

Evaluation Report for Category B, Subcategory 1.3 Application

Application Number: 2019-2120
Application: Changes to TGAI Product Chemistry-Specifications
Product: Lonza Barquat MB-80
Registration Number: 20380
Active ingredient (a.i.): alkyl (40% C₁₂, 50% C₁₄, 10% C₁₆) dimethylbenzylammonium chloride
PMRA Document Number : 3154108

Purpose of Application

The purpose of this application was to register an alternate manufacturing process for the technical-grade product Lonza Barquat MB-80.

Chemistry Assessment

Common Name: n-Alkyl (40% C₁₂, 50% C₁₄, 10% C₁₆) dimethyl benzyl ammonium chloride
IUPAC* Chemical Name: n-Alkyl (40% C₁₂, 50% C₁₄, 10% C₁₆) dimethyl benzyl ammonium chloride
CAS† Chemical Name: Quaternary ammonium compounds, benzyl-C₁₂-16-alkyldimethyl, chlorides

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Lonza Barquat MB-80 has the following properties:

Property	Result
Colour and physical state	Light yellow liquid
Nominal concentration	80%
Odour	Quaternary ammonium odour
Density	0.886 – 0.948 g/cm ³
Vapour pressure	Not applicable (Ionic compound)
pH	6.5 – 8.5
Solubility in water	Soluble
n-Octanol/water partition coefficient	Not applicable (Ionic compound)

The required chemistry data for Lonza Barquat MB-80 have been provided, reviewed, and found to be acceptable.

Health Assessments

The new manufacturing method has no impact on the toxicological profile of the product.

Dietary and occupational exposure assessments were not required for this application.

Environmental and Value Assessments

Environmental and value assessments were not required for this application.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found it sufficient to support the alternate manufacturing process for Lonza Barquat MB-80.

References

PMRA

Document

Number	Reference
2994514	2019, Barquat MB-80: Starting Materials, Production Process and Formulation Process, DACO: 2.11.1,2.11.2,2.11.3 CBI.
2994515	2019, Impurity Overview, DACO: 2.11.4 CBI
2994516	Preliminary Analysis of Barquat MB-80.
3091265	2020, Response - Waiver Request with Data, DACO: 2.13.4 CBI
3091266	2020, Production Process Confirmation, DACO: 2.13.3 CBI
3143147	2020, Confirmation of Commercial Batches, DACO: 2.13.3 CBI

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