

Evaluation Report for Category B, Subcategory 1.2 Application

Application Number: 2015-1386
Application: New Technical Grade Active Ingredient Product Chemistry – New source (site) by a new registration
Product: Cymoxanil Technical
Active ingredients (a.i.): Cymoxanil
PMRA Document Number : 2625860

Purpose of Application

The purpose of this application was to register a new source of cymoxanil, Cymoxanil Technical, by a new registrant.

Chemistry Assessment

Common Name: Cymoxanil
IUPAC* Chemical Name: 1-[(*EZ*)-2-cyano-2-methoxyiminoacetyl]-3-ethylurea
CAS† Chemical Name: 2-cyano-*N*-[(ethylamino)carbonyl]-2-(methoxyimino)acetamide

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Clethodim Technical Herbicide has the following properties:

Property	Result
Colour and physical state	White solid
Nominal concentration	98.8%
Odour	Odourless
Relative Density	1.3
Vapour pressure	4.5×10^{-5} Pa (at 25°C)
pH	6.4
Solubility in water	0.88 g/L (20°C, pH 4)
n-Octanol/water partition coefficient	Log K_{ow} = 0.64 (at 20°C)

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

Health Assessments

The new source of cymoxanil is considered to be toxicologically equivalent to a registered source. Subsequently, no new toxicological data were required.

Occupational and dietary exposure assessments were not required for this application.

Environmental Assessment

The proposed formulation of Cymoxanil Technical does not constitute an environmental concern. Environmental concerns have been mitigated through adequate statement on the product label.

Value Assessment

A value assessment was not required for this application.

Conclusion

The PMRA has completed a review of all available information in support of Cymoxanil Technical and found it sufficient to support a full registration.

References - Applicant Provided

PMRA Document Number	Reference
2522082	2015, Registration Identification, DACO: 2.1, 2.2, 2.3 CBI
2522083	2012, Product Identity and Composition, Description of the Materials Used, Description of the Production Process, Discussion of the Formulation of Impurities and Certified Limits for Cymoxanil Technical, DACO: 2.11.1, 2.11.2, 2.11.3, 2.11.4, 2.12.1 CBI
2522084	2010, Description of Technical Active Ingredient Production Process, DACO: 2.11.3 CBI
2522085	2009, Cymoxanil Technical Material Analytical Profile of 5 Representative Batches, DACO: 2.13.1, 2.13.2, 2.13.3 CBI
2522086	1995, Cymoxanil (Pure) Physiochemical Properties, DACO: 2.14 CBI
2522087	1995, Cymoxanil Technical: Physio-Chemical Properties, DACO: 2.14 CBI
2522088	2003, Determination of the melting and boiling temperature of Cymoxanil Technical by differential scanning calorimetry, DACO: 2.14.4 CBI
2522089	2012, Cymoxanil Technical Material Determination of stability to normal and elevated temperature and relative density, DACO: 2.14.13, 2.14.6 CBI

2522090	2004, Cymoxanil: Determination of the Water Solubility Including Effect of pH (4 to 10) on Solubility, DACO: 2.14.7 CBI
2522092	2004, Cymoxanil: Determination of the Partition Coefficient n-Octanol/Water (log Pow) at Acidic pH, DACO: 2.14.11 CBI
2522093	2013, Final Report For: Storage Stability and Corrosion Characteristics of Cymoxanil Technical, DACO: 2.14.14 CBI
2522094	2008, Oxidizing Properties of Solids, DACO: 2.16 CBI
2522095	2011, Cymoxanil Technical Material pH and Oxidization/Reduction: chemical incompatibility, DACO: 2.16 CBI
2608299	2015, Determination of (CBI removed) in Test Item "Technical Cymoxanil", DACO: 2.13.4 CBI
2628596	2016, Revised Batch Data Document - replacement of pages 7 and 8 of 12, DACO: 2.13.3 CBI

ISSN: 1911-8082

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