



Name: Bromuconazole

CAS: 116255-48-2

Molecular formula: C₁₃H₁₂BrCl₂N₃O

Characteristics:

Bromuconazole is the active ingredient (20%) in the product CHIPCO®. It is a fungicide to be used primarily in enclosed commercial greenhouses to control diseases (black spot) in commercially-grown roses. The substance decomposes on burning producing toxic gases/fumes including nitrogen oxides, hydrogen chloride, hydrogen bromide, carbon monoxide. Bromuconazole is odourless and colourless crystals or powder.

Health effects:

Humans

The substance can be absorbed into the body by inhalation and by ingestion. **Effects of short-term exposure:** bromuconazole may cause effects on the nervous system, if ingested, resulting in depression. **Effects of long-term or repeated exposure:** The substance may have effects on the liver, resulting in tissue lesions and impaired functions. Bromuconazole is not a dermal sensitizer.

Animals

The substance is high toxic to aquatic organisms.

Carcinogenity (IARC):

Not listed

Environment:

In soil under aerobic conditions bromuconazole exhibits high to very high persistence forming several minor (< 10% AR) metabolites. Mineralisation is limited accounting for only 1-4.4% AR after 100-120 days. The formation of unextractable residues was a sink, accounting for 5-17.6 % AR after 100-120 days. Laboratory soil photolysis study indicated that photolysis may contribute to the degradation of bromuconazole at the soil surface. Bromuconazole is essentially stable to hydrolysis and photolysis is not expected to be a significant process in the breakdown of bromuconazole in natural aquatic systems. Potential for contamination of surface water and groundwater cannot be adequately assessed because reliable degradation rates in soil under field conditions are not available.

Synonyms:

1-((2rs,4rs,2rs,4sr)-4-bromo-2-(2,4-dichlorophenyl)tetrahydrofurfuryl)-1h-1,; 1-((4-bromo-2-(2,4-dichlorophenyl)tetrahydro-2-furanyl)methyl)-1h-1,2,4-tria; 1h-1,2,4-triazole,1-((4-bromo-2-(2,4-dichlorophenyl)tetrahydro-2-furanyl)methyl); 1-((2RS,4RS,2RS,4SR)-4-Bromo-2-(2,4-dichlorophenyl) tetrahydrofurfuryl)-1H-1,2,4-triazole

Hazard symbols: Harmful



Risk Codes:

R22 Harmful if swallowed.

Safety Description:

S36 Wear suitable protective clothing.

Links:

<http://www.chemnet.com/product/pclist--bromuconazole--0.html>

http://www.alanwood.net/pesticides/index_cn_frame.html

<http://www.epa.gov/opprd001/factsheets/bromuconazole.pdf>

http://www.pesticideinfo.org/Detail_Chemical.jsp?Rec_Id=PC36318

<http://www.inchem.org/documents/icsc/icsc/eics1264.htm>

<http://actrav.itcilo.org/actrav-english/telearn/osh/ic/11625548.htm>

http://www.chemicalbook.com/ProductChemicalPropertiesCB7299007_EN.htm

<http://www.efsa.europa.eu/en/scdocs/doc/s136r.pdf>



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