



## HET COLLEGE VOOR DE TOELATING VAN GEWASBESCHERMINGSMIDDELEN EN BIOCIDEN

### 1 WEDERZIJDSE ERKENNING

Op 9 april 2015 is van

Globachem nv  
Lichtenberglaan 2019  
3800 SINT-TRUIDEN  
BELGIE

een aanvraag tot wederzijdse erkenning van een gewasbeschermingsmiddel ontvangen voor het middel

#### DIFURE PRO

op basis van de werkzame stoffen difenoconazool en propiconazool.

**HET COLLEGE BESLUIT** tot toelating van bovenstaand middel.

Alle bijlagen, waaronder registratierapport deel A en deel B, vormen een onlosmakelijk onderdeel van dit besluit.

#### 1.1 Samenstelling, vorm en verpakking

De toelating geldt uitsluitend voor het middel in de samenstelling, vorm en de verpakking als waarvoor de toelating is verleend.

#### 1.2 Gebruik

Het middel mag slechts worden gebruikt volgens het wettelijk gebruiksvoorschrift, letterlijk en zonder enige aanvulling, zoals opgenomen in deel A van het registratierapport, Appendix I.

#### 1.3 Classificatie en etikettering

Mede gelet op de onder “wettelijke grondslag” vermelde wetsartikelen, dienen alle volgende aanduidingen en vermeldingen conform de geldende regelgeving op of bij de verpakking te worden vermeld:

- De aanduidingen, letterlijk en zonder enige aanvulling, zoals vermeld onder “verpakkingsinformatie” in bijlage I.
- Het wettelijk gebruiksvoorschrift, letterlijk en zonder enige aanvulling, zoals opgenomen in deel A van het registratierapport, Appendix I.
- Overige bij wettelijk voorschrift voorgeschreven aanduidingen en vermeldingen.

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- De classificatie die overeenkomstig het toelatingsbesluit is vastgesteld, moet volgens de voorschriften op de verpakking worden vermeld, zoals beschreven in bijlage II en in hoofdstuk 2 van deel A van het registratierapport.

#### **1.4 Aflever- en opgebruiktermijn (respijtperiode)**

Niet van toepassing. Het betreft een nieuwe toelating.

## **2 WETTELIJKE GRONDSLAG**

Besluit	artikel 40 van de Verordening (EG) 1107/2009
Classificatie en etikettering	artikel 31 en artikel 65 van de Verordening (EG) 1107/2009
Gebruikt toetsingskader	Bgb en Rgb d.d. 16 december 2011 en Evaluation Manual Zonaal 2.0

## **3 BEOORDELINGEN**

### **3.1 Fysische en chemische eigenschappen**

De aard en de hoeveelheid van de werkzame stoffen en de in humaan-toxicologisch en ecotoxicologisch opzicht belangrijke onzuiverheden in de werkzame stof en de hulpstoffen zijn bepaald. De identiteit van het middel is vastgesteld. De fysische en chemische eigenschappen van het middel zijn vastgesteld en voor juist gebruik en adequate opslag van het middel aanvaardbaar geacht.

### **3.2 Analysemethoden**

De geleverde analysemethoden voldoen aan de vereisten om de residuen te kunnen bepalen die vanuit humaan-toxicologisch en ecotoxicologisch oogpunt van belang zijn, volgend uit geoorloofd gebruik.

### **3.3 Risico voor de mens**

Van het middel wordt voor de toegelaten toepassingen volgens de voorschriften geen onaanvaardbaar risico voor de mens verwacht.

### **3.4 Risico voor het milieu**

Van het middel wordt voor de toegelaten toepassingen volgens de voorschriften geen onaanvaardbaar risico voor het milieu verwacht.

### **3.5 Werkzaamheid**

Van het middel wordt voor de toegelaten toepassingen volgens de voorschriften verwacht dat het werkzaam is.

Voor nadere onderbouwing van de beoordelingen verwijzen wij u naar deel A en B van het Registration Report als toegevoegd aan de bijlagen van dit besluit overeenkomstig Besluit beleidsregel bekendmaken delen A en B van het Registration Report.

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**Bezwaarmogelijkheid**

*Degene wiens belang rechtstreeks bij dit besluit is betrokken kan gelet op artikel 4 van Bijlage 2 bij de Algemene wet bestuursrecht en artikel 7:1, eerste lid, van de Algemene wet bestuursrecht, binnen zes weken na de dag waarop dit besluit bekend is gemaakt een bezwaarschrift indienen bij: het College voor de toelating van gewasbeschermingsmiddelen en biociden (Ctgb), Postbus 8030, 6710 AA, EDE. Het Ctgb heeft niet de mogelijkheid van het elektronisch indienen van een bezwaarschrift opengesteld.*

Ede, 31 maart 2017

HET COLLEGE VOOR DE TOELATING VAN  
GEWASBESCHERMINGSMIDDELEN EN BIOCIDEN,

Ir. J.F. de Leeuw  
Voorzitter

**BIJLAGE I DETAILS VAN DE AANVRAAG EN TOELATING****1 Aanvraaginformatie**

Aanvraagnummer: 20150640 NLWERGZ  
Type aanvraag: aanvraag tot toelating van een gewasbeschermingsmiddel op basis van wederzijdse erkenning  
Middelnaam: DIFURE PRO  
Verzenddatum aanvraag: 8 april 2015  
Formele registratiedatum: \* 9 april 2015  
Datum in behandeling name: 28 september 2015

\* Datum waarop zowel de aanvraag is ontvangen als de aanvraagkosten zijn voldaan.

**2 Stofinformatie**

<u>Werkzame stof</u>	<u>Gehalte</u>
difenoconazool	150 g/L
propiconazool	150 g/L

De stof difenoconazool is per 1 januari 2009 geplaatst op Annex I van Richtlijn 91/414/EEG (2008/69/EC d.d. 1 juli 2008) en vervolgens bij Uitvoeringsverordening (EU) 540/2011 d.d. 25 mei 2011 goedgekeurd. De voorwaarden voor goedkeuring zijn aangepast bij Uitvoeringsverordening (EU) 1100/2011 d.d. 31 oktober 2011. De goedkeuring van deze werkzame stof expireert op 31 december 2018.

De stof propiconazool is per 1 juni 2004 geplaatst op Annex I van Richtlijn 91/414/EEG (2003/70/EC d.d. 17 juli 2003) en vervolgens bij Uitvoeringsverordening (EU) 540/2011 d.d. 25 mei 2011 goedgekeurd. De goedkeuring van deze werkzame stof expireert op 31 januari 2018 (Uitvoeringsverordening (EU) 2016/2016 d.d. 17 november 2016).

**3 Toelatingsinformatie**

Toelatingsnummer: 14988 N  
Expiratiedatum: 31 januari 2019  
Afgeleide parallel of origineel: n.v.t.  
Biocide, gewasbeschermingsmiddel of toevoegingsstof: Gewasbeschermingsmiddel  
Gebruikers: Professioneel

**4 Verpakkingsinformatie**

Aard van het preparaat:  
Emulgeerbaar concentraat

**HET COLLEGE VOOR DE TOELATING VAN GEWASBESCHERMINGSMIDDELEN EN BIOCIDEN****BIJLAGE II Etikettering van het middel DIFURE PRO**

Professioneel gebruik

de identiteit van alle stoffen in het mengsel die bijdragen tot de indeling van het mengsel:  
benzeensulfonzuur, alkyl derivaten, calciumzouten; 2-methylpropan-1-ol; alcoholethoxylaate

Pictogram	GHS05 GHS07 GHS08 GHS09
Signaalwoord	GEVAAR
Gevarenaanduidingen	H302 Schadelijk bij inslikken. H304 Kan dodelijk zijn als de stof bij inslikken in de luchtwegen terechtkomt. H315 Veroorzaakt huidirritatie. H318 Veroorzaakt ernstig oogletsel H336 Kan slaperigheid of duizeligheid veroorzaken. H410 Zeer giftig voor in het water levende organismen, met langdurige gevolgen.
Voorzorgsmaatregelen	P273 Voorkom lozing in het milieu. P280 Beschermende handschoenen/beschermende kleding/oogbescherming/gelaatsbescherming dragen. P301 + P310 NA INSLIKKEN: Onmiddellijk een ANTIGIFCENTRUM/arts/... raadplegen. P305 + P351 + P338 BIJ CONTACT MET DE OGEN: voorzichtig afspoelen met water gedurende een aantal minuten; contactlenzen verwijderen, indien mogelijk. Blijven spoelen. P331 GEEN braken opwekken. P501 Inhoud/verpakking afvoeren naar .... SP 1 Zorg ervoor dat u met het product of zijn verpakking geen water verontreinigt.
Aanvullende etiketelementen	EUH208 Bevat propiconazool. Kan een allergische reactie veroorzaken. EUH401 Volg de gebruiksaanwijzing om gevaar voor de menselijke gezondheid en het milieu te voorkomen.
Kinderveilige sluiting verplicht	Nee
Voelbare gevaarsaanduiding verplicht	Nee

**REGISTRATION REPORT  
Part A**

**Risk Management**

**Product code:** DIFURE PRO  
**Active Substance:** 150 g/L Difenoconazole  
150 g/L Propiconazole

**COUNTRY: the Netherlands**

**NATIONAL ASSESSMENT**

**Applicant:** Globachem NV  
**Date:** March 2017

## **PART A – Risk Management**

The authorisation of DIFURE PRO is based on mutual recognition of the authorisation of the product DIFURE PRO in France (authorisation number: 2140248).

This document describes the acceptable use conditions required for the registration of DIFURE PRO containing difenoconazole and propiconazole in the Netherlands. This evaluation is required subsequent to the inclusion of difenoconazole and propiconazole on Annex 1.

The risk assessment conclusions are based on the information, data and assessments provided in Registration Report, Part B Sections 1-7 and Part C (the Core dossier for DIFURE PRO is the French National Assessment) and where appropriate the addendum for the Netherlands. The information, data and assessments provided in Registration Report, Parts B includes assessment of further data or information as required at national registration by the EU review. It also includes assessment of data and information relating to DIFURE PRO where that data has not been considered in the EU review. Otherwise assessments for the safe use of DIFURE PRO have been made using endpoints agreed in the EU review of difenoconazole and propiconazole.

This document describes the specific conditions of use and labelling required for the Netherlands for the registration of DIFURE PRO.

Appendix 1 of this document provides a copy of the proposed product label for the Netherlands.

Appendix 2 contains the reference list.

## **1 Details of the application**

### **1.1 Application background**

This application was submitted by Globachem NV in April 2015 to support registration of DIFURE PRO, an emulsifiable concentrate containing 150 g/L difenoconazole and 150 g/L propiconazole for use as a fungicide in sugar and fodder beet at the rate of 0.6 L/ha against rust (*Uromyces betae*).

### **1.2 Annex I inclusion**

Difenoconazole and propiconazole were included on Annex I of Directive 91/414/EEC respectively on 01/01/2009 under Inclusion Directive 2008/69/EC and on 01/06/2004 under Inclusion Directive 2003/70/EC.

The Annex I Inclusion Directives for difenoconazole (2008/69/EC) and propiconazole (2003/70/EC) provide specific provisions under Part B which need to be considered by the applicant in the preparation of their submission and by the MS prior to granting an authorisation:

For the implementation of the uniform principles of Annex VI, the conclusions of the review report on difenoconazole and propiconazole, and in particular Appendices I and II thereof, as finalised in the

Standing Committee on the Food Chain and Animal Health shall be taken into account. In this overall assessment:

For difenoconazole, member States must pay particular attention to the:

- protection of aquatic organisms. Conditions of use shall include adequate risk mitigation measures, where appropriate.

For propiconazole, member States must pay particular attention to the:

- protection of non-target arthropods and aquatic organisms. Conditions of use shall include adequate risk mitigation measures, where appropriate.
- protection of soil organisms for applications rates exceeding 625 g a.i./ha (e.g. uses in turf). Conditions of authorisation should include risk mitigation measures (e.g. spot wise application scheme), where appropriate.
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These concerns were all addressed in the submission.

### 1.3 Regulatory approach

To obtain approval the product DIFURE PRO must meet the conditions of Annex I inclusion and be supported by dossiers satisfying the requirements of Annex II and Annex III, with an assessment to Uniform Principles, using Annex I agreed end-points.

This application was submitted in order to allow the registration of DIFURE PRO in the Netherlands in accordance with the above.

### 1.4 Data protection claims

Data protection is claimed for all new studies that are submitted to support this application.

### 1.5 Letters of Access

A letter of access and supply from Sumi-Agro Europe is provided in in the dossier since some of the submitted studies were sponsored by this company.

## 2 Details of the authorisation

### 2.1 Product identity

Product Name	DIFURE PRO
Authorisation Number (for re-registration)	Not applicable
Function	Fungicide
Applicant	Globachem NV
Composition	150 g/L difenoconazole + 150 g/L propiconazole
Formulation type	Emulsifiable concentrate [Code: EC]
Packaging	1 or 5 L HDPE/EVOH bottles/containers



## 2.2 Classification and labelling

### 2.2.1 Classification and labelling under EU Regulation 1272/2008

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The identity of all substances in the mixture that contribute to the classification of the mixture *:			
Benzenesulfonic acid, alkyl derivs., calcium salts; 2-methylpropan-1-ol; Fatty alcohol ethoxylate (ethoxylation degree 10)			
Pictogram:	GHS05 GHS07 GHS08 GHS09	Signal word:	Danger
H-statements:	H302 H304 H315 H318 H336 H410	Harmful if swallowed. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye damage. May cause drowsiness or dizziness. Very toxic to aquatic life with long lasting effects.	
P-statements:	P273 P280  P301+P310  P305+P351+P338	Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Immediately call a POISON CENTER/doctor/... IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
Supplemental Hazard information:	P331 P501 EUH401  EUH208	Do NOT induce vomiting. Dispose of contents/container to .... To avoid risks to human health and the environment, comply with the instructions for use. Contains propiconazole. May produce an allergic reaction.	
SP-statements:	SP1	Do not contaminate water with the product or its container.	
Child-resistant fastening obligatory?			not applicable
Tactile warning of danger obligatory?			not applicable

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#### Explanation:

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Pictogram:	-
H-statements:	Classification with H373 is not triggered by the active substances and coformulants.
P-statements:	The proposal of the applicant is accepted.
Other:	-

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\* according to Reg. (EC) 1272/2008, Title III, article 18, 3 (b)

### 2.3 Product uses

1	2	3	4	5	6	7	8	10	11	12	13	14
Use- No.	Member state(s)	Crop and/ or situation	F G or I	Pests or Group of pests controlled	Application			Application rate per treatment			PHI (days)	Remarks: a) max. no. of applications per crop and season b) Maximum product rate per season c) additional remarks
					Method / Kind	Timing / Growth stage of crop & season	Number / (min. Interval between applications)	L product / ha	kg as/ha	Water L/ha min / max		
1	Central zone, NL	Sugar- and fodder beet	F	Rust ( <i>uromyces betae</i> )	Foliar spraying	After BBCH 39, up to PHI (BBCH 49)  May to October	2 (14 days)	0.6	0.090dif + 0.090pro	100-500	21	a) 2 b) 1.2 L/ha

### 3 Risk management

#### 3.1 Reasoned statement of the overall conclusions taken in accordance with the Uniform Principles

##### 3.1.1 Physical and chemical properties (Part B, Section 1, Points 2 and 4)

**Overall Summary:** The product DIFURE PRO is an emulsifiable concentrate with a nominal difenoconazole and propiconazole concentration of 150 g/L each. All studies have been performed in accordance with the current requirements, the critical GAP and the results are deemed to be acceptable. The appearance of the product is that of a free flowing liquid with uniform amber coloured, semi-transparent oil with a solvent odour. It is not explosive, has no oxidising properties. It has a self- ignition temperature of more than 400°C. The flashpoint is 60.6°C. The kinematic viscosity at 40°C is 4.76 mm<sup>2</sup>/sec which is below the classification and labelling trigger for H304. The surface tension of the neat product at 20°C is 33.54 mN/m. In 1% aqueous solution, it has a pH value around 6.93. The stability data indicate a shelf life of at least 2 years at ambient temperature in HDPE/EVOH. Its technical characteristics are acceptable for an emulsifiable concentrate formulation.

**Implications for labelling:** Based on the composition of the product and its viscosity, the product is a category one aspiration hazard.

**Compliance with FAO specifications:** The product DIFURE PRO complies with the general FAO specifications and those of propiconazole. There do not exist specific FAO specifications for difenoconazole.

**Compatibility of mixtures:** not assessed since no mixture is recommended on the label.

**Nature and characteristics of the packaging:** Information with regard to type, dimensions, capacity, size of opening, type of closure, strength, leakproofness, resistance to normal transport & handling, resistance to & compatibility with the contents of the packaging, have been submitted, evaluated and is considered to be acceptable.

**Nature and characteristics of the protective clothing and equipment:** Information regarding the required protective clothing and equipment for the safe handling of DIFURE PRO has been provided and is considered to be acceptable.

##### 3.1.2 Methods of analysis (Part B, Section 2, Point 5)

###### 3.1.2.1 Analytical method for the formulation (Part B, Section 2, Point 5.2)

Analytical methods for determination of difenoconazole, propiconazole, impurities and relevance of CIPAC methods in DIFURE PRO were not evaluated as part of the EU review of difenoconazole or propiconazole. Therefore all relevant data are provided and are considered adequate. A HPLC-UV method was submitted to analyse the active ingredients content in the formulation. The method was validated.

### 3.1.2.2 Analytical methods for residues (Part B, Section 2, Points 5.3 – 5.8)

All analytical methods are active substance data and were provided in the EU review of difenoconazole and propiconazole and were considered adequate. All data are considered adequate.

The Dutch national requirement for an LOQ of 0.1 µg/L for the residue analytical methods for surface water is met.

### 3.1.3 Mammalian Toxicology (Part B, Section 3, Point 7)

#### 3.1.3.1 Acute Toxicity (Part B, Section 3, Point 7.1)

Acute toxicity studies for DIFURE PRO were not evaluated as part of the EU review of difenoconazole or propiconazole. Therefore, all relevant data were provided and are considered adequate.

DIFURE PRO, containing 150 g/L difenoconazole and 150 g/L propiconazole, has a low toxicity in respect to acute dermal toxicity and skin sensitisation. It is irritating to the rabbit eye and skin. Taking into account all submitted data, DIFURE PRO should be labelled for its toxicological properties with the H sentences H302, H315 and H318.

#### 3.1.3.2 Operator Exposure (Part B, Section 3, Point 7.3)

Operator exposure to DIFURE PRO was not evaluated as part of the EU review of difenoconazole or propiconazole. Therefore all relevant data and risk assessments are provided here and are considered adequate.

Operator exposure was assessed against the AOELs and dermal absorption values agreed in the EU reviews for difenoconazole and propiconazole:

Endpoint	Difenoconazole	propiconazole
Dermal penetration	Concentrate: 2% Spray dilutions: 4%	Concentrate: 0.9% Spray dilutions: 2.4%
AOEL	0.16 mg/kg bw/d	0.1 mg/kg bw/d

Operator exposure was modelled using the NL specific EUROPOEM I model.

According to the EUROPOEM I model calculations, it can be concluded that the risk for the operator using DIFURE PRO in sugar beet fields is acceptable at 0.6 L/ha, even without the use of PPE (combined exposure covers 7% of the AOEL).

#### 3.1.3.3 Bystander Exposure (Part B, Section 3, Point 7.4)

Bystander exposure to DIFURE PRO was **not** evaluated as part of the EU review of difenoconazole or propiconazole. Therefore, all relevant data and risk assessments are provided here and are considered adequate. It is concluded that there is no undue risk to any bystander after accidental short-term exposure to DIFURE PRO (combined exposure covers 1% of the AOEL). Furthermore, the resident exposure of children and adults living next to a field treated with DIFURE PRO is considered to be safe (combined exposure covers 1% of the AOEL).

### **3.1.3.4 Worker Exposure (Part B, Section 3, Point 7.5)**

Worker exposure to DIFURE PRO was not evaluated as part of the EU review of difenoconazole and propiconazole. Therefore, all relevant data and risk assessments have been provided and are considered adequate. It is concluded that there is no unacceptable risk anticipated for the worker wearing adequate work clothing (but no PPE), when re-entering crops treated with DIFURE PRO (combined exposure covers <1% of the AOEL). As a standard rule, treated crops should not be re-entered before spray deposits on leaf surfaces have completely dried.

### **3.1.4 Residues and Consumer Exposure (Part B, Section 4, Point 8)**

For the aspect ‘Residues’ and risk for consumers we refer to the member state of the original authorisation (France). The Guidelines for the generation of data concerning residue data Appendix C 7524/VI/95 rev.2 require that the residue situation in rotational crops must always be considered if, after the treated crop has been harvested (or in the event of early ploughing), it is possible to sow or plant a crop which can be used as a foodstuff and/or feed. Since the product was assessed according to the Uniform Principles by the member state of the original authorisation, residues in succeeding crops need no further consideration.

### **3.1.5 Environmental fate and behaviour (Part B, Section 5, Point 9)**

No new studies are presented; all data were reviewed in the EU review of difenoconazole and propiconazole. Appropriate endpoints from the EU review were used to calculate PECs for difenoconazole and propiconazole and the relevant metabolites in soil, surface water, ground water and air for the intended use patterns.

#### **3.1.5.1 Predicted Environmental Concentration in Soil (PEC<sub>soil</sub>) (Part B, Section 5, Points 9.4 and 9.5)**

The PEC<sub>soil</sub> of difenoconazole and its metabolites CGA205375 and CGA71019, and the PEC<sub>soil</sub> of propiconazole and its metabolites CGA118245 and CGA71019 has been assessed with the FOCUS groundwater crop interception values and the longest DT<sub>50</sub> values established in the EU review. Based on the critical use rate of 2 x 90 g/ha every 14 days in sugar beet, the maximum predicted environmental concentration in soil (PIEC + PEC<sub>plateau</sub>) of difenoconazole and propiconazole will be 0.038 and 0.052 mg/kg respectively.

For the metabolites CGA205375, CGA71019 and CGA118245, the use in sugar beet according to the critical use pattern defined above will lead to maximum PEC<sub>soil</sub> of 0.003 mg/kg (PIEC + PEC<sub>plateau</sub>), 0.005 mg/kg (PIEC + PEC<sub>plateau</sub> of both active substances) and 0.006 mg/kg (PIEC) respectively.

The results for PEC soil for the active substance and its metabolites were used for the eco-toxicological risk assessment.

#### **3.1.5.2 Predicted Environmental Concentration in Ground Water (PEC<sub>GW</sub>) (Part B, Section 5, Point 9.6)**

The PEC of difenoconazole, propiconazole, CGA205375, CGA71019 and CGA118245 in ground water have been assessed with the standard FOCUS Kremsmünster scenario in FOCUS PEARL 4.4.4 for the use of DIFURE PRO in sugar beet using the endpoints established in the EU review.

The 80<sup>th</sup> percentile PEC<sub>gw</sub> for difenoconazole, propiconazole, CGA205375 and CGA118245 at 1 m soil depth were calculated to be below the Dutch specific threshold of 0.01 µg/L for groundwater protection areas. However, the expected leaching based on the FOCUS PEARL 4.4.4 calculations for the metabolite 1,2,4-triazole is larger than 0.01 µg/L but smaller than 0.1 µg/L. Calculation results not clearly below 0.1 µg/L should be confirmed by performing a 2<sup>nd</sup> Tier calculation using the spatial model GeoPEARL.

The results of the GeoPEARL calculations present a PEC<sub>gw</sub> of 0.0088 µg/L for the spring scenario and a PEC<sub>gw</sub> of 0.0144 µg/L for the autumn scenario.

Therefore, a restriction on the use in groundwater protection areas should be placed on the label:

*Om het grondwater te beschermen mag dit product niet worden gebruikt in grondwaterbeschermingsgebieden in de periode 1 september tot 1 maart.*

### 3.1.5.3 Predicted Environmental Concentration in Surface Water (PEC<sub>sw</sub>) (Part B, Section 5, Points 9.7 and 9.8)

The PEC of difenoconazole, propiconazole, CGA205375, CGA71019 and CGA118245 in surface water (PEC<sub>sw</sub>) has been assessed with the NL specific TOXSWA model and the DT<sub>50</sub> water/sediment values established in the EU review. Based on the intended uses, the maximum PEC values for surface water and sediment have been calculated according to TOXSWA for the parent difenoconazole, propiconazole and the difenoconazole metabolite CGA205375. A 75% drift reducing measure for the uses in spring was suggested by the applicant, and therefore the drift percentage of the use in spring was reduced to 0.5%.

The results are presented in Table 3.1.5.3-1.

**Table 3.1.5.3-1: PEC<sub>sw</sub> for Difenoconazole, metabolite CGA205375 and Propiconazole in the edge-of-field ditch following spring and autumn application using 50% resp. 75% drift-reducing nozzles**

Substance	Rate [g/ha]	Freq	Inter-val	Scenario	Drift [%]	PIEC [µg/L] <sup>b</sup>	PEC-TWA21d [µg/L] <sup>b</sup>	PEC-TWA28d [µg/L] <sup>b</sup>
Difenoconazole	90	2	14	spring	0.5 <sup>a</sup>	0.3398	0.2523	0.2288
				autumn	1.0	0.4225	0.1149	0.0871
CGA205375	8.994	2	14	spring	0.5 <sup>a</sup>	0.0321	0.0227	0.0206
				autumn	1.0	0.0418	0.0111	0.0085
Propiconazole	90	2	14	spring	0.5 <sup>a</sup>	0.3824	0.3131	0.2807
				autumn	1.0	0.4279	0.1196	0.0901

<sup>a</sup> Lower drift in spring due to the risk reducing measure

<sup>b</sup> Calculated according to TOXSWA

The exposure concentrations in surface water are compared to the ecotoxicological threshold values in chapter IIIA 10.2.

The resulting PEC surface water for the active substances and its metabolites was used for the ecotoxicological risk assessment.

#### Monitoring data surface water

The Pesticide Atlas on internet ([www.pesticidesatlas.nl](http://www.pesticidesatlas.nl), [www.bestrijdingsmiddelenatlas.nl](http://www.bestrijdingsmiddelenatlas.nl)) is used to evaluate measured concentrations of pesticides in Dutch surface water, and to assess whether the observed concentrations exceed threshold values.

#### Difenoconazole

The active substance difenoconazole was observed in the surface water (most recent data from 2014). The authorisation threshold equals 0.56 µg a.s./L (consisting of first or higher tier acute or chronic ecotoxicological threshold value, including relevant safety factors, which is used for risk assessment, in

this case 0.1\*NOEC Daphnia). The relevant EQS for this substance are the WFD thresholds AA-EQS and MAC-EQS which equal 0.76 and 7.8 µg/L respectively.

There is no exceedance of thresholds, and therefore the monitoring data have no consequences for the proposed use of the product.

#### Propiconazole

The active substance propiconazole was observed in the surface water (most recent data from 2014). The authorisation threshold equals 6.8 µg a.s./L (consisting of first or higher tier acute or chronic ecotoxicological threshold value, including relevant safety factors, which is used for risk assessment, in this case 0.1\*NOEC fish). The relevant EQS for this substance is the MPC and equals 10 µg/L. There is no exceedance of thresholds, and therefore the monitoring data have no consequences for the proposed use of the product.

#### **Drinking water criterion**

Substances are categorized as new substances on the Dutch market (less than 3 years authorisation) or existing substances on the Dutch market (authorised for more than 3 years).

For new substances, a pre-registration calculation is performed.

For existing substances, the assessment is based on monitoring data of VEWIN (drinking water board).

If for an existing substance based on monitoring data no problems are expected by VEWIN, Ctgb follows this VEWIN assessment.

If for an existing substance based on monitoring data a potential problem is identified by VEWIN, Ctgb assesses whether the 90th percentile of the monitoring data meet the drinking water criterion at each individual drinking water abstraction point.

Difenoconazole and propiconazole have been on the Dutch market for more than 3 years (authorised since 02-08-2004 and before 1994 respectively). This period is sufficiently large to consider the market share to be established. From the general scientific knowledge collected by the Ctgb about the active substances, the Ctgb concludes that there are in this case no concrete indications for concern about the consequences of the active substances for surface water from which drinking water is produced, when used in compliance with the directions for use. The Ctgb does under this approach expect no exceeding of the drinking water criterion. The standards for surface water destined for the production of drinking water are met.

#### **3.1.5.4 Predicted Environmental Concentration in Air (PEC<sub>Air</sub>) (Part B, Section 5, Point 9.9)**

The fate and behaviour in air of difenoconazole and propiconazole was evaluated during the EU review of these active substances. No additional studies have been performed.

The vapour pressure of difenoconazole was determined to be  $3.32 \times 10^{-8}$  Pa at 25°C. The Henry's Law Constant was determined as  $9.0 \times 10^{-7}$  Pa.m<sup>3</sup>/mol (25°C). Both values indicate a low potential for volatility. No volatilization of difenoconazole from moist soil surface was observed in experiment with measurement of volatile radioactivity over 24 hours. In study with measurement of volatility as percentage loss of radioactivity from plant and soil only a small loss (<9% of initial radioactivity) was observed over 24 hours. Based on the presented data, no significant volatilisation of difenoconazole is expected. Photochemical oxidative degradation was rapid with a calculated half-life of 5 hours and any residue that may occur in the atmosphere are therefore expected to be rapidly degraded.

The volatilisation of propiconazole from plant surfaces was about 30% after 24 hours at 20°C and was insignificant from soil. There was no photolysis of propiconazole in air. Calculations using the method of Atkinson resulted in an atmospheric half-life estimated at maximum 14 hours indicating that the

proportion of applied propiconazole that did volatilise would be unlikely to be subject to long-range atmospheric transport since the  $DT_{50, \text{air}}$  of 2 days is not exceeded.

CGA71019 has a relatively high vapour pressure of 0.34 Pa at 25°C. The value of Henry's Law Constant is  $3 \times 10^{-5}$  Pa m<sup>3</sup>/mol. No volatile products were observed in soil degradation study on CGA71019. Therefore no significant volatilisation of CGA71019 formed in soil is expected.

### **3.1.6 Ecotoxicology (Part B, Section 6, Point 10)**

#### **3.1.6.1 Effects on Terrestrial Vertebrates (Part B, Section 6, Points 10.1 and 10.3)**

##### **Birds**

Effects on birds for DIFURE PRO were not evaluated as part of the EU review of difenoconazole and propiconazole. Therefore all relevant data and risk assessments are provided here and are considered adequate.

The risk assessment for effects on birds is carried out according to the 'Guidance of EFSA – Risk assessment for Birds and Mammals' (EFSA 2009)<sup>1</sup>.

The acute and long-term risks of DIFURE PRO to birds were assessed from toxicity exposure ratios between toxicity endpoints, estimated from studies with difenoconazole, propiconazole, combitox and the metabolite CGA131013, and maximum residues occurring on food items following applications according to the proposed use pattern. Risk of secondary poisoning has also been assessed, as difenoconazole and propiconazole have  $\log P_{\text{OW}} > 3.0$ . When needed, tier 1 risk assessment was performed for the focal species and interception values based on the FOCUS<sub>GW</sub> guidance document were used as refinement.

The TER values, calculated for recommended scenarios, all exceed the trigger values of 10 for acute risk and 5 for long-term risk (including secondary poisoning), thus indicating no unacceptable risk to birds from the proposed uses.

##### **Terrestrial vertebrates (other than birds)**

Effects on terrestrial vertebrates other than birds for DIFURE PRO were not evaluated as part of the EU review of difenoconazole and propiconazole. Therefore all relevant data and risk assessments are provided here and are considered adequate.

The acute and long-term risks of DIFURE PRO to wild mammals were assessed using the 'Guidance of EFSA – Risk assessment for Birds and Mammals' (EFSA 2009) by calculating the toxicity exposure ratios between toxicity endpoints, estimated from studies with difenoconazole, propiconazole, combitox and CGA131013, and maximum residues occurring on food items following applications according to the use pattern. If needed, tier 1 risk assessment was performed for the focal species and interception values based on the FOCUS<sub>GW</sub> guidance document were used as refinement. Risk of secondary poisoning has also been assessed, as difenoconazole and propiconazole have  $\log P_{\text{OW}} > 3.0$ .

The TER values, calculated for recommended scenarios, all exceed the trigger values of 10 for acute risk and 5 for long-term risk (including secondary poisoning), thus indicating no unacceptable risk to mammals from the proposed use.

<sup>1</sup> EFSA (2009). Guidance of EFSA – Risk assessment for Birds and Mammals. EFSA Journal 2009; 7(12):1438.



### 3.1.6.2 Effects on Aquatic Species (Part B, Section 6, Point 10.2)

Effects on aquatic organisms for DIFURE PRO were not evaluated as part of the EU review of difenoconazole or propiconazole. During the EU review of difenoconazole and propiconazole, it was quoted that Member States must pay particular attention to the protection of aquatic organisms. Conditions of use shall include adequate risk mitigation measures, where appropriate. A new risk assessment was performed for the intended uses using the toxicity data of the DIFURE PRO, the active substances, the combitox as well as the metabolites CGA205375 and CGA71019. This data has been reviewed and the resulting risk assessments are considered adequate.

For the application in sugar beet in spring, the use of 75% drift reducing nozzles is required to protect aquatic organisms. Therefore the following restriction sentence should be placed on the label:

*Om in het water levende organismen te beschermen is de toepassing van het middel tussen 1 maart en 1 oktober uitsluitend toegestaan indien op percelen die grenzen aan oppervlaktewater gebruik wordt gemaakt van minimaal 75% driftreducerende spuitdoppen.*

### 3.1.6.3 Effects on Bees and Other Arthropod Species (Part B, Section 6, Points 10.4 and 10.5)

#### Bees

Effects on bees for DIFURE PRO were not evaluated as part of the EU review of difenoconazole or propiconazole. A study with the formulation was provided showing 48h oral and contact LD<sub>50</sub> of 62.33 and >100 µg a.i./bee respectively. A risk assessment for the intended use was performed. This data has been reviewed and the resulting risk assessments are considered adequate.

The risks of DIFURE PRO to honey-bees was assessed from hazard quotients between toxicity endpoints, estimated from the acute oral or contact study with the formulation, and the maximum single application rate of 0.6 L formulation/ha.

All the hazard quotients are considerably less than 50, indicating that the difenoconazole and propiconazole poses a low risk to bees. Therefore a low risk to bees is expected from the application of DIFURE PRO according to the recommended use pattern.

No risk mitigation measure is necessary.

#### Other non-target arthropods

Effects on non-target arthropods for DIFURE PRO were not evaluated as part of the EU review of difenoconazole or propiconazole. During the EU review of propiconazole, it was quoted that Member States must pay particular attention to the protection of non-target arthropods. Conditions of use shall include adequate risk mitigation measures, where appropriate. A risk assessment for the critical GAP of 2 x 0.6 L/ha every 14 days in sugar beet was performed. This data has been reviewed and the resulting risk assessments are considered adequate.

The risk assessment was based on *Typhlodromus pyri* and *Aphidius rhopalosiphi* which were clearly found to be the most sensitive species to difenoconazole and propiconazole, while *Chrysoperla carea* and *Poeculus cupreus* did not indicate any sensitivity to the active substances. Tier II in-field assessments indicated no potential risk to *Aphidius rhopalosiphi* and *Typhlodromus pyri*. The off-field risk to *Aphidius rhopalosiphi* and *Typhlodromus pyri* was also acceptable on Tier II.

### **3.1.6.4 Effects on Earthworms and Other Soil Macro-organisms (Part B, Section 6, Point 10.6)**

Effects on earthworms and other soil macro-organisms for DIFURE PRO were not evaluated as part of the EU review of difenoconazole or propiconazole. During the EU review of propiconazole, it was quoted that Member States must pay particular attention to the protection of soil organisms for applications rates exceeding 625 g a.i./ha (e.g. uses in turf). Conditions of authorisation should include risk mitigation measures (e.g. spotwise application scheme), where appropriate. Since the application rate of DIFURE PRO amounts to 90 g a.i./ha, this is not applicable to this product. However, a risk assessment was performed for 2 x 0.6 L/ha every 14 days in sugar beet after BBCH 39. All relevant data were assessed and are considered adequate.

#### **Earthworms**

The acute and long-term risk of DIFURE PRO to earthworms was assessed from acute and long-term toxicity exposure ratios (TERs) between the selected toxicity endpoints for the active ingredient and relevant metabolites, and the maximum soil PECs.

The acute and chronic TER values for difenoconazole, propiconazole, metabolites CGA205375, CGA71019 and CGA118245 are greater than the Annex IV triggers of 10 and 5, respectively, indicating an acceptable risk to earthworms following application of DIFURE PRO for the proposed use.

No risk mitigation measure is necessary.

#### **Effects on other soil non-target macro-organisms**

The risk of DIFURE PRO to other non-target soil macro-organisms, as represented by Collembola, was assessed for difenoconazole and CGA71019 from toxicity exposure ratios (TERs) between the toxicity endpoints and the maximum soil PECs although it was not required.

The TER values for difenoconazole and CGA71019 are greater than the recommended trigger of 5, indicating no unacceptable risk to soil macro-organisms as represented by *Folsomia candida* following application of DIFURE PRO for the proposed use.

No risk mitigation measure is necessary.

### **3.1.6.5 Effects on organic matter breakdown (Part B, Section 6, Point 10.6)**

The risk of difenoconazole and propiconazole to organic matter decomposition was evaluated by comparison of the soil PEC with no-effect concentrations from a litter-bag test with difenoconazole and propiconazole respectively.

The NOEC values for difenoconazole and propiconazole are greater than the corresponding soil PEC values, indicating that difenoconazole and propiconazole in DIFURE PRO do not pose an unacceptable risk to organic matter breakdown, which was confirmed by the combined risk assessment performed.

No risk mitigation measure is necessary.

### **3.1.6.6 Effects on Soil Non-target Micro-organisms (Part B, Section 6, Point 10.7)**

Effects on soil microbial activity of DIFURE PRO were not evaluated as part of the EU review of difenoconazole or propiconazole. Therefore all relevant data and assessments were provided and are considered adequate.

The risk to soil micro-organisms was evaluated by comparison of no-effect concentrations, derived from laboratory tests on DIFURE PRO, CGA205375 and CGA71019, with respective soil PECs based on 2 applications of 0.6 L/ha every 14 days in sugar beet after BBCH 39. All no effect levels exceed the relevant PEC values, indicating that DIFURE PRO does not pose an unacceptable risk to soil micro-organisms.

No risk mitigation measure is necessary.

### **3.1.6.7 Assessment of Potential for Effects on Other Non-target Organisms (Flora and Fauna) (Part B, Section 6, Point 10.8)**

#### **Non-Target Plants**

Effects on non-target plants for DIFURE PRO were not evaluated as part of the EU review of difenoconazole. As required for fungicides, vegetative vigour data on DIFURE PRO were provided. This data has been reviewed and the resulting risk assessments are considered adequate.

The potential effect of DIFURE PRO on vegetative vigour has been tested through studies performed on six non-target terrestrial plants. The ER<sub>50</sub> was higher than 1.5 L/ha for all test species. For the worst-case application rate of 2 applications of 0.6 L/ha every 14 days in sugar beet, the TER was found to be > 31 without using any risk mitigation measure.

DIFURE PRO poses no unacceptable risk to terrestrial non-target plants in off-crop areas following the proposed uses.

No risk mitigation measure is necessary.

#### **Other non-target species (Flora and Fauna)**

Tests on other non-target species are not required.

### **3.1.7 Efficacy (Part B, Section 7, Point 8)**

It concerns a mutual recognition. The product is authorised in France, Belgium, UK, Ireland, Czech Republic, Greece and Italy for the use in sugar beet and fodder beet. France was Rapporteur Member State for the registration of DIFURE PRO in the Southern Zone in sugar beet using bridging trials to compare to the reference product ARMURE. All additional efficacy trials of this dossier are bridging trials. The efficacy trials were performed both in the Mediterranean zone (France, Greece, Spain) and the Maritime zone (Northern France).

Climatological and environmental circumstances relevant for the aspect efficacy in the claimed uses in The Netherlands are comparable to those in France in its Maritime zone (according to EPPO), but not to the Mediterranean zone.

As the bridging product ARMURE is not authorised in the Netherlands and the authorisation in France is based on Mediterranean trials, control against *Uromyces beta* will be evaluated for the Netherlands separately. To demonstrate efficacy against this disease six efficacy trials were carried out in the Maritime zone.

Four acceptable bridging trials were performed on DIFURE PRO in Northern France in two years in which DIFURE PRO was compared to the reference product ARMURE and these studies were added to the dossier to meet the requirements. Two additional efficacy trials were conducted in 2015 and 2016 in

the UK and in Germany. DIFURE PRO was tested with 1 or 2 applications at the rates of 0.4 and 0.6 (proposed rate) or 0.65 L/ha to assess its efficacy against foliar diseases in sugar beet.

In the efficacy trials DIFURE PRO was compared to the following reference products: ARMURE (difenoconazole 150 g/L + propiconazole 150 g/L EC like DIFURE PRO) was applied at the rates of 0.6 and 0.7 L/ha; RUBRIC (based on epoxiconazole); and SPYRALE (difenoconazole 100 g/L + fenpropyridine 375 g/L EC). DIFURE PRO at proposed dose rate (0.6 L/ha equals to 0.090dif + 0.090pro kg as/ha) demonstrated comparable or higher efficacy than the reference products. Efficacy results of a single formulation of difenoconazole (DIFCOR 250 EC) or propiconazole product demonstrated the benefit of mixing the two active ingredients of DIFURE PRO. The minimum effective dose of 0.6 was considered justified. No signs of phytotoxicity were observed in any efficacy trial. This is acceptable for a mutual recognition in The Netherlands.

The cultivation method in sugar and fodder beet is similar in Northern France and The Netherlands and there are no country-specific situations for the use of DIFURE PRO as a fungicide in the claimed use.

For the evaluation of the aspect ‘Efficacy’ we refer to the evaluation of the member state of the original authorisation in France.

Because non-standard spray volumes are used the following sentence should be included on the label:

In de teelt van bieten het middel toepassen in 100-500 liter water per ha.

In the Core assessment it is concluded that resistance management is recommended. Also it is stated that “The overall risk of resistance occurrence can be considered as low to medium”.

The following sentence should be added to the label (in Dutch):

Resistentie management

Dit middel bevat de werkzame stoffen difenoconazool en propiconazool. Difenoconazool en propiconazool behoren tot de triazolen. De Frac code is 3. Bij dit product bestaat er kans op resistentieontwikkeling. In het kader van resistentiemanagement dient u de adviezen die gegeven worden in de voorlichtingsboodschappen op te volgen.

### 3.2 Conclusions

The assessment conducted for DIFURE PRO was in accordance with Uniform Principles and demonstrates an acceptable risk to human health and the environment.

### 3.3 Further information to permit a decision to be made or to support a review of the conditions and restrictions associated with the authorisation

None.

## Appendix 1 – Copy of the proposed product label

### Wettelijk Gebruiksvoorschrift

Toegestaan is uitsluitend het professionele gebruik als schimmelbestrijdingsmiddel in de volgende toepassingsgebieden (volgens Definitielijst toepassingsgebieden versie 2.0, Ctgb juni 2011) onder de vermelde toepassingsvoorwaarden.

Toepassingsgebied	Type toepassing	Te bestrijden organisme	Dosering (middel) per toepassing	Maximaal aantal toepassingen per teeltcyclus	Minimum interval tussen toepassingen in dagen	Veiligheidstermijn in dagen
Bieten	Na opkomst	Roest <sup>1</sup>	0,6 L/ha	2	14	21

<sup>1</sup>Roest (*Uromyces betae*)

### **Toepassingsvoorwaarden**

In de teelt van bieten het middel toepassen in 100-500 liter water per ha.

Om in het water levende organismen te beschermen is de toepassing van het middel tussen 1 maart en 1 oktober uitsluitend toegestaan indien op percelen die grenzen aan oppervlaktewater gebruik wordt gemaakt van minimaal 75% driftreducerende spuitdoppen.

Om het grondwater te beschermen mag dit product niet worden gebruikt in grondwaterbeschermingsgebieden in de periode van 1 september tot 1 maart.

### Resistentiemanagement

Dit middel bevat de werkzame stoffen difenoconazool en propiconazool. Difenoconazool en propiconazool behoren tot de triazolen. De Frac code is 3. Bij dit product bestaat er kans op resistentieontwikkeling. In het kader van resistentiemanagement dient u de adviezen die gegeven worden in de voorlichtingsboodschappen op te volgen.

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## Appendix 2 – List of data submitted in support of the evaluation

### Efficacy

Annex point/ref. number	Year	Reference (title etc.)	Study relied on Y/N	Data Protection claimed Y/N	Data protection granted Y/N	Owner
IIIA, 6.1.3/1	2011a	Efficacy of fungicides against <i>Uromyces betae</i> on Sugarbeets Report number: 1107F06 Laboratory: Essais + Sponsor: Globachem N.V. GEP, not published	Y	Y	Y	Globachem NV
IIIA, 6.1.3/2	2011b	Efficacy of fungicides against <i>Uromyces betae</i> on Sugarbeets Report number: 1107F07 Laboratory: Essais + Sponsor: Globachem N.V. GEP, not published	Y	Y	Y	Globachem NV
IIIA, 6.1.3/3	2011a	Determination of Efficacy of Difenconazole 150 + Propiconazole 150 EC against fungal diseases in sugar beet, 1 Site in France 2011 Report number: S11-02726-01 Laboratory: Eurofins Agrosience Services Sponsor: Globachem N.V. GEP, not published	Y	Y	Y	Globachem NV
IIIA, 6.1.3/4	2011b	Determination of Efficacy of Difenconazole 150 + Propiconazole 150 EC against fungal diseases in sugar beet, 1 Site in France 2011 Report number: S11-02726-02 Laboratory: Eurofins Agrosience Services Sponsor: Globachem N.V. GEP, not published	Y	Y	Y	Globachem NV
IIIA, 6.1.3/6	2011d	Determination of Efficacy of Difenconazole 150 + Propiconazole 150 EC against fungal diseases in sugar beet, 1 Site in France 2011 Report number: S11-02726-04 Laboratory: Eurofins Agrosience Services Sponsor: Globachem N.V. GEP, not published	Y	Y	Y	Globachem NV
IIIA, 6.1.3/17	2016	An evaluation of Difure Pro, Difenconazole 250 EC and Propiconazole 250 EC for the control of rust ( <i>Uromyces betae</i> ) on sugar beet. Report number: 446-16-GLO-RUS Laboratory: Oxford Agricultural Trials Limited Sponsor: Globachem N.V. GEP, Not published	Y	Y	Y	Globachem NV
IIIA,	2016	Field study to evaluate the efficacy	Y	Y	Y	Globachem

<b>Annex point/ref. number</b>	<b>Year</b>	<b>Reference (title etc.)</b>	<b>Study relied on Y/N</b>	<b>Data Protection claimed Y/N</b>	<b>Data protection granted Y/N</b>	<b>Owner</b>
6.1.3/18		of triazoles (difure Pro) against foliar diseases when applied on sugar beets in Germany. Report number : FRS214/16-V3 Sponsor: Globachem N.V. GEP, Not published				NV
IIIA, 6.1.3/19	2015	Fungicide trial in sugar beets 2015 Sponsor: Globachem N.V. GEP, Not published	Y	Y	Y	Globachem NV