

Clopyralid is a selective herbicide used for postemergent selective control of broadleaf weeds. It is of the picolinic acid category, which includes Tordon (picloram).

Acute toxicity

Moderate to low toxicity to rats and fish.

Chronic toxicity

Carcinogenic and mutagenic tests have been negative. Developmental and reproductive tests have been mostly negative. Limited positive effects were noted, but these were discounted by later studies.

Environmental fate

Lab data and chemical characteristics indicate high mobility. However, field experiments have not found significant leaching. The Stinger label states: "Can leach through soil and under certain conditions contaminate groundwater. Do not use where soils have a very rapid permeability throughout the profile (such as loamy sand to sand) and the water table of an underlying aquifer is shallow..." Persistence varies, but is likely to be moderate in Thurston County conditions.

Nontarget, other

The inerts are on EPA's List 3 or 4. Clopyralid may be highly phytotoxic to nontarget plants. Residue in the soil may remain toxic the following year for certain species. Clopyralid may seriously injure the eye if exposed and left unwashed.

Conclusions

From the data reviewed, acute toxicity, chronic toxicity, and potential impact to most nontarget organisms would not be a concern. Nontarget impacts to sensitive plants are a concern.

Persistence would be expected to be moderate. The potential for mobility under field conditions appears to be lower than the high potential noted in lab studies. As described by the label, clopyralid should not be used in aquifer sensitive areas.

Clopyralid passes the review criteria. However, potential users should be aware of its potential impact to nontarget plants and mobility in vulnerable soil conditions.