



ECOSURF™ EH Surfactants

Unlock the Power of Your Formulation

When formulated in both in-can pesticide formulations and tank mix adjuvant formulations, ECOSURF™ EH Surfactants provide benefits such as wetting, rapid dissolution, rapid foam collapse, solubilization, low odor and adjuvancy. These benefits coupled with low aquatic toxicity and ready biodegradability position ECOSURF™ EH Surfactants for widespread adjuvant use. ECOSURF™ EH Surfactants are available in a range of HLB's. The ECOSURF™ EH product family consists of ECOSURF™ EH-3, ECOSURF™ EH-6, ECOSURF™ EH-9, ECOSURF™ EH-9 (90%) and ECOSURF™ EH-14.

Suitable Applications

- Tank Mix Adjuvant
- In-Can Adjuvant
- Wetting Surfactant

Typical Properties

Agricultural tank mix adjuvant formulations are applied under a wide variety of conditions with spring applications often utilizing cold water for dilution with limited mixing capabilities. Therefore, it is important for the adjuvant formulation to rapidly dissolve upon dilution in the spray tank. The dissolution rate of a nonionic surfactant adjuvant formulation varies with surfactant composition.

The dissolution rate of ECOSURF™ EH compared to common nonionic surfactants in cold water is shown in Figure 1.

Adjuvants are broadly defined as substances which improve the performance of an active ingredient. In order to evaluate the adjuvant performance of ECOSURF™ EH Surfactants, they were applied with glyphosate IPA to giant foxtail in the presence of 1% ammonium sulfate (AMS). For comparison purposes tallow amine

ethoxylate with 20 EO (TAE20) was also included in the study. When used with glyphosate, ECOSURF™ EH Surfactant improved the control of giant foxtail as shown below. The adjuvant effect improves as EO levels increase. The right balance of hydrophobe and hydrophile is crucial to achieve optimum results.

Availability

Contact your local Dow Crop Defense technical representative for sampling and regional availability. ECOSURF™ Surfactants are cleared for use as inert ingredients in pesticide formulations under EPA Regulations 40 CFR 180.910 and 40 CFR 180.920.

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Figure 1: Dissolution Time

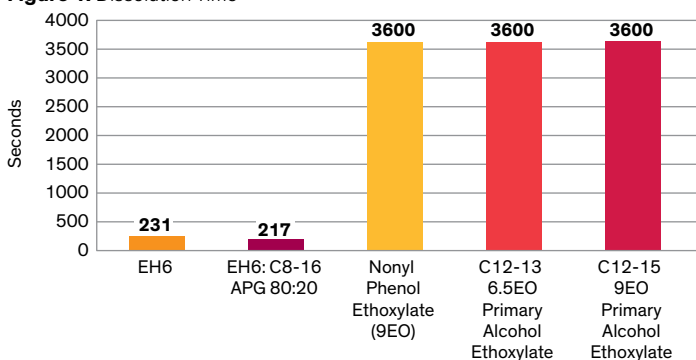
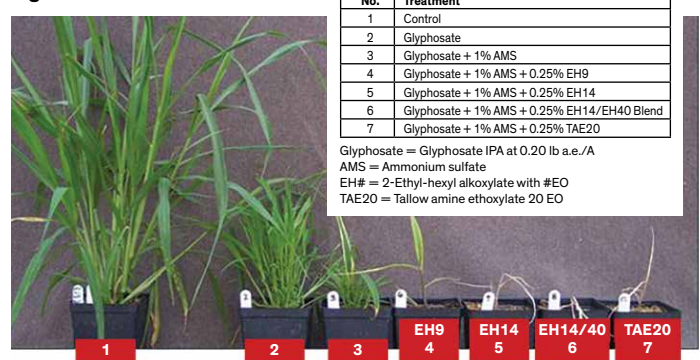


Figure 2



Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

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