

## **PSR II Application – New Source of Active Ingredient; New Registrant Evaluation Report for Category B, Subcategory B.1.2 Application**

**Application Number:** 2007-4335  
**Application:** Category B, Subcategory B.1.2 Application (New or Changes TGA)  
**Product:** MANA Clodinafop-Propargyl Technical  
**Registration Number:** 29373  
**Active ingredients (a.i.):** clodinafop-propargyl  
**PMRA Document Number:** 1776093

### **Background**

The original source of clodinafop-propargyl technical grade active ingredient, “Clodinafop-Propargyl Technical Active Ingredient” (Reg. No. 24066), was first registered on April 19<sup>th</sup>, 1995.

### **Purpose of Application**

The purpose of this application is to register a new technical source of clodinafop-propargyl herbicide.

### **Chemistry Assessment**

**Common Name:** Clodinafop-propargyl  
**IUPAC Chemical Name:** Prop-2-ynyl (R)-2-[4-(5-chloro-3-fluoropyridin-2-yloxy)phenoxy]propionate or Prop-2-ynyl (R)-2-[4-(5-chloro-3-fluoro-2-pyridinyloxy)phenoxy]propionate  
**CAS Chemical Name:** Propynyl (R)-2-[4-[(5-chloro-3-fluoro-2-pyridinyl)oxy]phenoxy]propanoate or 2-Propynyl (2R)-2-[4-[(5-chloro-3-fluoro-2-pyridinyl)oxy]phenoxy]propanoate

MANA Clodinafop-Propargyl Technical has the following properties:

| Property                              | Result                                 |
|---------------------------------------|----------------------------------------|
| Colour and physical state             | Beige crystals containing agglomerates |
| Nominal concentration                 | 97.10%                                 |
| Odour                                 | Strong specific                        |
| Density                               | 1.38 g/cm <sup>3</sup> (at 19.6°C)     |
| Vapour pressure                       | 1.94 x 10 <sup>-6</sup> Pa (at 25°C)   |
| pH                                    | 4.5-5.1 (1% suspension)                |
| Solubility in water                   | 2.6 ± 0.2 mg/L (at 20°C)               |
| n-Octanol/water partition coefficient | Log P <sub>ow</sub> = 3.4              |

The chemistry requirements for MANA Clodinafop-Propargyl Technical have been completed.

### Health and Environmental Assessment

This new source of clodinafop-propargyl has been found to be chemically equivalent to the registered source (Reg. No. 24066). Therefore, the health and environmental risk profile of MANA Clodinafop-Propargyl Technical is expected to be similar to that of the original registered source.

### Value Assessment

A value assessment is not required for technical grade active ingredient products.

### Conclusion

The PMRA has completed an evaluation of the subject application and has determined that MANA Clodinafop-Propargyl Technical is eligible for a full registration, subject to submission of all studies as required under product specific registration policy.

## References

### 7.1.1 Studies/Information Provided by Applicant/Registrant

| PMRA Document Number | Reference                                                                                                                                                                                          |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1429186              | 2007, DACO 2.1, 2.2, 2.3, 2.3.1, N/A, MRID: N/A, DACO: 2.1,2.2,2.3,2.3.1                                                                                                                           |
| 1429187              | 2007, Clodinafop-Propargyl - Technical Grade, Chemical Composition, 0072TC02.CDN, MRID: N/A, DACO: 2.12.1 CBI                                                                                      |
| 1429188              | 2006, Clodinafop-Propargyl Technical - Five Lots Analysis and Method Validation, 06-02/3, MRID: N/A, DACO: 2.13.1,2.13.2,2.13.3,2.14.12 CBI                                                        |
| 1429189              | 2006, Determination of the Melting Point/Melting Range and the Boiling Point/Boiling Range and Appearance of Clodinafop-Propargyl, A49735, MRID: N/A, DACO: 2.14.1,2.14.2,2.14.3,2.14.4,2.14.5 CBI |
| 1429190              | 2006, Calculation of the Dissociation Constant of Clodinafop-Propargyl, A49757, MRID: N/A, DACO: 2.14.10 CBI                                                                                       |
| 1429191              | 2006, Expert Statement on the Oxidizing Properties of Clodinafop-Propargyl Technical, A49770, MRID: N/A, DACO: 2.14.13 CBI                                                                         |
| 1429192              | 2007, Waiver Request: Stability to Metals and Metal Ions Re: Clodinafop-Propargyl Technical, N/A, MRID: N/A, DACO: 2.14.13 CBI                                                                     |
| 1429193              | 2007, Storage Stability and Corrosion Characteristics of Clodinafop-Propargyl Technical Storage at 54 C for 14 Days, F07-01/12, MRID: N/A, DACO: 2.14.13,2.14.14 CBI                               |
| 1429194              | 2006, Determination of the Relative Density of Clodinafop-Propargyl - Analytical Standard, A49702, MRID: N/A, DACO: 2.14.6 CBI                                                                     |
| 1429195              | 2006, Determination of the Water Solubility and the Partition Coefficient (N-octanol/water) of Clodinafop-Propargyl Analytical Standard, A49746, MRID: N/A, DACO: 2.14.11,2.14.7 CBI               |
| 1429196              | 2006, Determination of the Solubility of Clodinafop-Propargyl Technical in Organic Solvent, A49713, MRID: N/A, DACO: 2.14.8 CBI                                                                    |
| 1429197              | 2006, Calculation of the Vapour Pressure of Clodinafop-Propargyl - Analytical Standard, A49768, MRID: N/A, DACO: 2.14.9 CBI                                                                        |
| 1429198              | 2007, DACO 2.15, N/A, MRID: N/A, DACO: 2.15                                                                                                                                                        |
| 1429199              | 2006, Determination of the Flammability of Clodinafop-Propargyl Technical, A49678, MRID: N/A, DACO: 2.16 CBI                                                                                       |
| 1429200              | 2006, Determination of the Relative Self-Ignition Temperature of Clodinafop-Propargyl Technical, A49680, MRID: N/A, DACO: 2.16 CBI                                                                 |
| 1429201              | 2006, Determination of the Explosive Properties of Clodinafop-Propargyl Technical, A49691, MRID: N/A, DACO: 2.16 CBI                                                                               |
| 1429202              | 2006, Clodinafop-Propargyl Technical Product Chemistry Data For Registration, N/A, MRID: N/A, DACO: 2.11.1,2.11.2,2.11.3,2.11.4,2.4,2.5,2.6,2.7,2.8,2.9 CBI                                        |
| 1590287              | 2008, Clodinafop-Propargyl Technical - Five Lots Analysis of Optical Isomers in Active Ingredient after 2 Years of Storage at Room Temperature, 08-02/7, MRID: NS, DACO: 2.13.3 CBI                |
| 1591760              | 2008, Chemistry-2.13.3-production dates-06may2008, 06-02/3, MRID: NS, DACO: 2.13.3 CBI                                                                                                             |

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