

Abstract

## BIXLOZONE: A NEW ISOXAZOLIDINONE HERBICIDE FOR A WIDE RANGE OF MAJOR CROPS.

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### Abstract

Bixlozone is a new herbicide from the isoxazolidinone family discovered and developed by FMC's research and development organization. It provides a new and unique selective residual weed control solution in a wide range of crops including, cereals, corn, legumes, oilseed rape, rice and sugarcane, and will offer a new mode of action herbicide solution for many of these crops. Bixlozone provides both systemic and contact activity, with residual control and can be applied pre-emergence, early post-emergence or incorporated by sowing, across a wide range of agronomic environments. It controls major problem grass weeds including ryegrass and blackgrass, and several key broadleaf weeds by inhibiting 1-deoxy-D-xylulose 5-phosphate synthase resulting in the disruption of plastid isoprenoid biosynthesis. Bixlozone is proposed to be classified as an HRAC Group F4 and will offer a new rotational product tool for resistance management. It will be an ideal complementary mixing partner for broadleaved herbicides as it can extend the utility of existing molecules by expanding the weed spectrum in many cases at reduced use rates. It will also be safe to a wide variety of rotational crops seeded after initial crop planting. Bixlozone is expected to be first launched in Australia in 2021 in cereals and rapeseed with subsequent launches planned in Asia Pacific, Latin America, and Europe.

**Keywords:** Bixlozone, isoxazolidinone, blackgrass, ryegrass