

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

Application Number: 2011-2293
Application: B.2.3 (Product chemistry – identity of formulants)
B.3.1 (Product labels – application rate increase)
B3.12 (Product labels – new site or host)
Product: Bardac 2250M
Registration Number: 30912
Active ingredients (a.i.): didecyl dimethyl ammonium chloride
PMRA Document Number: 2284821

Purpose of Application

The purpose of this application was to register a new didecyl dimethyl ammonium chloride-based slimicide for oilfield uses, Bardac 2250M, with additional uses and a different formulation (winterized) based on the precedent Lonza Water Treatment Microbiocide (Registration number 17770).

Chemistry Assessment

Bardac 2250M is formulated as a solution containing didecyl dimethyl ammonium chloride at a nominal concentration of 50.0%. This product has a density of 0.878 g/mL and pH 5.34 (1% solution in water). The chemistry requirements for Bardac 2250M are complete.

Health Assessments

Although no toxicology data were submitted, the hazard labeling proposed for Bardac 2250M is deemed to be informative of any acute toxicity that may arise following the use of this product.

A health assessment has been conducted to register the new commercial end-use product, Bardac 2250M. Exposure to mixer/loader/applicators, post-application workers and bystanders was determined to be acceptable.

Environmental Assessment

Additional environmental data were not required to support the registration of Bardac 2250M, for various uses in industrial process fluids. Due to the use pattern, exposure to the environment following the proposed use in a normally operating scenario is expected to be minimal.

Value Assessment

One laboratory trial was provided to support the uses of Bardac 2250M. This trial tested a wide range of rates against Sulfate Reducing Bacteria (SRB), Acid Producing Bacteria (APB), and General Heterotrophic Bacteria (GHB). This method showed that the product, in laboratory scale, is effective against the formation of free-floating bacteria and biofilms. As no small-scale or operational data were provided, only uses and rates for which a suitable precedent was identified were approved.

Conclusion

The PMRA has completed an assessment of the available information and is able to support the registration of Bardac 2250M.

References

PMRA Document Number	Reference
2059424	2011, Product Identification, DACO: 3.1.1,3.1.2,3.1.3,3.1.4 CBI
2059425	2010, Bardac 2250M: Product Identity, Manufacturing Process, Impurity Discussion, and Certified Limits, DACO: 3.2.1,3.2.2,3.2.3,3.3.1,3.4.1 CBI
2059427	2010, Physical and Chemical Characteristics: Color, Physical State, Odor, Flammability, pH, Viscosity, and Density/Relative Density, DACO: 3.5.1,3.5.11,3.5.2,3.5.3,3.5.6,3.5.7,3.5.9 CBI
2059429	Container Information and Specifications, DACO: 3.5.5 CBI
2059431	2010, MSDS, DACO: 3.5.12,3.5.13,3.5.4,3.5.8
2059432	2011, Study to be completed when finished/not applicable, DACO: 3.5.10,3.5.14,3.5.15 CBI
2158700	DR-67: Determination of Quaternary Concentration of Ba, DACO: 3.4.1 CBI
2288370	2011, Storage Stability and Corrosion Characteristics, DACO: 3.5.10,3.5.14 CBI
2158703	Description of the pest problem, DACO 10.2.2
2059438	Laboratory trials, DACO 10.2.3.2
2059434	2011, Use Description-Scenario, DACO: 5.1,5.2
2094479	2011, Use Description, DACO: 5.2
2158701	2012, Use Description Scenario, DACO: 5.2
2158702	2011, Chemical Handling and Injection in Oil & Gas Applications, DACO: 5.3,5.4,5.5,5.6,5.7
2179586	2012, Evaluation of Bardac 2250M as a Microbiocide, DACO: 5.3,5.4,5.5
2179588	2012, Evaluation of Bardac 2250M as a Microbiocide, DACO: 5.3,5.4,5.5 CBI
2179590	US EPA Office of Pesticide Programs, Antimicrobial Division, 2006, DRAFT DDAC Occupational and Residential Exposure Assessment, DACO: 5.3,5.4,5.5
2179591	2012, 5.14 Other Studies conditional request, DACO: 5.14

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