

Evaluation Report for Category B, Subcategory 4.1 Application

Application Number: 2007-8729
Application: B.4.1, Conversion to full registration without consultation
Product: NW 100 Wood Preservative Concentrate
Registration Number: 27131
Active ingredients (a.i.): Cuprous Oxide and N-Alkyl (67% C12, 25% C14, 7% C16, 1% C18) Dimethyl Benzyl Ammonium Chloride
PMRA Document Number : 1801978

Background

NW 100 Wood Preservative Concentrate has been registered since April 9, 2002 and contains cuprous oxide and n-alkyl dimethyl benzyl ammonium chloride (ADBAC) as the technical grade active ingredients. The technical, ADBAC (Barquat 50-65B, Reg. No. 27952; and Barquat 50-65A, Reg. No. 27953), currently has a conditional registration status.

NW 100 Wood Preservative Concentrate is registered for use as a heavy duty wood preservative in the treatment of non-industrial wood for above ground and ground contact in the following categories: residential construction such as decks, patios, fencing, play structures, siding, plywood, sill plate, and/or recreational applications such as walkways, boardwalks, landscaping, docks, gazebos, and/or general construction and commercial applications such as dimensional lumber, structural timbers, posts, decking, and/or agriculture and horticulture applications such as fencing, framing, and building poles. For specific details of uses, application rates and methods, precautions, restrictions, and personal protective equipment requirements, refer to the product label.

Purpose of Application

Timber Specialties Co. has submitted an application to convert the end use product, NW 100 Wood Preservative Concentrate from conditional to full registration.

Chemistry Assessment

The chemistry requirements have been fulfilled.

Health Assessments

A toxicology assessment was not required as there is not change to the toxicological profile of the product.

A risk assessment was conducted for workers that come into contact with NW 100 Wood Preservative Concentrate as well as for potential residential exposure for people who may be exposed to treated wood. No unacceptable exposure is expected when workers follow the label directions and wear the personal protective equipment identified on the label, or for adults and children who come into contact with treated wood.

Environmental Assessment

An environmental risk assessment for NW 100 Wood Preservative Concentrate has not been completed at this time, due to outstanding environmental data associated with the technical ADBAC products found in the NW 100 Wood Preservative Concentrate formulation. Uses of NW 100 Wood Preservative Concentrate will be re-examined once all outstanding ADBAC data are submitted and reviewed.

Value Assessment

Efficacy data were submitted for soil block laboratory trials testing three commercial Canadian wood species, for a standard water leaching test with two wood species, for two field study stake tests, and two field study decking trials. The stake tests were relatively new and only had two years worth of data on two Canadian wood species. The two decking studies, conducted with Canadian wood species, were also relatively recent with three years worth of data. Overall, the submitted studies demonstrated that NW 100 Wood Preservative Concentrate provided effective protection for lumber in ground contact at 6.4 kg/m³. Further data from the ongoing decking and stake tests using Canadian wood species are required to be submitted in five years.

Conclusion

The PMRA has completed an assessment of available information for NW 100 Wood Preservative Concentrate and has found the information sufficient to allow for conditional registration, with registration being contingent upon fulfilling the following requirements:

- conversion of the registration of Barquat 50-65B (Reg. No. 27952) and Barquat 50-65A (Reg. No. 27953) to full registration.

References

A. List of Studies/Information Submitted by Registrant

Chemistry Assessment

PMRA No.	Reference
1390367	2004, NW 100 Concentrate Storage Stability and Corrosion Data, DACO: 3.5.10, 3.5.14 CBI
1724530	2009, Description of Formulation Process - NW 100 Wood Preservative Concentrate, DACO: 3.2.2 CBI
1730258	2009, NW 100 Wood Preservative Concentrate Description of Formulation Process, DACO: 3.2 CBI

Health Assessment

PMRA No.	Reference
1580712	2007, Wipe Study to Define Dislodgeable Residues in Wood Pressure Treated With an ACQ Type C Formulation, 2006-CT-ACQ-C, DACO 5.6, 5.7, 5.9 CBI

Environmental Assessment

PMRA No.	Reference
1390369	2004, Evaluation of Copper Leachability in Southern Pine and Amabilis Fir Treated with NW 100, Laboratory Project 3018, DACO: 8.3.4
1397201	2007, ACQ-C Soil Sampling at UBC Malcolm Knapp Research Forest, Maple Ridge, BC. Laboratory Project 130684 / V053143, December 2006, DACO: 10.2
1523662	2007, Determination of Combustion Products resulting from the Burning of ACQ-C Treated wood under Oxidative and Pyrolytic Conditions, DACO: 8.5.2

Value Assessment

PMRA No.	Reference
1036936	2002, Technical Information on the use of the ACQ Preserve family of products for wood preservative applications, DACO: 10.2.3.3
1046078	Mode of action: Copies of published reports on the fixation mechanism of copper amine systems in wood, DACO: 10.2.1
1046079	Adverse effects on use site: Section 7.0, effects on wood properties. Excerpt of technical data support package originally submitted to PMRA February 2002 in support of product registration, DACO: 10.3
1397201	2007, ACQ-C Soil Sampling at UBC Malcolm Knapp Research Forest, Maple Ridge, BC. December 2006, DACO: 10.2
1390366	Chemical Specialties Inc. - Soil Block Testing. AQ-P144 Soil-block Testing in ACQ in Canadian Species (<i>Gloeophyllum trabeum</i>) and (<i>Postia placenta</i>); DACO 10.2.3.2

1394007	2004, Initiation of an above ground field test of lumber treated with NW 100/ACQ2102. December 2004. DACO 10.2.3.2
1394008	2004, Data summaries for exposure of ACQ 2102/NW100 treated wood samples to (<i>Gloeophyllum trabeum</i> and <i>Postia placenta</i>) in a soil block test; DACO 10.2.3.2
1519056	2007, Three-year Inspection of An Above-ground Field Test of Lumber Treated with NW 100/ACQ 2102; DACO 10.2.3.4
1523665	2007, Two-year Inspection of A Ground Contact Field Test of Stakes Treated with NW100/ACQ2102; DACO 10.2.3.4
1094081	2004, Evaluation of Copper Leachability in Southern Pine and Amabilis Fir Treated with NW 100, DACO 8.3.4

B. Additional Information Considered

i) Published Information

None.

ii) Unpublished Information Considered

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