

PROWL® H₂O - A NOVEL WATER-BASED FORMULATION OF PENDIMETHALINE**Scott Asher****BASF Corporation****Research Triangle Park, NC****Joe Schuh****BASF Corporation****Parker, CO****Abstract**

Prowl® H₂O is a novel water-based formulation of pendimethalin that will be launched into the cotton market in 2004. Prowl H₂O has many advantages over other dinitroaniline herbicides including; low odor, reduced staining, superior surface stability, and improved performance in high plant residue/no-till cultural practices. Prowl H₂O may be applied in conventional, minimum, stale seeded or not-till as a preplant surface, preplant incorporated, preemergence or lay-by application in cotton.

Prowl H₂O is formulated as a 3.8 lb ai/gallon capsule suspension. This formulation contains three components; a molten pendimethalin core, a polyurea shell which encapsulates the molten pendimethalin core and an aqueous solution which the capsules are suspended in. The capsules are designed to stay intact throughout the spraying process. Once deposited on the soil surface, the capsule wall begins to rupture due to a wetting/drying cycle, heating/cooling, microbial degradation or mechanical incorporation thus releasing the pendimethalin. Prowl H₂O is labeled for control of many common weeds in cotton including barnyardgrass, crabgrass, foxtail spp., kochia, pigweed spp. and waterhemp spp.

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