

Evaluation Report for Category B, Subcategory 4.6 Application

Application Number: 2021-5400

Application: Conversion of Term – Fulfill Conditions of Registration

Product: Methyl Bromide

Registration Number: 18613

Active ingredient (a.i.): Methyl bromide

PMRA Document Number: 3480246

Background

Methyl bromide was an active ingredient with no specifications on file. A section 12 notice was issued 21 October 2020 requesting an updated statement of product specification form (SPSF) supported by the analytical results of the preliminary analysis as well as chemical and physical properties.

Purpose of Application

The purpose of this application was to address outstanding data requirements to support approval of an SPSF as was identified under the re-evaluation of methyl bromide.

Chemistry Assessment

Common Name: methyl bromide
IUPAC* Chemical Name: bromomethane
CAS† Chemical Name: bromomethane

Methyl Bromide has the following properties:

Property	Result
Colour and physical state	colourless to light yellow gas
Nominal concentration	99.96 %
Odour	odourless to chloroform like odour
Density	1.7 g/cm ³ at 0°C
Vapour pressure	190 kPa at 20°C
рН	not applicable



^{*} International Union of Pure and Applied Chemistry

[†] Chemical Abstracts Service

Property	Result
Solubility in water	17.5 g/L
n-Octanol/water partition coefficient	$\log K_{\rm ow} = 1.91$

The required chemistry data for methyl bromide have been provided, reviewed, and found to be acceptable.

Health, Environmental, and Value Assessments

Health, 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 the information acceptable to fulfill requirements of registration for Methyl Bromide.

References

PMRA Document Number Reference 2013, Methyl Bromide Raw Material Specifications, DACO: 2.11.2 CBI 3275532 2009, Methyl Bromide manufacturing process, DACO: 2.11.1,2.11.2,2.11.3,2.11.4 3275533 CBI 3275534 2021, MeBr cylinder analysis results, DACO: 2.13.1,2.13.2,2.13.3,2.13.4 CBI 3288901 2021, ANALYTICAL TEST RESULTS, DACO: 2.13.3 CBI 3373454 2022, Methyl bromide (MeBr) samples for impurity analysis, DACO: 2.13.2,2.13.3,2.13.4 CBI 1986, Methyl Bromide - Physical and Chemical Characteristics, DACO: 3275535 2.14.1,2.14.10,2.14.11,2.14.13,2.14.14,2.14.15,2.14.2,2.14.3,2.14.5,2.14.6,2.14.7, 2.14.9,2.16,830.7000 1990, Methyl Bromide - Octanol/Water Partition Coefficient, DACO: 2.14.11 3275536 3275538 1988, Methyl Bromide Storage Stability Study Long-Term Storage, DACO: 1994, Determination of Methyl Bromide Solubility in Petroleum-Based Solvents, 3275540 DACO: 2.14.8

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