

2-Methyl-1-butanol (431602) Fact Sheet

OPP CHEMICAL CODE: 431602 (CAS # 137-32-6)

Summary

2-Methyl-1-butanol is registered as a biochemical pesticide. It is a naturally occurring alcohol present in all fruits, wine and beer. 2-Methyl-1-butanol is also present in many of our processed foods as a flavorant. No adverse human health effects have been associated with its consumption; and all data on file with the Agency confirm its non-toxic mode of action as a biochemical pesticide. As a biochemical active ingredient, 2-Methyl-1-butanol is intended for non-food use as an attractant for hornets and wasps (particularly yellowjackets, a subset of predatory wasps) in traps. Agency reviews indicate that the use of this compound poses no significant risk to human health or the environment due to limited exposure and negligible hazard.

I. Description of the Active Ingredient

2-Methyl-1-butanol is a whiskey-scented amyl alcohol that is naturally present in all fruits wine and beer. 2-Methyl-1-butanol is commercially used as a solvent in paints and oils and as flavorant in many processed foods. 2-Methyl-1-butanol has a characteristic redolence, which is thought to account for its active properties as an attractant for hornets and certain wasps, such as yellowjackets, in traps. As a biochemical active ingredient, it has a non-toxic mode of action – targeted pests are killed through physical entrapment.

II. Use Sites, Target Pests, and Application Methods

- **Use Sites:** 2-Methyl-1-butanol is used as an attractant in traps for hornets and wasps, particularly yellowjackets. It is primarily intended for residential uses; commercial uses are unlikely, but not prohibited. Uses are limited to non-food applications. A perimeter of 20 feet must be kept around building entrances, gardens, and agricultural crops. The perimeter is to assure that volatilized residues do not contaminate food and that people in the area of the traps are not subject to the potential hazard of increased wasp, hornet and yellowjacket traffic.
- **Target pests:** Hornets and Wasps, particularly Yellowjackets. (Yellowjackets are a subset of predatory wasps that are frequently referred to as distinct from all wasps in the literature.)
- **Application Methods:** 2-Methyl-1-butanol is contained in a water soluble pouch inside a trap. The user must cut open the trap entrance structure, add the appropriate amount of

water to activate the attractant, and hang the trap. The trap is for a single use and is not designed to be reused or refilled. The used trap is disposed of via trash collection.

III. Assessing Risks to Human Health

No significant human health risks are expected when the pesticide is used in accordance with the label directions. The human health assessment for the 2-Methyl-1-butanol notes the following: 1) no exposure is expected due to the active ingredient's containment in traps; 2) the active ingredient is naturally occurring and is not associated with any hazard; 3) people are regularly exposed to the active ingredient as a food additive without known incident; 4) traps are intended for non-food uses only; 5) traps are to be kept at a minimum of 20 feet from buildings and food crops; 6) the active ingredient volatilizes in very low concentrations and 7) pesticidal residues resulting from volatilization dissipate and degrade rapidly.

IV. Assessing Risks to the Environment

Information submitted to the Agency in support of waiver requests indicate that the pesticide should pose no significant risk to the environment if used in accordance with label directions. The active ingredient is intended use in yellow jacket traps; accordingly, no direct exposures are expected for non-target organisms. The active ingredient volatilizes in very low concentrations and dissipates rapidly. And because it biodegrades rapidly, it is not expected to accumulate in the environment. Even in the event of small exposure, there is no ecotoxicity associated with this biochemical. 2-Methyl-1-butanol is an attractant with a non-toxic mode of action. There are no toxicological endpoints associated with non-target organism exposed to the compound. Further, there are no reported incidents of ecotoxicity relative to exposure to this naturally occurring compound. Because of the lack of exposure and toxicity associated with this use of 2-Methyl-1-butanol, a "No Effect" (NE) determination was issued for threatened and endangered species.

V. Regulatory Information

2-Methyl-1-butanol was registered as an active ingredient in February, 2010. There is one registered product containing 2-Methyl-1-butanol as an active ingredient.

VI. Registrant Information

Bull Run Scientific, VBT,
7400 Beaufont Springs Drive, Suite 300
Richmond, VA 23225-5519

VII. Additional Contact Information:

[Ombudsman, Biopesticides and Pollution Prevention Division](#) (7511P)
Office of Pesticide Programs
Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460