

Evaluation Report for Category B, Subcategory B.2.3, 2.4, 3.1, 3.12 Application

Application Number: 2008-1550
Application: New end use product
Product: Fungitrol 440S Fungicide
Registration Number: 29896
Active ingredients (a.i.): 3-Iodo-2-propynyl butyl carbamate (IPB)
PMRA Document Number (English PDF): 1989689

Purpose of Application

The purpose of this application was to register a new end use product, Fungitrol 440S Fungicide, that contains the active ingredient 3-iodo-2-propynyl butyl carbamate (iodocarb). Fungitrol 440S Fungicide is for use as a preservative in exterior paint films, plastics, and adhesives.

Chemistry Assessment

Fungitrol 440S Fungicide is formulated as a solution containing 3-iodo-2-propynyl butyl carbamate at a nominal concentration of 40% w/w. This end-use product has a density of 1.17 g/mL and a pH of 7.0. The chemistry requirements for Fungitrol 440S Fungicide are complete.

Health Assessments

Fungitrol 440S Fungicide is considered to be of slight acute toxicity via the oral and dermal routes, and of moderate acute toxicity via the inhalation route. Fungitrol 440S Fungicide is severely irritating to the eyes, mildly irritating to the skin, and considered to be a potential dermal sensitizer.

A risk assessment was not performed for Fungitrol 440S Fungicide as the use pattern fits within the existing use profile for the active ingredient, 3-iodo-2-propynyl butyl carbamate (iodocarb). The potential exposure to mixers, loaders, applicator and the post-applicators is not expected to exceed that of registered uses. Label amendments outlining supplementary personal protective equipment (PPE), required due to toxicology signal words and hazard statements, were provided.

Environmental Assessment

The active ingredient 3-iodo-2-propynyl butyl carbamate is toxic to aquatic organisms. The end-use product, Fungitrol 440S Fungicide, contains an aromatic petroleum distillate. Environmental exposure to these products through manufacturing processes can be mitigated through label statements.

Due to the use pattern as a preservative to be applied to exterior dry-film paints, adhesives and plastics, direct environmental exposure to Fungitrol 440S Fungicide is considered to be negligible if used according to the label.

Value Assessment

A standardized four-week laboratory test method was established and used to evaluate nine different paint samples, six different plastic samples, and two samples each of different cements and adhesives. Long term field studies, ranging from six months to two years, were carried out in New Jersey, a climate similar to much of Canada, for exterior paint dry-film and wood-plastic composite material. As a whole, the submitted data showed that 1000-2000 ppm of iodocarb was a reasonable range for the protection of exterior paint films from mildew. Wood-plastic composite material required 1000-3000 ppm of 3-iodo-2-propynyl butyl carbamate (iodocarb), while plastics and adhesives required less 3-iodo-2-propynyl butyl carbamate (iodocarb) (250-1000 and 200-500 ppm a.i., respectively) to protect them from fungal degradation.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided in support for the product, Fungitrol 440S Fungicide, and has found the information sufficient to support for its full registration.

References

<i>PMRA #</i>	<i>Title</i>
1608447	2008, Product Chemistry Data Requirements for an End-Use Product, DACO: 3.1 CBI
1608449	2001, End-use Product Chemistry, Fungitrol 440 Fungicide, DACO: 3.1 CBI
1608456	2001, Fungitrol 440 Fungicide Physico-Chemical Properties, RTS035/013187, DACO: 3.5 CBI
1608459	2006, IPBC: Evaluation of the Ambient Temperature Storage Stability, 1184/102-D2149, DACO: 3.5.10 CBI
1737680	2009, Fungitrol 440S Letter Re: Oxidizing, DACO: 3.5.8 CBI
1803681	2002, Acute Oral Toxicity in the Rat, DACO: 4.2.1
1803682	2002, Acute Dermal Toxicity Study in the Rat, DACO: 4.2.2
1803683	2001, Acute (Four-Hour) Inhalation Study in Rats, DACO: 4.2.3
1803684	2002, Acute Eye Irritation Study in the Rabbit, DACO: 4.2.4
1803685	2002, Acute Dermal Irritation Study in the Rabbit, DACO: 4.2.5
1803687	2002, Acute Dermal Sensitisation Study in the Guinea Pig (Buehler Method), DACO: 4.2.6
1925140	2000, 8045-004 Acute Oral Prelim Range Finding Individual Clinical Signs, DACO: 4.6.1
1925148	2001, 8046-004 Acute Dermal LD50 Definitive Study 04-04-01 to 04-18-01 Individual Clinical Signs, DACO: 4.6.2
1925150	2002, Study RTS 027/014167 Acute Inhalation Toxicity Individual Clinical Signs, DACO: 4.6.3
1963065	2001, 8045-004 Acute Oral LD50 Definitive Study 01-11-01 to 01-24-01 Individual Clinical Signs, DACO: 4.6.1
1963066	2000, 8045-004 Acute Oral Limit Test 5000 mg-kg Individual Clinical Signs, DACO: 4.6.1
1963067	2000, 8045-004 Acute Oral Limit Test 2000 mg-kg Individual Clinical Signs, DACO: 4.6.1

- 1963068 2000, 8046-004 Acute Dermal Limit Test 5000 mg-kg Individual Clinical Signs, DACO: 4.6.2
- 1963069 2001, 8046-004 Acute Dermal Limit Test 2000 mg-kg Individual Clinical Signs, DACO: 4.6.2
- 1963070 2001, 8046-004 Acute Dermal Prelim RF 03-27-01 to 04-03-01 Individual Clinical Signs, DACO: 4.6.2
- 1963071 2002, Study RTS 027/014167 Acute Inhalation Letter from Huntingdon, DACO: 4.6.3
- 1963072 2002, Acute Inhalation Toxicity Classification Letter from EPA, DACO: 4.6.3
- 1591685 2004, Efficacy of Fungitrol 420S Fungicide in Plastics and Plastic Coatings. International Specialty Products, Wayne NJ. 9 p.
- 1803611 2009, Efficacy Data for Various ISP-IPBC based formulation for PMRA Registrations. ISP Report. 37 p.

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