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SubmitterType	BehalfOfAnOrganisation
OrganisationType	Company-Manufacturer
OrganisationName	Safeguard Europe
OrganisationCountry	United Kingdom
ProductType	PT08

GeneralComments

AltIdentityAndProp Having reviewed the alternatives to disodium tetraborate on the active substance list for Product Type 8 under the Biocidal Product Regulations, other than the other boron based actives (boric oxide, disodium octaborate tetrahydrate and the various hydrates of disodium tetraborate) no other single active substance is an appropriate alternative. Combinations of IPBC with either propiconazole or tebuconazole would offer a similar fungicidal spectrum to disodium tetraborate. The addition of either permethrin or cypermethrin, would be necessary to incorporate the insecticidal properties of disodium tetraborate.

TechFeasibility A number of products have been approved under BPR containing alternatives to disodium tetraborate. These products contain multiple active substances in order to achieve the same spectrum of efficacy as disodium tetraborate. Formulating with multiple active substances brings additional complexities that are not present when working with a single active. The changes in the availability of co-formulants would be detrimental to these products as they have limited water solubility, whilst disodium tetraborate formulations are simple by comparison.

HazAndRisks Fungicidal Alternatives -
Propiconazole is a reproductive toxin 1B, an acute toxin if swallowed, a skin sensitizer and is under assessment as an endocrine disruptor. It is also toxic to aquatic life with long lasting effects. It is under assessment to be a candidate for substitution.

Tebuconazole is a reproductive toxin 2, an acute toxin if swallowed and is toxic to aquatic life with long lasting effects. It is under assessment to be a candidate for substitution.

IPBC is a skin sensitizer, an acute toxin if inhaled or swallowed, causes eye damage and damage to the larynx. It is under assessment as an endocrine disruptor. IPBC is also toxic to aquatic life with long lasting effects. It is under assessment to be a candidate for substitution.

Insecticidal Alternatives -
Permethrin is a skin sensitizer and an acute toxin if inhaled or swallowed. It is also toxic to aquatic life with long lasting effects.

Cypermethrin is toxic if swallowed, or inhaled, may cause damage to organs through prolonged or repeated exposure, is harmful in contact with skin and may cause respiratory irritation. It is very toxic to aquatic life with long lasting effects. It is under assessment

to be a candidate for substitution.

By comparison disodium tetraborate is considered a reproductive toxin 1B.

Availability The alternatives are currently available, but future availability cannot be relied upon due to the possibility that the regulatory issues outlined in section 4 may cause manufacturers to withdraw from the market.

AltSuitAvailConcl Products containing alternative active substances to disodium tetraborate are currently on the market. However, the process of switching to these products would constitute enormous investment from a SME.

The active substances for the fungicidal properties are all under assessment to be candidates for substitution. They also constitute a broader range of hazards, including skin sensitisation and environmental hazards compared to disodium tetraborate.

Of the active substances for the insecticidal properties, cypermethrin is under assessment to be a candidate for substitution.

In order to achieve the fungicidal and insecticidal properties of disodium tetraborate, it is necessary to use multiple actives, including two fungicides that are under assessment as candidates for substitution.

The use of multiple actives, which are under assessment as candidates for substitution, puts the products at high risk of their place on the market being restricted. This would entail further costs for retraining, labelling and formulating. disodium tetraborate by comparison results in a relatively simple formula and so a lower risk financially.

SubstanceName Disodium tetraborate pentahydrate

ECNumber 215-540-4

CASNumber 12179-04-3

CompetentAuthority The Netherlands

CommentRegarding 8

IntendedUse Disodium tetraborate pentahydrate acts a fungicide and insecticide; and is used for industrial, professional, and non-professional users as a preventive and curative wood preservative for wood and construction timbers in Use Classes 1, 2, 3 and 4a according to CEN 335-1. Products are applied by vacuum pressure, dipping, injection, spraying/deluge, or brushing