

SURFOM[®] DRT 8575

ANTI-DRIFT SOLUTION



How it works

Spray drift is the physical movement of pesticide droplets or particles through the air from the target site to any non-target site, exposing people, wildlife, and plants to pesticides that can affect their health and the environment, causing financial losses. The risk of spray drift is closely related to spray droplet size. Droplets with a diameter < 200 µm contribute significantly to drift. On the other hand, fine spray droplets are in many cases desirable, offering better coverage of crop protection chemicals.

Adjuvants for drift control need to find a balance between driftable fine reduction and efficacy. The primary function of the drift control adjuvant is to reduce the amount of off-target drift, thereby increasing the amount of pesticides deposited on target surfaces because of a reduction in the amount of spray that moves off-target.

Application

SURFOM® DRT 8575 is a non-polymer anti-drift blend, ready-to-use tank mix adjuvant that combines drift control with pesticide performance improvement.

- Driftable fine reduction;
- Narrow droplet size distribution;
- Increased droplet velocity;
- Non-polymer technology;
- Works with air-induction nozzles;
- Improved wettability, retention and uptake;
- Nonylphenol ethoxylate (NPE) free;
- Proven bioefficacy enhancer for herbicides application;
- Flexibility – Only one product for drift control and bioefficacy.

Technical data

Properties

Appearance at 25 °C (77 °F)	Liquid formulation
Freezing Point, °C (°F)	< - 6 (< 21)
Equilibrium surface tension, mN/m, 0.25% v/v, 25°C (77°F)	33
Contact angle on Parafilm, °	61
Density at 25°C (77 °F), g/cm ³	0.920
Flash Point, °C (°F)	85 (185)
Viscosity at 25 °C (77 °F), cP	12

Application Rates

Recommended dose rate is about 0.25%v/v in the spray tank

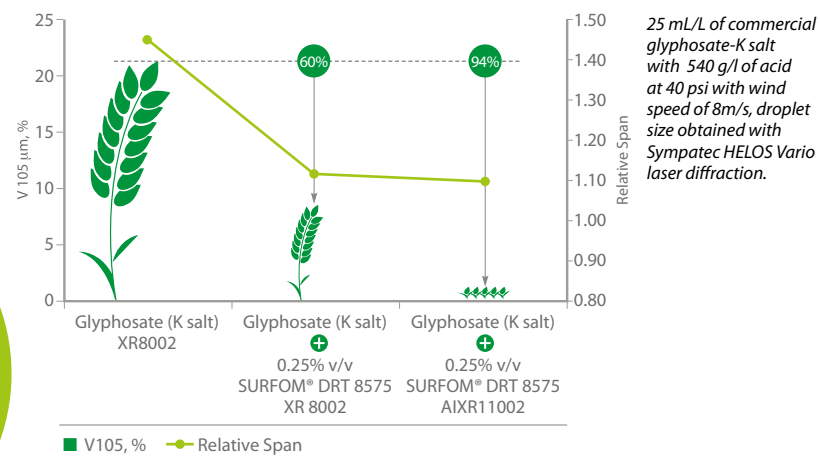
(1) The properties described above are examples only and may be altered without prior notice. Please check the product and contact OXITENO, if necessary.

Driftable fine reduction

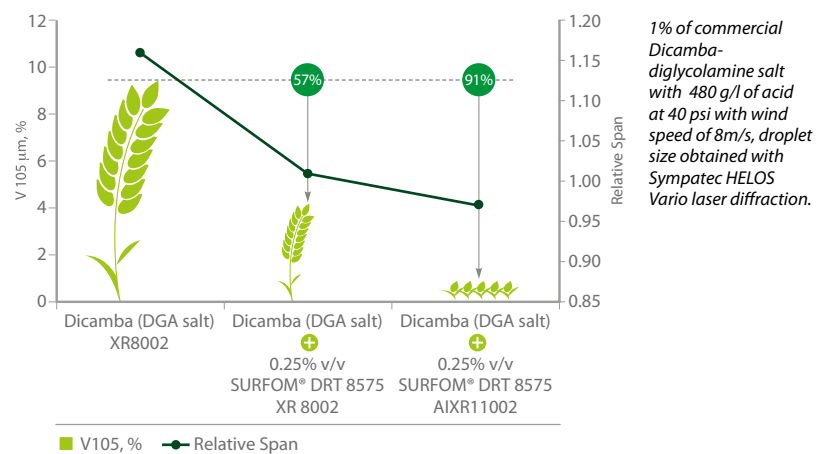
Wind tunnel

Figures 1 and 2 show how SURFOM® DRT 8575 reduces the driftable fine percentage of commercial Glyphosate and Dicamba, decreasing the relative span of droplet size distribution with flat fan and air induction nozzles. The tests below were conducted in a wind tunnel.

1. Driftable Fine Reduction for Glyphosate (K salt)



2. Driftable Fine Reduction for Dicamba (DGA salt)



SURFOM® DRT 8575

Technology differentials

Anti-drift adjuvants influence the quality of the spray by reducing the formation of fine droplets, which are easily charged through the air, allowing more product to reach the target. On the other hand, fine spray droplets are desirable, offering better coverage of crop protection chemicals.

The technology developed by Oxiteno narrows droplet size distribution, avoiding the formation of very small and very large droplets at the same time - balancing drift mitigation with desirable spreading, wetting and penetration properties.

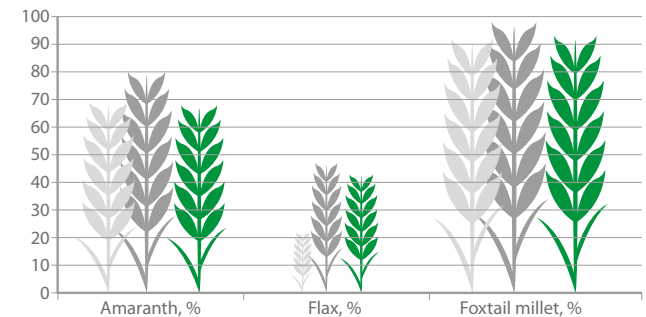
SURFOM® DRT 8575 also improves retention of dicamba and glyphosate on difficult-to-wet plants.






Glyphosate K salt, 2.5% v/v (540 g/L a.e.); Dicamba DGA salt, 1% v/v (480 g/L a.e.), both applied on Lambsquarter with TTI11004; dye: tartrazine

Field trials

It has been demonstrated that SURFOM® DRT 8575 delivers bio-efficacy improvement with a much lower rate. Weed control, 28 DAT – Same performance as Oil adjuvants benchmarks with a much lower rate.



-  Glyphosate (K) + Clethodim + 1% v/v POC Adjuvant (Reference)
-  Glyphosate (K) + Clethodim + 0.75% v/v MSO Adjuvant (Reference)
-  Glyphosate (K) + Clethodim + 0.25% v/v SURFOM® DRT 8575

9.7 fl oz/a of commercial glyphosate-K salt with 500 g/l of acid + 6 fl oz/a of commercial clethodim with 240g/L of ai, TurboTee Jet nozzles, size 11001 at 40 psi and spray volume of 200 L/ha.