

#### PESTICIDE DETECTIVES

## **HERBICIDE**

## Diuron

#### What is diuron?

Diuron is a broad spectrum herbicide and algicide (APVMA, 2015)

Uses for diuron.

Diuron is used in the control of broadleaved and grass weeds on land, and in the control of weeds and algae in and around water bodies, and is an ingredient in marine antifouling paints. Some uses of diuron are now restricted or no longer allowed. (APVM, 2015)



#### How does diuron work?

Diuron inhibits photosynthesis which is the way in which plants capture light and turn it into energy to grow, thus preventing growth. (Moncada,2004)

# What happens to diuron when it enters the environment?

Diuron is highly mobile and relatively persistent in water, so prone to movement in surface runoff and migration in groundwater (Moncada, 2004). Diuron also persists in soils and sediments.

### Sediment quality guideline values for diuron

ANZECC guidelines have stipulated a freshwater low reliability value of 0.2  $\mu$ g/L, and a marine low reliability value of 1.8  $\mu$ g/L. There was insufficient data for a high reliability value. LC50 data is available for a range of species for example: 190ppm in rainbow trout (96hrs).

#### References

Australian Pesticides and Veterinary Medicines Authority, diuron chemical review 2015, https://apvma.gov.au/node/12511

Adriana Moncada, 2004, Environmental fate of Diuron, Environmental Monitoring Branch, Department of Pesticide Regulation Sacramento CA, <a href="http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.433.9676&rep=rep1&type=pdf">http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.433.9676&rep=rep1&type=pdf</a>

https://www.waterquality.gov.au/anz-guidelines/guideline-values/default/water-quality-toxicants/toxicants/diuron-2000