Chemical Factsheet

Trinexapac-ethyl

General Information

- Product Names:
  GROOM(TM) PGR
  QUALI-PRO T-NEX
  LPI T-PACK MEC PLANT GROWTH REGULATOR
  TRIN-PAC SELECT
  LAWN PRIMO
  PALISADE
  GOLDWING
  ARMOR
- Chemical Class: Plant growth regulator
- Uses: Uses for of barley, grasses grown for seed, oats, sugarcane, triticale, turf grass, and wheat. Turf grass uses include athletic fields and parks, commercial and residential lawns, golf courses, and sod farms. It is also registered for application around flower beds, ornamental trees, and shrubs.
- Alternatives: Organic Land Management
- Beyond Pesticides rating: Toxic

Health and Environmental Effects

See citations at end of document.

- Cancer: Not documented
- Endocrine Disruption: Not documented
- Reproductive Effects: Not documented
- Neurotoxicity: Not documented
- Kidney/Liver Damage: Not documented
- Sensitizer/ Irritant: Not documented
- Birth/Developmental: Not documented
- Detected in Groundwater: Not documented
- Potential Leacher: Not documented
- Toxic to Birds: Not documented
- Toxic to Fish/Aquatic Organisms: Not documented
- Toxic to Bees: Not documented

Additional Information

- Regulatory Status:
  - EPA Regulatory Documents
  - National Library of Medicine: PubChem Hazardous Substances Database
  - PAN Pesticides Database: Trinexapac-ethyl (Pesticide Action Network)
- Studies [compiled from the Pesticide-Induced Diseases Database]
  - Dermal exposure assessment to trinexapac-ethyl: a case study of workers in golf course in Hawaii, USA. Wang, X., Murison, J., Wang, J. et al. Dermal exposure assessment to

trinexapac-ethyl: a case study of workers in golf course in Hawaii, USA. Environ Sci Pollut Res 28, 1072–1076 (2021). https://doi.org/10.1007/s11356-020-10566-w
- Evidence of the Toxic Potentials of Agrochemicals on Human Health and Biodiversity: Carcinogens and Mutagens. Yarkwan, B., Isaac, T.O., Okopi, A., Izah, S.C. (2024). Evidence of the Toxic Potentials of Agrochemicals on Human Health and Biodiversity: Carcinogens and Mutagens. In: Ogwu, M.C., Izah, S.C., Ntuli, N.R. (eds) Food Safety and Quality in the Global South. Springer, Singapore. https://doi.org/10.1007/978-981-97-2428-4_11
- A preliminary study on the detection of potential contaminants in the European brown hare (Lepus europaeus) by suspect and microplastics screening. Romana Hornek-Gausterer, Herbert Oberacher, Vera Reinstadler, Christina Hartmann, Bettina Liebmann, Ievgeniia Lomako, Sigrid Scharf, Annika Posautz, Anna Kübber-Heiss, A preliminary study on the detection of potential contaminants in the European brown hare (Lepus europaeus) by suspect and microplastics screening, Environmental Advances, Volume 4, 2021, 100045, ISSN 2666-7657, https://doi.org/10.1016/j.envadv.2021.100045.
- Heavy Metals and Pesticides Toxicity in Agricultural Soil and Plants: Ecological Risks and Human Health Implications. Alengebawy A, Abdelkhalek ST, Qureshi SR, Wang M-Q. Heavy Metals and Pesticides Toxicity in Agricultural Soil and Plants: Ecological Risks and Human Health Implications. Toxics. 2021; 9(3):42. https://doi.org/10.3390/toxics9030042

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