Dead Sure®/AIXR Drift Reduction System (DRS).

The AIXR is a nozzle with a 110° wide, tapered flat spray angle with air induction technology. Depending on the chemical, the AIXR produces large air-filled drops through a Venturi air aspirator.

The Dead Sure/AIXR DRS produces usually less than 10% droplet fines with a range of glyphosate tank mixes. The Dead Sure/AIXR DRS enhances both grass and broadleaf weed control with glyphosate alone or glyphosate plus 2,4-D in the same mixture.

**Drift risk of fallow herbicide mixtures depends on % Driftable Fines**

Reducing the driftable fine droplets formed is a key aspect of controlling chemical spray drift. The physical weight of droplets greater than 150μm diameter means they will not stray far from their original trajectory.

**Figure 1: % Driftable Fines - AIXR nozzle at 5 bar**

The Dead Sure/AIXR DRS does an excellent job with almost all fallow herbicide mixtures tested.

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**Key:**

- **Am625** = Amicide 625
- **Am700** = Amicide 700 at 815mL/ha
- **RuAtk** = Roundup Attack at 1300mL/ha
- **RuCT** = Roundup CT at 1L/ha
- **AS** = Liaise ammonium sulphate at 2% v/v
- **SP** = Surpass 300 at 2400mL/ha
- **Ru DST** = Dual Salt Roundup at 2L/ha
- Dead Sure at 0.5% v/v
- Water volume = 50L/ha

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For more information contact Caltex Precision Spray Oils™: David Johnson, 0401 140 536 or www.precisionsprayoils.com.au
**Drift Potential**

The drift potential of sprays is very strongly correlated with the proportion of fine droplets in a spray. The USA’s Spray Drift Task Force atomization data for thousands of droplet size measurements and a large number of field drift studies forming the heart of the AgDRIFT™ model have been analyzed to produce the following equation:

\[
\text{Drift Potential} = 0.00126534 + 0.000074433 D^{0.1} - 0.00000337 D^{0.5} - 0.0000186 D^{0.9} + 0.3397122 F^{141} \]

When the relevant spray quality data are substituted into this equation, a relative drift potential value is generated.

**Results (See figure above)**

- The Dead Sure/AIXR DRS reduces the drift potential by about half with most mixtures compared to just using the AIXR nozzle as the only DRT.

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Enhanced Weed Control
The Dead Sure/AIXR DRS:

- Despite producing almost no fine droplets, the Dead Sure/AIXR DRS gave excellent efficacy enhancement of the herbicides tested across a range of weed types.

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**Key:**
- Glyphosate = Glyphosate CT applied at 800mL/ha
- Surpass 475 used at 415mL/ha
- Dead Sure used at 0.25% v/v
- Water volume = 50L/ha
- Assessments 29DAT in Namoi