

Dinoseb (C₁₀H₁₂N₂O₅)

What is Dinoseb?

Dinoseb is a contact herbicide in the chemical family dinitrophenol. It was widely used to control broadleaf weeds in agricultural crops such as soybeans, vegetables, and other field crops, as well as fruits and nuts. It is a dark brown/reddish brown solid or viscous liquid with a pungent odor. Dinoseb has been banned from use in the US since 1986 due to harmful health effects.

Does Dinoseb have any additional names?

Chemical Name: 2-(sec-butyl)-4,6-dinitrophenol

Trade Names: DNBP; DNOSBP; Kiloseb; Klean Krop, and many others

What are the known health effects?

Some people who drink water containing Dinoseb well in excess of the MCL over many years could experience reproductive difficulties.

How does exposure occur?

Since Dinoseb is no longer used, exposure from food, soil, or air is unlikely to occur. The use of Dinoseb on farms contaminated groundwater, and that could lead to exposure among some populations.

Is this contaminant regulated?

Yes, and water supplied to Mount Laurel MUA customers is in compliance with USEPA and NJDEP requirements. The maximum concentration of Dinoseb permitted in drinking water is 7 ppb; water supplied by the MLTMUA system has not reported any detections of Dinoseb.

How can I reduce exposure?

Dinoseb in drinking water can be removed by point of use granulated activated carbon filtration.

Additional information regarding Dinoseb, including the information referenced, can be found at:

https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0047_summary.pdf

<https://dhss.delaware.gov/dhss/dph/files/dinosebfaq.pdf>