

PRODUCT PROFILE

D-C-Trate® NewGen with FIRST® Technology.



D-C-Trate NewGen is Caltex Precision Spray Oils' most advanced selective herbicide adjuvant ever. It's a combination of activating surfactants and mineral oil that work synergistically with our patented FIRST® (Fast Interface-Replenishment Surfactant Technology).

Introducing FIRST Technology

Caltex's FIRST Technology gets surfactant molecules rapidly to where they're needed most – at the interface between the spray droplet and its target. If surfactants are trapped in the interior of a water droplet when it strikes the leaf at high velocity, then there's little stopping that droplet bouncing straight back off again. Caltex's FIRST ensures there's always the impact cushioning effect of the D-C-Trate NewGen surfactant system where the action is. And with the droplet safely secured on the leaf, FIRST takes over again, rapidly replenishing the droplet/leaf interface with new surfactant molecules as soon as the others are used up in the continuous drive to spread the droplet and get your herbicide active through the leaf cuticle.

D-C-Trate NewGen finishes FIRST with herbicides.

D-C-Trate NewGen has been trialled with many herbicides in many regions across several seasons. Its FIRST additive package helped produce impressive results compared to Hasten with a whole host of herbicides. We found:

- D-C-Trate NewGen outperformed Hasten, when used at the same rate, in some trials with Hussar, Fusliade, Spinnaker, Sertin 186, Correct 100EC and Topik 240 EC and performed equally with Fusilade Forte, Decision, Fusion WG, Select and Axial.
- D-C-Trate NewGen outperformed Hasten, when used at half the rate, in some trials with Logran and Aramo and performed equally with Atlantis and Achieve when used at half the rate of Hasten.
- D-C-Trate NewGen, on no occasion, in any trial, showed inferior adjuvancy to Hasten.

D-C-Trate NewGen has been screened extensively with these herbicides in crop safety trials too.

Other Features of the Formulation

Reliable tank mix compatibility

D-C-Trate NewGen forms a micro-emulsion which gives it consistent compatibility in a range of herbicide mixtures even in cold water conditions. Compatibility has been tested in concentrated spray volumes (30L/ha), through fine mesh filters. In known troublesome mixtures, for example, those containing atrazine granules and an EC,

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it has performed robustly. It is physically compatible with a wide range of herbicides including: atrazine, metosulam, flumetsulam, triclopyr, clopyralid, fluoxypyr and selective grass herbicides of the "fop" and "dim" type such as butoxydim, tralkoxydim, sethoxydim, fluazifop, quizalofop and clethodim. Granular formulations require constant agitation.

Benefits of petroleum oil

The petroleum oil component of D-C-Trate NewGen produces benefits in flight, on the leaf and in the cuticle penetration process.

Low ethoxylate surfactants

The low ethoxylate surfactants in the formulation are better at solubilising waxy cuticles and increase the diffusion coefficients of herbicides in leaf cuticles.

Features

- Fast Interface Replenishment Surfactant Technology (FIRST)
- Micro-emulsion formation for more stable tank mixtures
- Low dynamic surface tension
- Highly effective activator surfactants
- Increases herbicide diffusion coefficient in the cuticle
- Low ethoxylated surfactants that aid penetration rate
- Swells intercuticular pores to assist facile passage of herbicide molecules
- Slows droplet drying on leaf surface

Benefits

- Robust performance from selective grass herbicides in post-emergent weed control
- Wide-ranging compatibilities including at low temperatures
- Minimises herbicide over-use saving dollars/ha
- Safe to crops

Key Characteristics

Registered as: A spray oil concentrate to improve the wetting, spreading and penetration of herbicides and insecticides on plant surfaces.

Active constituents: 653g/L petroleum oil; 217 g/L Non-ionic polyethoxylate surfactants

APVMA Registration No: 66652/54100

Formulation type: Emulsifiable Concentrate

Common usage rate: 0.5 to 1% v/v

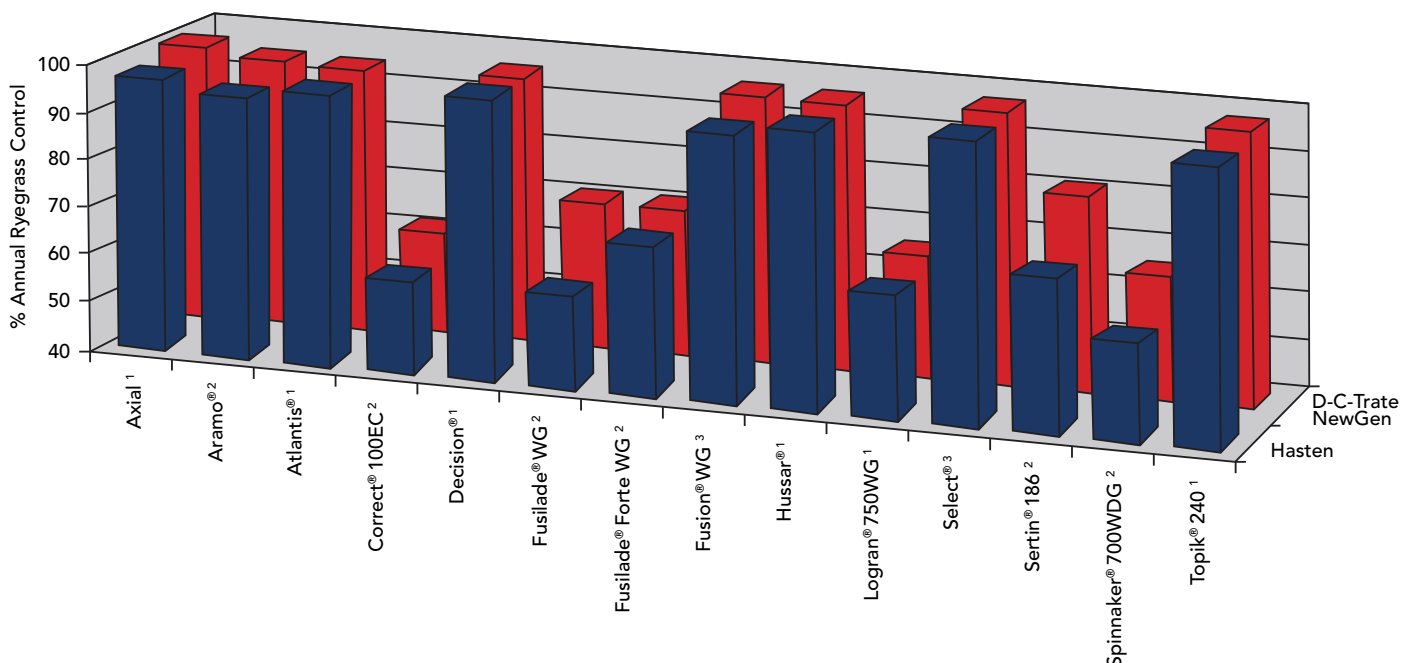
Compatible herbicide types include:

Aramo® Herbicide, Atlantis® Herbicide, Correct® 100EC Selective Herbicide, Decision® Selective Herbicide, Fluazifop WG Herbicide, Fusilade® Forte WG Herbicide, Imazethapyr 700 WDG Herbicide, Logran® 750 WG Selective Herbicide, Hussar® OD Selective Herbicide, Select® Herbicide, Topik® 240 EC Selective Herbicide

Pack Sizes

1000L, 205L, 20L

How D-C-Trate NewGen with FIRST, compares to Hasten.



Data shown from after 50 DAT. Results from Kapunda SA¹, York WA², Long Plains SA³. D-C-Trate NewGen used at 0.5% v/v except with Hussar and Decision (1% v/v). Hasten used at 0.5% v/v except with Atlantis, Decision, Hussar, Spinnaker (1% v/v). D-C-Trate NewGen performed significantly better than Hasten (95% LSD) with Fusilade WG, Sertin 186 and Spinnaker.

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