



DINOSEB

What is DINOSEB?

Dinoseb is an organic solid with a pungent odor. Its main use is as an herbicide, a substance used to kill or control plants. It is also used as an insecticide. Former product names containing Dinoseb were: Basanite®, Caldon®, Chemox®, Chemsect DNBP®, Dinitro®, Dynamyte®, Elgetol®, Gebutox®, HelFire®, Kiloseb®, Nitropone®, Premerge®, Sinox General®, Subitex® and Vertac® Weed Killer.

Where can Dinoseb be found and how is it used?

Until 1986, Dinoseb was used in the United States to control grass and weeds in agricultural crops such as soybeans, vegetables and other field crops, as well as fruits and nuts. It also killed insects in grapes and was used to dry seed crops. Harmful health effects, including birth defects, were experienced among people who applied Dinoseb or worked near high levels of it.

How can people be exposed to Dinoseb?

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.

How does Dinoseb work and how can it affect my health?

Short-term exposure to Dinoseb causes sweating, headaches and mood changes.

Long-term exposure to Dinoseb over a lifetime causes loss of body and thyroid weight. It can also harm the testes and thicken the intestinal lining. There is not enough data to know if drinking Dinoseb in water over a lifetime causes cancer.

How is Dinoseb poisoning treated?

Medical personnel can treat the symptoms of Dinoseb poisoning and limit the effect of the exposure.

What should I do if exposed to Dinoseb?

If you think you were exposed to Dinoseb, remove yourself from the source and seek medical help.

What factors limit use or exposure to Dinoseb?

Dinoseb is banned in the United States and, therefore, exposure is very limited.

Is there a medical test to show whether I've been exposed to Dinoseb?

Blood and urine tests can determine exposure to Dinoseb and similar compounds.



Technical information for Dinoseb

CAS Number: 88-85-7

Chemical Formula: $C_{10}H_{12}N_2O_5$

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

Carcinogenicity (EPA): D – Not classifiable to human carcinogenicity.

MCL (Drinking Water): 0.007 mg/L (or 7 μ g/L = 7ppb)

OSHA Standards: None

NIOSH Standards: None

References and Sources

U.S. EPA Groundwater & Drinking Water Consumer Fact Sheet on Dinoseb,
http://www.epa.gov/safewater/contaminants/dw_contamfs/dinoseb.html (Accessed 10/29/09)

U.S. EPA Groundwater & Drinking Water Technical Fact Sheet on Dinoseb,
<http://www.epa.gov/safewater/dwh/t-soc/dinoseb.html> (Accessed 10/29/09)

Oregon State University, Extension Technology Network, Pesticide Information Profiles,
<http://extoxnet.orst.edu/pips/heptachl.htm> (Accessed 10/29/09)

U.S. EPA, IRIS Summary for Dinoseb, <http://www.epa.gov/ncea/iris/subst/0047.htm> (Accessed 10/29/09)