

Evaluation Report for Category B, Subcategory 3.1, 3.11, 3.12, and 3.14 Application

Application Number: 2009-1046
Application: B.3.1-Changes to Product Labels-Application Rate Increase
B.3.11-Changes to Product Labels-New Pests
B.3.12-Changes to Product Labels-New Site or Host
B.3.14-Changes to Product Labels-Classifications
Product: Polyphase PW20
Registration Number: 29260
Active ingredients (a.i.): 3-iodo-2-propynyl N-butylcarbamate (IPB)
PMRA Document Number English PDF: 2023042

Purpose of Application

The purpose of this application was to amend the label and reclassify this registered manufacturing concentrate Polyphase PW20, to a commercial material preservative end-use product.

Chemistry Assessment

A chemistry assessment was not required for this application.

Health Assessments

Polyphase PW20 is of low acute toxicity by the oral ($LD_{50} > 2000$ mg/kg bw), dermal ($LD_{50} > 2000$ mg/kg bw), and inhalation ($LC_{50} > 2.04$ mg/L) routes of exposure. It is extremely irritating to the eyes, moderately irritating to the skin, and is not considered to be a dermal sensitizer.

Environmental Assessment

An environmental assessment was conducted on Polyphase PW20 (containing 20% of the technical grade active ingredient 3-iodo-2-propynyl N-butylcarbamate). Polyphase PW20 is currently registered as a manufacturing concentrate (Reg. No. 29260) for use in the manufacturing, reformulating or repackaging of material preservatives for paints and stains, cutting oils, wood, adhesives, inks and paper coating for non-food uses. This product is similar to the registered manufacturing concentrate Polyphase P-20T (Reg. No. 24141).

The active ingredient 3-iodo-2-propynyl N-butylcarbamate is toxic to aquatic organisms. Direct environmental exposure to 3-iodo-2-propynyl N-butylcarbamate is not expected since the product is to be used as a preservative for materials such as paints and stains, cutting oils, wood, adhesives, inks and paper coating for non-food uses. The label does not permit discharge of effluent containing this product into aquatic systems. Since this active ingredient is currently registered for proposed uses and concentrations, the exposure of non-target organisms to Polyphase PW20 is not expected to increase. Environmental exposure to material preservatives leaching from treated materials is considered negligible.

Value Assessment

Two trials were carried out with different paint formulations to support the use of Polyphase PW20 as a dry-film preservative for paints. The ranges of rates found to be effective are as follows: Exterior paint (solvent) 0.5-1.5%, Exterior paint (latex) 1.0-2.5% and Interior paint 0.2-0.8%. These rates are consistent with those of other similar Troy Chemical Corporation products. Therefore, based on the information provided, Polyphase PW20 is acceptable for use in controlling fungal defacement of interior and exterior paint films.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided in support of the product, Polyphase PW20, and has found the information sufficient to amend the registration of the manufacturing concentrate to a commercial material preservative end-use product.

References

PMRA Number	Title
1424931	2007, Product Toxicology of Polyphase PW20, DACO: 4.1
1424932	2006, Acute Oral Toxicity Up and Down Procedure to Rats, 19142, DACO: 4.6.1
1424933	2006, Acute Dermal Toxicity Study in Rats-Limit Test, 19143, DACO: 4.6.2
1424934	2006, Acute Inhalation Toxicity Study in Rats-Limit Test, 19144, DACO: 4.6.3
1424935	2006, Primary Eye Irritation Study in Rabbits, DACO: 4.6.4
1424936	2006, Primary Skin Irritation Study in Rabbits, DACO: 4.6.5
1424937	2006, Dermal Sensitization Study in Guinea Pigs (Buehler Method), DACO: 4.6.6
1735601	2009, Mode of Action, DACO: 10.2.1
1735602	2009, Description of Pest Problem, DACO: 10.2.2
1735603	2006, Efficacy Growth Chamber Studies, DACO: 10.2.3.2(E)
1735604	2006, Efficacy Growth Chamber Studies, DACO: 10.2.3.2(E)

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