

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

Application Number:	2008-1553
Application:	New end use product
Product:	Fungitrol 920 Fungicide
Registration Number:	29899
Active ingredients (a.i.):	3-Iodo-2-propynyl butyl carbamate (IPB)
PMRA Document Number	: 1989747

Purpose of Application

The purpose of this application was to register a new end use product, Fungitrol 920 Fungicide, that contains the active ingredient 3-iodo-2-propynyl butyl carbamate (iodocarb). Fungitrol 920 Fungicide is for use as a preservative in exterior paint films, plastics, and adhesives.

Chemistry Assessment

Fungitrol 920 Fungicide is formulated as a suspension containing 3-iodo-2-propynyl butyl carbamate at a nominal concentration of 20% w/w. This end use product has a density of 1.10-1.15 g/mL and a pH of 5-6. With the exception of the storage stability study, the chemistry requirements for Fungitrol 920 Fungicide are complete.

Health Assessments

Fungitrol 920 Fungicide is considered to be of low acute toxicity via the oral and dermal routes, and of slight acute toxicity via the inhalation route. Fungitrol 920 Fungicide is moderately irritating to the eyes and skin, and is considered to be a potential dermal sensitizer.

A risk assessment was not performed for the Fungitrol end-use products 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. 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 920 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 920 Fungicide, and has found the information sufficient to support full registration with the condition of the submission of a storage stability study.

References

PMRA #	Title
1608459	2006, IPBC: Evaluation of the Ambient Temperature Storage Stability,
	1184/102-D2149, DACO: 3.5.10 CBI
1737859	2009, Fungitrol 940 Modified Chemistry Template, DACO: 3.0 CBI
1737860	2006, Fungitrol 940 Test - Identity Methodologies, DACO: 3.0 CBI
1737861	2009, Oxidization Statement, DACO: 3.5.8 CBI
1737862	2009, Explanation for Variance in Viscosity, DACO: 3.5.9 CBI
1741584	2009, Plant Manufacturing Procedure for Fungitrol 930 Fungicide, DACO:
	3.2.2 CBI (Submission # 2008-1555)
1753091	2009, Fungitrol 940 Analytical Data, DACO: 3.4 CBI
1803644	2002, Acute Oral Toxicity in the Rat, DACO: 4.2.1,4.6.1
1803645	2002, Acute Dermal Toxicity Study in the Rat, DACO: 4.2.2,4.6.2
1803646	2001, Acute (Four-Hour) Inhalation Study in Rats, DACO: 4.2.3,4.6.3
1803647	2002, Acute Eye Irritation Study in the Rabbit, DACO: 4.2.4,4.6.4
1803648	2002, Acute Dermal Irritation Study in the Rabbit, DACO: 4.2.5,4.6.5
1803649	2002, Acute Dermal Sensitisation Study in the Guinea Pig (Buehler Method),
	DACO: 4.2.6,4.6.6
1925075	2001, 8045-002 Acute Oral LD50 Definitive Study 01-09-01to 01-23-01
	Individual Clinical Signs, DACO: 4.6.1
1925076	2000, 8045-002 Acute Oral Prelim RF 12-06-00 to 12-13-00 Individual
	Clinical Signs, DACO: 4.6.1
1925077	2000, 8045-002 Acute Oral Limit Test 5000 mg-kg Individual Clinical Signs,
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1925078	2000, 8046-002 Acute Dermal Limit Test 5000 mg-kg Individual Clinical
	Signs, DACO: 4.6.2
1934205	2001, Fungitrol 420 Study 025-012837 Acute Inhalation Toxicity Individual

Clinical Signs, DACO: 4.6.3

- 1963040 2001, 8045-002 Acute Oral LD50 Definitive Study 01-09-01to 01-23-01 Individual Clinical Signs, DACO: 4.6.1
- 1963041 2000, 8045-002 Acute Oral Prelim RF 12-06-00 to 12-13-00 Individual Clinical Signs, DACO: 4.6.1
- 1963042 2000, 8045-002 Acute Oral Limit Test 5000 mg-kg Individual Clinical Signs, DACO: 4.6.1
- 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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