

BEST MANAGEMENT PRACTICE

Understanding FORMULATIONS

Since introducing TZone™ SE Broadleaf Herbicide for Tough Weeds, we've discovered there is a misconception in the pest control industry that all liquid formulations are alike. It is important to understand the differences between an Emulsifiable Concentrate (EC), and a Suspoemulsion (SE) like TZone SE, because those differences can impact product performance.

Emulsifiable Concentrate (EC)

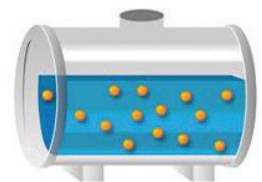
An oil-based formulation containing active ingredients that are dissolved in solvents and emulsifiers. When added to the spray tank, an oil-in-water emulsion results.

- Offers spontaneous emulsification on dilution
- Delivers uniform application of AIs
- Can have an odor



EC Formulation
Liquid active ingredient or a solid dissolved in a solvent, combined with emulsifiers

User dilutes EC prior to application

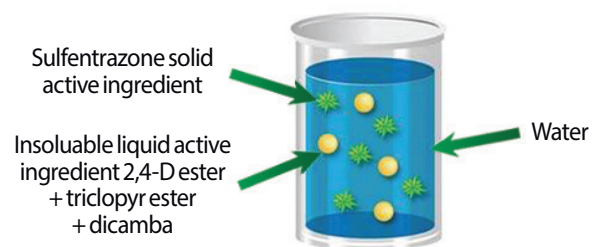


Spray Tank
In the spray tank a spontaneous milky emulsion forms

Suspoemulsion (SE)

A formulation of both liquid and solid active ingredients that readily disperses when diluted with water.

- Combines multiple active ingredients with different solubilities or melting points
- Superior mixing of SE eliminates tank mixing
- Surfactant must support both solid and liquid AIs
- Lower VOC
- Better compatibility with spray tank components



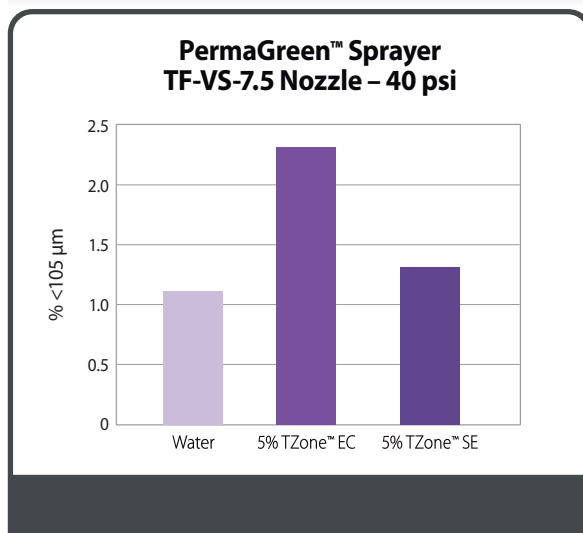
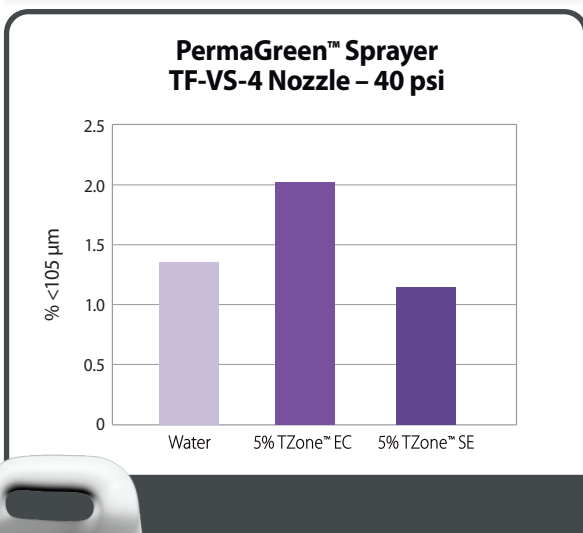
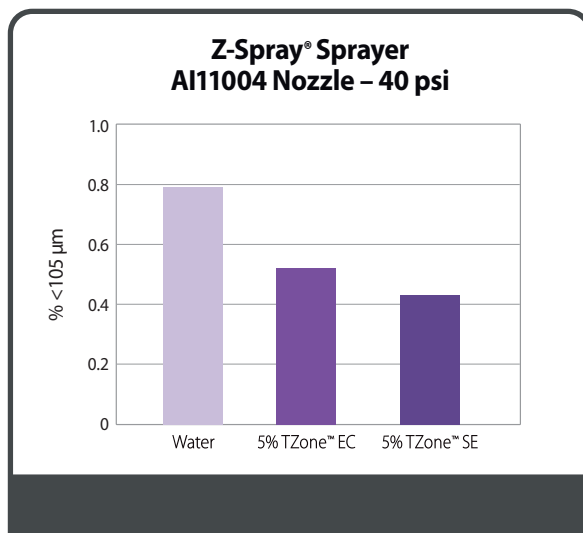
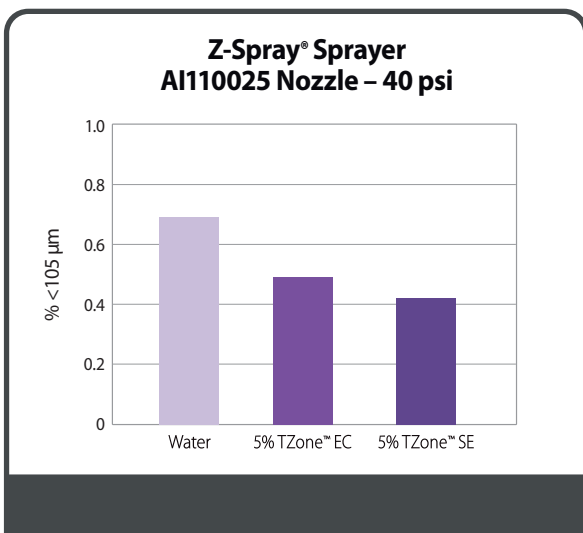
On dilution in the spray tank the SE formulation is further diluted

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Proven Performance

With seven decades in the industry, PBI-Gordon knows a few things about formulations. When we created TZone™ SE Broadleaf Herbicide for Tough Weeds, the advanced suspoemulsion formulation reduced driftable particles by up to 43% compared to an emulsifiable concentrate formulation. That means more active ingredient hits the target weed for better control.



Data was obtained utilizing a vertically oriented low speed wind tunnel.

PBIGordonTurf.com



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