ‘TANK MIX’ PARTNERS FOR GLYPHOSATE

**2,4-D Products**

2,4-D provides an economical tank mix option, particularly in fallow situations where the use of 2,4-D does not pose a risk to hormone damage susceptible crops and the label conditions of 2,4-D is not breached. 2,4-D can be formulated in a number of ways but the most common options for mixing with Glyphosate are:

- **2,4-D AS THE ISOPROPYLAMINE SALT**: (for example Ken-Star 450). Ken-Star 450 is specifically formulated for mixing with the isopropylamine form of glyphosate commonly used in fallow situations (e.g.: Ken-Up 450 CT). As both products are formulated on the same base (isopropylamine) there is less chance of antagonism and degradation in the spray tank. Ken-Star 450 is also compatible with most other forms of Glyphosate such as Ken-Up Dry 680. Sufficient spray water volumes, good quality water and using the right mixing order are critical.

- **2,4-D AS THE DUAL SALT**: (Ken-Amine 625); this product is also commonly mixed with Glyphosate products although if left for a long time some tank antagonism may occur lessening the efficacy of the glyphosate, the addition of this product broadens the weed spectrum in the same way as the Ken-Star 450 above.

---

A.B.N. 49 115 269 460
Head Office, 3C/59 Oxford Street
Bulimba Qld 4171
Ph: (07) 3217 9788   Fax: (07) 3217 9733

For more information visit
www.kenso.com.au
2,4-D AS THE LV ESTER 680: (Ken-Ester 680); 2,4-D as the low volatile ester is a very effective herbicide in the control of very tough broadleaf weeds. The use of this product may be geographically restricted in your area. Ester formulations may be required to help control weeds such as wild radish and thistles.

**Clopyralid**

KEN-TREL 300 AND KEN-TREL 750 WG: Clopyralid is a particularly useful herbicide for the control of cape weed, thistles and skeleton weed. It may be added to Glyphosate in a pre sowing application however growers need to be aware of the long plant back periods that apply to some crops. The WG formulation mixes very readily and saves growers on handling and storage.

**Dicamba**

KENSO DICAMBA 500

Dicamba products can be added to glyphosate tank mixes and is very useful to help control a wide range of broadleaf weeds, in particular Dicamba is strong on buckwheat, double gee, docks, clovers and thistles. Dicamba has the added advantage of being non-volatile and not have the same restrictions that apply to 2,4-D phenoxy based products.

**Oxyfluorfen**

KENSO OX 240

Oxyfluorfen products are particularly active on tough to kill weeds such as marshmallows and nettles and are commonly used in fallow and orchard situations in addition to glyphosate. Oxyfluorfen is a contact herbicide and best results are achieved when weeds are small and actively growing, surfactant addition is necessary for good results.

**Triclopyr**

KENSO TRICLOPYR 600

The addition of Triclopyr to Glyphosate is a common mix to control melon weed species: Camel and Prickly Paddy melon.

**GENERAL GUIDELINES FOR AN EFFECTIVE SPRAY JOB.**

- Choose a good brand that has product support
- Use good quality spray water If unavailable – ameliorate the water before using
- Adhere to the conditions on the label
- Spray when weeds are actively growing
- Be aware of the temperature and weather conditions
- Use a sufficient water volume for good coverage and compatibility; a minimum of 50 L per hectare is recommended.

### Some useful information:

<table>
<thead>
<tr>
<th>Product</th>
<th>Herbicide Group</th>
<th>Plant-back</th>
<th>Rainfast period*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,4-D (Ken-Star450)</td>
<td>I</td>
<td>Up to 28 days</td>
<td>6 hours</td>
</tr>
<tr>
<td>Dicamba 500</td>
<td>I</td>
<td>Up to 28 days</td>
<td>4 Hours</td>
</tr>
<tr>
<td>Fluroken 333</td>
<td>I</td>
<td>Up to 28 days</td>
<td>1 Hour</td>
</tr>
<tr>
<td>(Fluroxypyr)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OX 240 (Oxyfluorfen)</td>
<td>G</td>
<td>Up to 90 days</td>
<td>-</td>
</tr>
<tr>
<td>Triclopyr 600</td>
<td>I</td>
<td>-</td>
<td>1 Hour</td>
</tr>
<tr>
<td>Ken-Trel 300/750</td>
<td>I</td>
<td>Up to 360 days</td>
<td>3 Hours</td>
</tr>
</tbody>
</table>

* Need to also consider the rainfast period of the glyphosate formulation.