

Evaluation Report for Category B, Subcategory 1.1 and 1.3 Application

Application Number: 2011-4268
Application: Changes to technical grade active ingredient chemistry – new source (site) for same registrant and changes to specifications
Product: Maquat MQ2525M – 80%
Registration Number: 22062
Active ingredients (a.i.): N-alkyl (5% C₁₂, 60% C₁₄, 30% C₁₆, 5% C₁₈) dimethyl benzyl ammonium chloride and n-alkyl (68% C₁₂, 32% C₁₄) dimethyl ethylbenzyl ammonium chloride
PMRA Document Number : 2201915

Purpose of Application

The purpose of this application is to register a new site of manufacture for Maquat MQ2525M – 80% (Registration number 22062).

Chemistry Assessment

Common Name: Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides
IUPAC Name: QAL: n-Alkyl (5% C₁₂, 60% C₁₄, 30% C₁₆, 5% C₁₈) dimethyl benzyl ammonium chloride and QAF: n-Alkyl (68% C₁₂, 32% C₁₄) (ethylbenzyl) dimethyl ammonium chloride
CAS Name: QAL: Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides and QAF: Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides

Maquat MQ2525M – 80% has the following properties:

Property	Result
Colour and physical state	White liquid
Nominal concentrations	n-alkyl (5% C ₁₂ , 60% C ₁₄ , 30% C ₁₆ , 5% C ₁₈) dimethyl benzyl ammonium chloride at 40.0% and n-alkyl (68% C ₁₂ , 32% C ₁₄) dimethyl ethylbenzyl ammonium chloride at 40.0%
Odour	Mild benzaldehyde odour
Specific gravity	0.9487 at 23°C
Vapour pressure	5.87 kPa
pH	4.4-6.8 (10% solution)

Property	Result
Solubility in water	Soluble
n-Octanol/water partition coefficient (K _{ow})	Not applicable

The chemistry requirements for Maquat MQ2525M – 80% have been completed.

Health Assessments

The proposed request to register a new site of manufacture for Maquat MQ2525M -80% does not alter the toxicity profile of the technical.

Environmental and Value Assessment

Environmental and value assessments were not required for this application.

Conclusion

The PMRA has completed an assessment of available information for Maquat MQ2525M -80% and has found the information sufficient to register a new site of manufacture for Maquat MQ2525M -80%.

References

PMRA Document Number	Reference
1102580	Manufacturing Summary, DACO: 2.11.1 CBI
1102582	Standard Manufacturing Procedures, DACO: 2.11.3 CBI
1102583	Discussion of Formation of Impurities, DACO: 2.11.4 CBI
1102584	Establishing Certified Limits, DACO: 2.12.1 CBI
1102585	Detailed Specification for Maquat MQ2525M-80%, DACO: 2.13.1 CBI
1319166	2006, Certificate of Analysis, DACO: 2.11.4
1319167	Methods of Testing - For Maquats, DACO: 2.13.1 CBI
1319168	2004, UV Visible Absorption, DACO: 2.14.2
2102045	2011, Applicant and manufacturing Site, DACO: 2.1,2.2 CBI
2102047	2011, Description of Starting Materials, DACO: 2.11.2 CBI
2102048	2005, Maquat MQ 2525M-80% Preliminary Analysis, DACO: 2.13.2,2.13.3 CBI
2180952	FARMIN DM-4662M, DACO: 2.11.2
2180955	Standard Manufacturing Procedures, DACO: 2.13.2 CBI
2180957	C of As, DACO: 2.13.3 CBI

2180959	1994, Physical and Chemical Characteristics of Maquat MQ2525M-80%: Physical State, Flammability, pH, Viscosity and Relative Density, DACO: 2.14.6 CBI
2193014	Manufacturing dates of submitted representative batches, DACO: 2.13.3 CBI

ISSN: 1911-8082

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