

Abstract

HERBICIDAL COMPOSITIONS COMPRISING GLYPHOSATE, ACTIVATING SURFACTANT AND POLYUREA, POLYURETHANE, OR POLYUREA-URETHANE

A herbicidal composition including isocyanate capped high molecular weight diols, triols and polyols. Glyphosate and/or a herbicidally active derivative thereof such as a glyphosate salt is combine with hydrophilic, isocyanate end-capped prepolymers in order to significantly improve the efficacy of the herbicide. A combination of surfactant, glyphosate, and a hydrated polymer or hydrophilic prepolymer consisting of isocyanate capped prepolymers which are substantially comprised of ethylene oxide, propylene oxide or butylene oxide units or a combination thereof demonstrates increased efficacy over conventional glyphosate formulations. The liquid herbicidal compositions of the present invention can be prepared by simply mixing the various constituents. The order of addition can be used effectively to cap free isocyanate groups in the hydrophilic prepolymer.