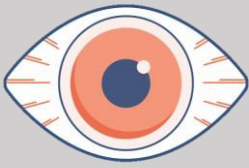


2,4-D HERBICIDE

WHAT IS 2,4-D HERBICIDE?

A commonly used herbicide to control broadleaf weeds, 2,4-D can be applied to turf, lawns, aquatic sites, forestry sites, and agricultural production. Originally used as a component of the deadly Agent Orange biocide, 2,4-D is a weed killer that was developed in the 1940's by Dow Chemical and is mostly used for aesthetic lawn maintenance. This herbicide can be used in liquid, dust, or granule formulas and applied in various ways. It is included in a variety of herbicide products including **Weed & Feed, Triplet, End Run** and **Q4 Plus**. 2,4-D prevents the continued growth of broadleaf plants by initiating uncontrolled cell division in unwanted plants. It generally does not affect residential grasses; however, it can kill or harm non-target species of other broadleaf plants. While toxicity can be limited with proper handling and minimize exposures, there are environmental and human health risks associated with the commercial or residential application of 2,4-D herbicide.

IMPACTS OF 2,4-D HERBICIDE



2,4-D is a **known eye and skin irritant**. High levels of exposure can also result in vomiting, headaches, dizziness, and respiratory irritation. ^{1,2}



2,4-D is classified by the IARC as a **possible human carcinogen** and is linked to both non-Hodgkin's lymphoma and sarcoma. 2,4-D is also an endocrine disrupting chemical that can interfere with the normal actions of estrogen and thyroid hormone. ^{2,3}



This herbicide is toxic to aquatic life with fish early life-stages being the most sensitive. 2,4-D may cause reproductive effects and death in both fish and other aquatic species. ⁴



2,4-D has been detected in both surface and groundwater in the United States. ⁵

RIGHT TO KNOW: Herbicide Spraying in Anchorage

Anchorage law regulates the spraying of broadcast chemicals (pesticides, insecticides, or herbicides) by private companies under Title 15 of the Municipal Charter. Under this law there is a provision for notification:

1. Notice must be provided by the company at least 48 hours before application to the adjacent property owners and kept in place for 48 hours following the application.
2. The notice must be given to each residential and commercial building property that shares a common boundary and/or is near or close, but not necessarily touching the property to be sprayed.
3. Broadcast chemicals may not be sprayed if the wind speed exceeds the maximum wind speed stated on the label, or 7 mph, if no wind speed is stated on the label.

To report violations, contact the Anchorage Health Department Environmental Health Services to file a complaint. If the company is found to be in violation, the spraying may be discontinued.

(907) 242-4200 OR

www.muni.org/soundoff



ALTERNATIVES TO HERBICIDES

Maintaining the health of your outdoor space will prevent the intrusion of unwanted plant pests. Many effective alternatives to herbicide use can be implemented to prevent and remove unwanted plants, while ensuring the health of your local environment.⁶

1. Fertilizers

Chemical fertilizers are damaging to local environments. Organic fertilizers can be purchased at local home and garden shops or created through composting. Maintaining healthy lawns can be achieved by applying organic fertilizer 6 weeks after lawn planting and fertilizer approximately 4 times per year.

2. Natural Herbicides

Organic weed remover can be made with simple at home ingredients including a combination of vinegar (1/2 gallon), salt (1/2 cup), and dish soap (2 tablespoons). Homemade mixtures will be effective at removing unwarranted plants, but may damage grasses, so should be used sparingly across entire lawns.⁷

3. Mulching & Mowing

Waste materials from mowing can be recycled to encourage healthy soils. Grass clippings collected during mowing can be left on top of lawns, acting as an organic fertilizer or can be added to compost or mulch piles which can be distributed throughout the lawn or other outdoor spaces.⁸

4. Promote Healthy Soils

Maintaining healthy soils is the key to ensuring your outdoor space is resilient and remains weed free. Ensuring even and consistent irrigation, adequate mowing, and proper soil aeration to overturn soil and improve oxygen flow will not only prevent unwanted plants, but encourage the growth of grasses, flowers, and shrubs.

5. Promote Pollinators

Pollinators like bees, birds, and other insects are essential for carrying pollen across environments and fertilizing plants. They are important in promoting diversity and protecting from harmful plant species. Lawns can promote pollinators by incorporating diverse species and avoiding the use of pesticides, allowing overall greater lawn health.⁹

6. Hand Weeding

If weeds do manage to grow, manual hand weeding can be implemented to prevent the continued propagation of weeds. Hand weeding involves manual removal of weeds across the lawn, ensuring the entire root of the weed is removed from the soil.

7. Alternative Lawns

Lawns are not limited to mono-culture grasses, they can be dynamic and diverse with a variety of plants. Incorporating flowers, shrubs, and trees into yard landscapes will bring pollinators and promote diverse health soils promoting new and circulating nutrients through the soil systems.¹⁰

QUESTIONS?

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