

A Unique Formulation Suitable for Use in Sandy Soils in Low Rainfall Zones.

KELPIE® PRO-CARB DUO TF is a high load pre-emergent herbicide registered for the control of Annual Ryegrass, Silver Grass & Wireweed, Suppression of Barley Grass and some broadleaf weeds in Wheat and Barley. A patented formulation that combines a high load of 670g Prosulfocarb with 250g/L Trifluralin to target grass weeds.

KELPIE® PRO-CARB DUO TF consists of both a group D & J Herbicide which inhibits fat synthesis and cell division/inhibitors of fatty acids. This convenient co formulation delivers strong combined performance that provides an additional mode of action to combat resistance to Trifluralin.

KELPIE® PRO-CARB DUO TF is a short length residual, soil applied, pre-emergent herbicide that is absorbed by the roots and mesocotyl of germinating seedlings with inhibition of growth in the meristematic region of weed seedlings.

KELPIE® PRO-CARB DUO TF PRODUCT FEATURES



Combats Resistance

This formulation incorporates group D and J actives, which provide alternative modes of action and a robust resistance management strategy delivering better performance than a single active.

Multiple absorption sites

KELPIE® PRO-CARB DUO TF is absorbed by the roots and mesocotyl of the target weeds. The multiple absorption sites increase weed contact opportunities increasing efficacy and minimising weed escapes.

Low Soil Mobility

The low soil mobility of **KELPIE® PRO-CARB DUO TF** prevents downward leaching into the seeded band after incorporation by sowing and assists the active to remain in the weed seed contact zone.

Optimal Transport, Handling and Storage Characteristics

The formulation, 670g/L Prosulfocarb & 250g/L Trifluralin, provides 92% active ingredient. This minimises non-active solvent inclusions as well as reducing drums, storage and handling compared to stand alone formulations.

Compatibility

KELPIE® PRO-CARB DUO TF may be mixed in the spray tank with:

- Herbicides: 540g/L glyphosate (present as the potassium salt), 750g/kg triasulfuron, paraquat/diquat, 250g/L paraquat.
- Insecticides: 500g/L chlorpyrifos.

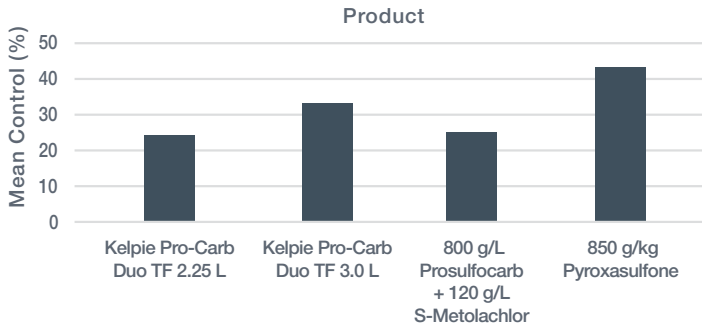
Always refer to plant back restrictions on the label of the tank mix partner.

Solubility

Trifluralin has low water solubility and strongly binds to organic matter in the soil. This means the active has a low soil mobility and will generally not move far from where it was applied making KELPIE® PRO-CARB DUO TF suitable to sandy soils due to its low leaching capacity.

Trials

Figure 1: Percentage Control of Annual Ryegrass. Data presented is the compilation of all trial conducted in Australia by Ag Partners SA. 2015-18.

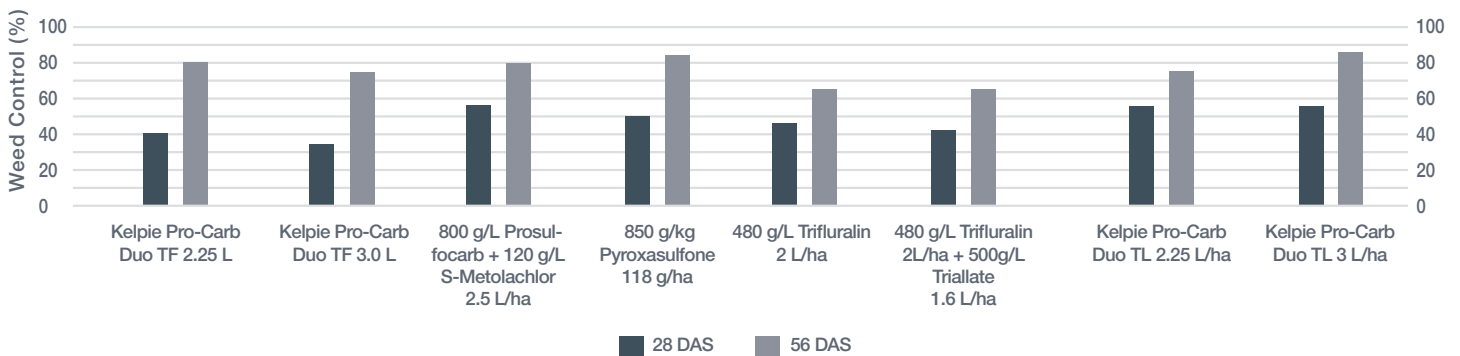


Preliminary trials were conducted by Ag Grow Agronomy & Research in April 2017 at Beelbanger NSW. Weed control was assessed 28 and 56 days after sowing (DAS), with a ryegrass panicle counts taken at maturity. Percent weed control was a measure of the weed control of each treatment in comparison to the untreated control.

KELPIE® PRO-CARB DUO TF showed no increase in efficacy by increasing the rate from 2.25L to 3L/ha. It provided the similar level of control as 2.5L/ha of Boxer Gold® and KELPIE® PRO-CARB DUO TL at 2.25L/ha.

Figure 2: Percentage weed control of Annual Ryegrass taken 28 days after sowing (DAS) and 56 days after sowing (DAS).

Source: Ag Grow Agronomy & Research, 2017



References; <https://www.aggrowagronomy.com.au/wp-content/uploads/2018/01/Imtrade-Pre-emergent-Trial-2017.pdf>
<https://grdc.com.au/resources-and-publications/groundcover/ground-cover-issue-116-may-june-2015/water-solubility-key-to-effective-pre-emergent>