Date: 19/07/2012

# Art. 51 Extension of authorisation for minor uses REGISTRATION REPORT Part A

# Risk Management

**Product code: ASKON Active Substances:** 

Difenoconazole 125 g/L and Azoxystrobin 200 g/L

COUNTRY: Germany

Central Zone
Zonal Rapporteur Member State: Germany

# CORE ASSESSMENT

Applicant: Pflanzenschutzdienst der Landwirtschaftskammer Nordrhein-Westfalen

Date: 19/07/2012

Date: 19/07/2012

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#### PART A – Risk Management

This document describes the acceptable use conditions required for extension of the registration of ASKON containing Difenoconazole and Azoxystrobin in Germany.

The risk assessment conclusions are based on the already existing registration of the PPP. The following sections of Registration Report, Part B were prepared on basis of new data:

• Section 4.

Assessments for the safe use of ASKON have been made using endpoints agreed in the EU reviews of Difenoconazole and Azoxystrobin.

Appendix 1 of this document provides a copy of the final product authorisation in Germany.

# 1 Details of the application

Application to extend the authorisation of a plant protection product (PPP) already authorised in Germany to minor uses not yet covered by that authorisation. The application is intended for use in Germany only.

# 1.1 Application background

#### **Details on applicant and application**

Plant protection product As	SKON
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Type of application Zonal application according to Article 51, ZRMS=DE, first application

(GV1)

Registration number 006902-00/07

Applicant Pflanzenschutzdienst der Landwirtschaftskammer Nordrhein-Westfalen,

Siebengebirgsstraße 200, 53229 Bonn, Germany

Authorisation holder Syngenta Agro GmbH, Am Technologiepark 1-5, 63477 Maintal, Germany

Function Fungicide

Type of formulation Suspension concentrate

Expiration of authorisation 2021-12-31

Date: 19/07/2012

#### 1.2 Annex I inclusion

The active substances included in the plant protection product are approved according Regulation (EC) No 1107/2009. The present application is in line with the provisions of the approvals.

Active substance (BVL Number)

Difenoconazole (0865)

Content in PPP 125 g/l

Approval status Approved according Regulation (EC) No 1107/2009

Approval Regulation (EC) No 540/2011

Expiration of approval 31/12/2018

Azoxystrobin (0902)

Content in PPP 200 g/l

Approval status Approved according Regulation (EC) No 1107/2009

Approval Regulation (EU) 703/2011

Expiration of approval 31/12/2021

# 1.3 Regulatory approach

The PPP is already registered in Germany according to Directive 91/414/EEC taking into account the uniform principles of Annex VI. Therefore the evaluation of the current application is limited to the points not covered by the existing registration.

#### 1.3.1 Uses applied for and registration decision

Number of	Plant/commodity/object	Harmful organism/purpose	decision
use			
001	Aubergine, Tomato	Fungal leaf spot diseases	authorise

#### 1.3.2 Public interest and minor use

According to Article 51 (2) a and c of the Regulation (EC) No 1107/2009 extensions of authorisation are only possible if the intended use applied for is minor in nature and in public interest.

In Germany cultivated area of aubergine and tomato is about 324 ha, there from worth to treat are 130 ha. Calculation shows that authorisation holder will not profit from authorisation in that use.

Upon this calculation and the examination of available alternative measures for the applied use(s) it can be stated that the applied use(s) is minor in nature and the authorisation is in the public interest.

# 1.4 Data protection claims

The authorisation holder is owner of the new studies submitted and claims data protection.

#### 1.5 Letters of Access

The Authorisation holder is owner of the new studies submitted. Authorisation holder agrees to the current application to extend the authorisation.

# 2 Details of the authorisation

# 2.1 Product identity

Product name ASKON
Authorisation number 006902-00

Composition Difenoconazole 125 g/L; Azoxystrobin 200 g/L

Type of formulation Suspension concentrate (SC)

Function Fungicide

Authorisation holder Syngenta Agro GmbH, Am Technologiepark 1-5, 63477 Maintal, Germany

# 2.2 Classification and labelling

# 2.2.1 Classification and labelling under Directive 99/45/EC or Regulation (EC) No 1272/2008

N	Dangerous for the environment
Xn	Harmful
RK051	R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
RX020	R 20: Harmful by inhalation
RX043	R 43: May cause sensitisation by skin contact
SK012	S 36/37: Wear suitable protective clothing and gloves.
SX002	S 12: Do not keep the container sealed.
SX013	S 13: Keep away from food, drink and animal feeding stuffs
SX024	S 24: Avoid contact with skin
SX035	S 35: This material and its container must be disposed of in a safe way.
SX046	S 46: If swallowed, seek medical advice immediately and show this container or label
SX057	S 57: Use appropriate container to avoid environmental contamination.
SP001	To avoid risk to man and the environment, comply with the instructions for use.

# 2.2.2 R and S phrases under Regulation (EC) No 547/2011

None

# 2.2.3 Other phrases

# 2.2.3.1 Restrictions linked to the PPP

The authorization of the PPP is linked to the following conditions (mandatory labelling):

#### **Operator protection**

SB001	Avoid any unnecessary	contact with the product.	Misuse can lead to l	nealth damage.
30001	Avoid any differensary	contact with the product.	Wilsuse call lead to i	icaitii dainage.

SB110 The directive concerning requirements for personal protective gear in plant protection, "Personal protective gear for handling plant protection products" of the Federal Office of

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Consumer Protection and Food Safety must be observed.

- SE110 Wear tight fitting eye protection when handling the undiluted product.
- SF245-01 Treated areas/crops may not be entered until the spray coating has dried.
- SS110 Wear standard protective gloves (plant protection) when handling the undiluted product.
- Wear a protective suit against pesticides and sturdy shoes (e.g. rubber boots) when handling the undiluted product.
- Wear a rubber apron when handling the undiluted product.

#### **Ecosystem protection**

- NW262 The product is toxic for algae.
- NW264 The product is toxic for fish and aquatic invertebrates.
- NW468 Fluids left over from application and their remains, products and their remains, empty containers and packaging, and cleansing and rinsing fluids must not be dumped in water. This also applies to indirect entry via the urban or agrarian drainage system and to rain-water and sewage canals.

#### **Integrated Pest Management (IPM)**

- NN2001 The product is classified as slightly harmful for populations of relevant beneficial insects
- NN3002 The product is classified as harmful for populations of relevant predatory mites and spiders

#### **Active substance**

VH619 The content of toluene and Z-isomer in the technical active substance Azoxystrobin may not exceed 2 g/kg respectively 25 g/kg.

The authorization of the PPP is linked to the following conditions (voluntary labelling):

#### Honeybee

NB6641 The product is classified as non-hazardous to bees, even when the maximum application rate, or concentration if no application rate is stipulated, as stated for authorisation is applied. (B4)

#### **Integrated Pest Management (IPM)**

The authorization of the PPP is linked to the following conditions (voluntary labelling):

#### **Integrated Pest Management (IPM)**

# 2.2.3.2 Specific restrictions linked to the intended uses

Some of the authorized uses are linked to the following conditions (mandatory labelling): See 2.3 (Product uses)

#### **Operator protection**

SS2202 Wear a protective suit against pesticides and sturdy shoes (e.g. rubber boots) when applying/handling the product ready for application.

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# 2.3 Product uses

PPP (product name/code) ASKON active substance 1 Difenconazol active substance 2 Azoxystrobin

Zone(s): northern/central/southern/EU

Formulation type: SC
Conc. of as 1: 125 g/L
Conc. of as 2: 200 g/L
professional use x

Date: 19/07/2012

non professional use

Verified by MS: yes

1	2	3	4	5	6	7	8	10	11	12	13	14
Use-	Membe	_	F	Pests or Group of		Application		Ap	plication rate			Remarks:
No.	r state(s)	or situation (crop destination / purpose of crop)	G or I	pests controlled (additionally: developmental stages of the pest or pest group)	Method / Kind	Timing / Growth stage of crop & season	Max. number (min. interval between applications) a) per use b) per crop/ season	kg, L product / ha a) max. rate per appl. b) max. total rate per crop/season	g, kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max	(days	e.g. safener/synergist per ha e.g. recommended or mandatory tank mixtures
001	DE	aubergine (SOLME) tomato (LYPES)	G	Fungal leaf spot diseases (FXBFXX)	spraying	from BBCH-Code 19 at beginning of infestation and/or when first symptoms become visible	2 2 (10 to 14 days)	a) 1 L/ha b) 2 L/ha	a.s.1 a) 125 g/L b) 200 g/L a.s.2 a) 250 g/L b) 400 g/L	600 - 900	3	plant height < 50 cm: 0.75 L/ha in 600 L/ha water plant height 50 - 125 cm: 1 L/ha in 900 L/ha water Restrictions (see 2.2.3.2) SS2202

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#### 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

Not relevant for extension of authorisation according article 51.

# 3.1.2 Methods of analysis

# 3.1.2.1 Analytical method for the formulation

Not relevant for extension of authorisation according article 51.

# 3.1.2.2 Analytical methods for residues

Analytical methods for commodities of high water content such as tomatoes and aubergine are available and acceptable for enforcing Azoxystrobin.

Analytical methods for commodities of high water content such as tomatoes or aubergines are available and acceptable for enforcing Difenoconazole.

# 3.1.3 Mammalian Toxicology

The PPP is already registered in Germany according to Directive 91/414/EEC.

If used properly and according to the intended conditions of use, adverse health effects for operators, workers, bystanders and residents will not be expected. A special risk assessment for the intended use of ASKON in greenhouse is reported in Part B, Section 3 of a previous dRR (006902-00/06). On this basis a special restriction for applicants (SS2202 - " Wear a protective suit against pesticides and sturdy shoes (e.g. rubber boots) when applying/handling the product ready for application.") is necessary which is not included in the existing registration in Germany

#### 3.1.4 Residues and Consumer Exposure

The residue behaviour of the active substances Azoxystrobin and Difenoconazole has been evaluated within the EU review process. Information about metabolism is sufficient to evaluate the intended use in tomatoes and aubergine.

#### **3.1.4.1 Residues**

The available residue information is sufficient to perform an adequate assessment. Residues that are expected from the intended use of the plant protection product will not exceed the MRL set in Regulation (EC) No 396/2005 for Azoxystrobin (3 mg/kg tomatoes and aubergine) and Difenoconazole (2 mg/kg tomatoes and 0.4 mg/kg aubergine).

#### 3.1.4.2 Consumer exposure

An assessment of residue uptake by consumers (TMDI calculation, EFSA PRIMo) results in the following maximum ADI consumptions:

Azoxystrobin (0.2 mg/kg bw/d) - 53 % (DE children)

Difenoconazole (0.01 mg/kg bw/d) – 183 % (WHO cluster diet B)

Refinement: IEDI (EFSA PRIMo) - 91.5 % ((WHO cluster diet B)

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Long-term dietary intake of residues of Azoxystrobin and Difenoconazole is unlikely to present a public health concern for European consumers.

No acute risk is expected from the consumption of tomatoes or aubergines treated according to the intended use.

#### 3.1.5 Environmental fate and behaviour

No new studies are presented; all data were reviewed within the EU review and approval of the national authorisation 006902-00/00 according the uniform principles of directive 91/414/EEC.

# 3.1.6 Ecotoxicology

No new studies are presented; all data were reviewed within the EU review and approval of the national authorisation 006902-00/00 according the uniform principles of directive 91/414/EEC.

The PPP ASKON and the active substances Azoxystrobin and Difenoconazole are toxic to the aquatic environment (Azoxystrobin: *Mysidopsis bahia*:  $EC_{50}$ : 55 µg a.i./L; *O. mykiss*:  $LC_{50}$  470 µg a.i./L; Difenoconazole: *P. promelas*: NOEC: 3,6 µg a.i./L). Subsequently no additional entries as those according to the evaluated use pattern and good agricultural practise are acceptable. Therefore the safety phrases and conditions of use NW262, NW264 and NW468 are assigned, see also 2.2.3.1

The honeybee risk assessment for the main application covers the use(s) in accordance with Article 51 of regulation (EC) No 1107/2009 (see also point 2.2).

# 3.1.7 Efficacy

Labelling in accordance with the requirements of ANNEX III General principles of integrated pest management under directive 2009/128/EC (see also point 2.2):

- -The classification of effects on beneficial arthropods for the main application covers the use(s) in accordance with Article 51 of regulation (EC) No 1107/2009.
- -The categories and labelling for mode of action for the main application covers the use(s) in accordance with Article 51 of regulation (EC) No 1107/2009.

According to Article 51 of the regulation (EC) No 1107/2009 the requirements for approval concerning the sufficient effect and any unacceptable effects on plants and plant products have not to be met.

#### 3.2 Conclusions

PPP ASKON is already registered in Germany according to Directive 91/414/EEC taking into account the uniform principles of Annex VI.

The intended use is minor in nature and the extension of authorisation is in public interest. Effects on bees and other beneficials were evaluated in the frame of the already authorised uses. No additional effects are anticipated because of the extension of uses(s).

The intended use in tomatoes or aubergines will not result in residues above the MRLs set in Regulation (EC) No 396/2005. A risk for consumers through the consumption of food with these residues of Azoxystrobin and Difenoconazole is not expected. There is no special risk mitigation necessary which deviate from the existing registration.

Considering an application in accordance with the evaluated use pattern and good agricultural practise as well as strict observance of the conditions of use no harmful effects on groundwater or adverse effects on the ecosystem are to be apprehended.

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# 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 product authorisation

# Appendix 2 – Copy of the product label

No product label available. Not mandatory according to Article 51 (5)

# Appendix 3 – Letter of Access

No letter of access necessary. The authorisation holder is owner of the studies submitted. Authorisation holder agrees to the current application to extend the authorisation.



Dr. Dietmar Gottschild

Referent

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mit Zustellungsurkunde Pflanzenschutzdienst der Landwirtschaftskammer INTERNET www.bvl.bund.de

Landwirtschaftskammer Nordrhein-Westfalen Siebengebirgsstraße 200

IHRE NACHRICHT VOM

IHR ZEICHEN

AKTENZEICHEN 200.22200.006902-00/07.53975

(bitte bei Antwort angeben)

DATUM 17. Juli 2012

GV1 006902-00/07

53229 BONN

**ASKON** 

Verfahren zur Erweiterung einer Zulassung nach Art. 51 der Verordnung (EG) Nr. 1107/2009

mit den Wirkstoffen:

200 g/l Azoxystrobin; 125 g/l Difenoconazol

Zulassungsnummer

006902-00

Versuchsbezeichnung:

SYD-21680-F-0-SC

Genehmigung

GV1 006902-00 vom 05. Juli 2011 in der Fassung der

Änderungsbescheide vom 26. März 2012, 20. Juni 2012

Ihr Antrag vom

27. Juni 2011

Die Zulassung des oben genannten Pflanzenschutzmittels wird wie in Anlage 1 beschrieben auf der Grundlage von Art. 51 der Verordnung (EG) Nr. 1107/2009 um folgende Anwendungsgebiete erweitert:

Dienstsitz Braunschweig Bundesallee 50, Geb. 247 38116 Braunschweig Tel: +49 (0)531 21497-0

Fax: +49 (0)531 21497-299

Abt. Pflanzenschutzmittel Messeweg 11/12 38104 Braunschweig Tel: +49 (0)531 299-5 Dienstsitz Berlin Mauerstraße 39-42 10117 Berlin

Diedersdorfer Weg 1 12277 Berlin 44-000 Tel: +49 (0)30 18412-0 44-8999 Fax: +49 (0)30 18412-2955

Referatsgr. Untersuchungen

Fax: +49 (0)531 299-3002

Tel: +49 (0)30 18444-000 Fax: +49 (0)30 18444-89999

Schadorganismus/ Zweckbe-	Pflanzen/ -erzeugnisse/Objekte	Anwendungsnummer	
stimmung			
Pilzliche Blattfleckenerreger	Aubergine, Tomate	006902-00/07-001	

Folgende Auflagen werden gemäß § 36 Abs. 3 S. 1 PflSchG erteilt:

Siehe anwendungsbezogene Auflage in Anlage 1, unter 3.

# Rechtsbehelfsbelehrung

Gegen diesen Bescheid kann innerhalb eines Monats nach Bekanntgabe Widerspruch erhoben werden. Der Widerspruch ist bei dem Bundesamt für Verbraucherschutz und Lebensmittelsicherheit, Messeweg 11/12, 38104 Braunschweig, schriftlich oder zur Niederschrift einzulegen.

Im Auftrag

gez.

Dr. Karsten Hohgardt stellvertretender Abteilungsleiter

Anlage

Dieses Schreiben ist maschinell gefertigt und daher ohne Unterschrift gültig.

# Anlage 1 genehmigte Anwendung: 006902-00/07-001

1 Anwendungsgebiet:

Schadorganismus/Zweckbestimmung Pilzliche Blattfleckenerreger

**Pflanzen/-erzeugnisse/Objekte** Aubergine, Tomate

**2 Einsatzgebiet**: Gemüsebau

3 Kennzeichnungsauflagen:

3.1 Angaben zur sachgerechten

**Anwendung:** 

Anwendungsbereich Gewächshaus

Stadium der Kultur ab 19

Anwendungszeitpunkt Bei Befallsbeginn bzw. bei Sichtbarwerden der

ersten Symptome

Maximale Zahl der Behandlungen

in dieser Anwendungfür die Kultur bzw. je Jahr2

- Abstand 10 bis 14 Tage

Anwendungstechnik spritzen

**Aufwand** 

Pflanzengröße bis 50 cm
 Pflanzengröße 50 bis 125 cm
 1 l/ha in 900 l Wasser/ha

# 3.2 Sonstige Kennzeichnungsauflagen:

- keine -

# 3.3 Wartezeiten:

3 Tage Gewächshaus: Aubergine, Tomate

# 4 Anwendungsbezogene Anwendungsbestimmungen:

- keine -

# REGISTRATION REPORT Part B

Section 4: Metabolism and Residues
Detailed summary of the risk assessment

**Product code: ASKON** 

Active Substance: 200 g/L Azoxystrobin and 125 g/L Difenoconazole

Central Zone Zonal Rapporteur Member State: Germany

**CORE ASSESSMENT** 

Applicant: Pflanzenschutzdienst der Landwirtschaftskammer NRW

Date: 23/12/2011

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# IIIA 8 METABOLISM AND RESIDUES DATA

# IIIA 8.1 Evaluation of the active substances

# IIIA 8.1.1 Azoxystrobin

Table IIIA 8.1.1-1: Information on the active substance azoxystrobin

Structural formula	* WeO OMe
Common Name	azoxystrobin

# IIIA 8.1.1.1 Storage stability

A brief summary of the storage stability data on azoxystrobin is given in the following table. Data, which has been previously evaluated at EU level, is described in detail in the Draft Re-Assessment Report prepared by UK (ASB2010-10494).

Table IIIA 8.1.1.1-1: Stability of residues (Annex IIA, point 6 Introduction, Annex IIIA, point 8 Introduction)

Stability of azoxystrobin	Azoxystrobin and R230310 are stable for up to 24 months when stored at approximately –18°C in the following matrices: grapes, wine, apples, orange oil, orange juice, orange pulp, bananas, peaches, tomatoes (juice and paste), cucumbers, lettuce, carrot root, cereal straw, cereal grain, soybean meal, oilseed rape, pecans and peanut (oil and nut meat).
	Azoxystrobin is stable for up to 10 months in animal tissues, eggs and milk when stored at approximately –18°C.

# *IIIA* 8.1.1.2 *Metabolism in plants and plant residue definition(s)*

A brief summary of the metabolism of azoxystrobin in plants is given in the following table. Data, which has been previously evaluated at EU level, is described in detail in the Draft Re-Assessment Report prepared by UK (ASB2010-10494).

Table IIIA 8.1.1.2-1: Metabolism in plants (Annex IIA, point 6.1 and 6.7, Annex IIIA, point 8.1 and 8.6)

<u> </u>	
Plant groups covered	Cereals (wheat), fruit crops (grapes), oilseeds/pulses (peanuts)
	The metabolism of azoxystrobin in all plant matrices investigated proceeds along the following degradation and biotransformation steps:
	<ul> <li>Cleavage of the ether linkage between the phenylacrylate ring and the pyrimidinyl ring gives metabolite M 28 [R401553], and cleavage of the ether linkage between the cyanophenyl ring and the pyrimidinyl ring gives M 13.</li> <li>Complex photochemical rearrangement leads to M U13.</li> <li>The Z-isomer M 09 [R230310] of azoxystrobin is formed by photoisomerisation.</li> <li>Oxidative cleavage of the acrylic bond leads to M 24 and M 19, further oxidation to M 30.</li> <li>M 02 [R234886] is obtained by ester hydrolysis or oxidative o-dealkylation. Hydroxylation of the acrylic bond in M 02 [R234886] gives metabolite M U6.</li> <li>Reduction of the acrylic bond of M 02 [R234886] gives M U5.</li> <li>Azoxystrobin and its metabolites are incorporated naturally into sugars such as glucose. This is indicative of the mineralisation of azoxystrobin in soil (forming CO<sub>2</sub>, which is subsequently assimilated and converted to simple sugars via photochemical reactions).</li> <li>N-glucosylation of M 28 [R401553] forms M 42 [R405287].</li> </ul>
	However, despite formation of several metabolites the unchanged parent substance was identified as major residue in all matrices investigated.
Rotational crops	Wheat, radish, lettuce
	The metabolism of azoxystrobin in succeeding crops is almost similar for all the analysed crops and also similar to that observed in the primary crops. The metabolism of azoxystrobin in rotational crops is more extensive with more metabolites being formed than in the primary crops but the metabolites in succeeding crops are produced in low concentrations.
	Metabolism in succeeding crops proceeded by four major routes:
	<ul> <li>Hydrolysis of the ester to give the free acid (M 02 [R234886]), followed by conjugation to glucose (N2) and malonylglucose (O3).</li> <li>Reduction of the double bond of acid M 02 [R234886], followed by conjugation to glucose (N1) and malonylglucose (O2 and M2).</li> </ul>

	<ul> <li>Cleavage of the ether linkage into two ring compounds, followed by further conjugation to glucose.</li> <li>Mineralisation and subsequent incorporation of <sup>14</sup>C-CO<sub>2</sub> into natural products.</li> </ul>
Metabolism in rotational crops similar to metabolism in primary crops? (yes/no)	yes
Distribution of the residue in peel/ pulp	no data
Processed commodities (nature of residue)	No significant degradation of azoxystrobin observed under standard hydrolysis conditions (pH 4, 90°C, 20 minutes, pH 5, 100°C, 60 minutes, pH 6, 120°C, 20 minutes – in aqueous solution).
Residue pattern in raw and processed commodities similar? (yes/no)	yes
Plant residue definition for monitoring	Azoxystrobin
Plant residue definition for risk assessment	Azoxystrobin
Conversion factor(s) (monitoring to risk assessment)	none

# IIIA 8.1.1.3 Metabolism in livestock and animal residue definition(s)

A brief summary of the metabolism of azoxystrobin in livestock is given in the following table. Data, which has been previously evaluated at EU level, is described in detail in the Draft Re-Assessment Report prepared by UK (<u>ASB2010-10494</u>).

Table IIIA 8.1.1.3.-1: Metabolism in livestock (Annex IIA, point 6.2 and 6.7, Annex IIIA, point 8.1 and 8.6)

Animals covered	Lactating goats, laying hens; pyrimidinyl,
	phenylacrylate and cyanophenyl label
	Goats: 25 mg/kg feed DM, 7 days.
	TRR up to 1.2 mg/kg in liver (0.02 mg/kg azoxy-
	strobin), 0.25 mg/kg in kidney (0.008 mg/kg azoxy-
	strobin), 0.06 mg/kg in muscle, 0.025 mg/kg in fat and
	0.01 mg/kg in milk. A couple of metabolites was
	identified, with largest contributions by M 13, M 20 and M 28 [R401553].
	Laying hens: 11 mg/kg feed DM, 10 days.
	Azoxystrobin and metabolite R401553 were the only
	identified residues. Transfer of TRR into tissues and
	eggs was very low (liver: 0.111 mg/kg; muscle: up to 0.018 mg/kg; skin+fat: up to 0.039 mg/kg; eggs: up to
	0.059 mg/kg). Based on azoxystrobin levels in animal
	feed as calculated (see below), residues are expected to
	be significantly below 0.01 mg/kg in tissues and eggs.
Time needed to reach a plateau concentration in	Eggs: egg yolk 6-8 days, egg white 3-4 days
milk and eggs	(metabolism study)
	Milk: 3-5 days (feeding study)
Animal residue definition for monitoring	Azoxystrobin
Animal residue definition for risk assessment	Azoxystrobin
Conversion factor(s) (monitoring to risk	none
assessment)	
Metabolism in rat and ruminant similar (yes/no)	yes
Fat soluble residue: (yes/no)	no

#### IIIA 8.1.1.4 Residues in rotational crops

A brief summary of the field rotational crop studies on azoxystrobin is given in the following table. Data, which has been previously evaluated at EU level, is described in detail in the Draft Re-Assessment Report prepared by UK (ASB2010-10494).

Table IIIA 8.1.1.4-1: Residues in rotational crops (Annex IIA, point 6.6, Annex IIIA, point 8.5)

Field studies	Field trials on wheat, millet, radish, turnip, beetroot, mustard greens and leaf lettuce
	Residues were <0.01 mg/kg (LOQ) in edible parts. In non-edible commodities (animal feed), the highest residues were seen in cereals: up to 0.05 mg/kg in forage, 0.03 mg/kg in hay and 0.04 mg/kg in straw.

#### IIIA 8.1.1.5 Residues in livestock

An actual calculation of the dietary burden (based on all relevant uses according to national authorizations in DE) is provided in the following table.

Table IIIA 8.1.1.5-1: Calculation of the dietary burden (according to nationally authorized uses in DE)

Feedstuff	%	Percent of daily livestock diet (dry feed basis)								
	DM	Chicken	Dairy cattle	Beef cattle	Pig	(mg/kg)	Chicken	Dairy	Beef	Pig
		1.9 kg bw	550 kg bw	350 kg bw	75 kg bw			cattle	cattle	
		daily maximum feed (DM) 120 g	daily maximum feed (DM) 20 kg	daily maximum feed (DM) 15 kg	daily maximum feed (DM) 3 kg					
Sugar beet leaves	16.0	0.000	30.000	20.000	25.000	0.380 <sup>a</sup>	0.000	0.713	0.475	0.594
Fruit pomace	23.0	0.000	10.000	30.000	0.000	0.630 b	0.000	0.274	0.822	0.000
Cereal grain	86.0	70.000	10.000	0.000	15.000	0.015 °	0.012	0.002	0.000	0.003
Cereal straw	86.0	0.000	20.000	50.000	0.000	5.300 <sup>d</sup>	0.000	1.233	3.081	0.000
Pulses	86.0	10.000	0.000	0.000	0.000	0.010 <sup>e</sup>	0.001	0.000	0.000	0.000
Sugar beet root	20.0	20.000	30.000	0.000	60.000	0.010 <sup>f</sup>	0.010	0.015	0.000	0.030
				Intake (mg/kg	dry weight fee	d)	0.023	2.236	4.378	0.626
	Intake (mg/kg feed as received)			<b>d</b> )	0.012	0.538	1.396	0.132		
	Intake (mg/kg bw/d)			0.001	0.081	0.188	0.025			
	Intake (mg/animal/d)			0.003	44.714	65.672	1.879			

<sup>&</sup>lt;sup>a</sup> HR, based on cGAP: 2 x 0,25 kg as/ha, PHI: 36-43 d, BBCH 39-49

A brief summary of the available livestock feeding study/studies is given in the following table. Data, which has previously been evaluated at EU level is described in detail in the Draft Re-Assessment Report prepared by UK (<u>ASB2010-10494</u>). The dietary burden calculated at EU level is worst case as compared to the dietary burden based on nationally authorized uses in DE.

<sup>&</sup>lt;sup>b</sup> STMR, based on cGAP: 3 x (0,075-0,3) kg as/ha, PHI: 35 d (partly overdosed trials, 3-8 x 0,25-0,4 kg as/ha, PHI 26-28 d), no processing factor for pomace available

<sup>&</sup>lt;sup>c</sup> STMR, based on cGAP: barley, 2 x 0,2 kg as/ha, BBCH 31-61, PHI: 34-43 d

<sup>&</sup>lt;sup>d</sup> HR, based on cGAP: barley, 2 x 0,2 kg as/ha, BBCH 31-61, PHI: 34-50 d

e STMR, based on cGAP: pea seed, dry, 2 x 0,2 kg as/ha, PHI: 42-45 d

<sup>&</sup>lt;sup>f</sup> HR, based on cGAP: 2 x 0,25 kg as/ha, PHI: 36-43 d, BBCH 39-49

Table IIIA 8.1.1.5-2: Conditions of requirement of livestock feeding studies on azoxystrobin based on EU evaluation (AIR-DAR and Addendum, May/September 2009, RMS UK)

	Ruminant:	Poultry:	Pig:
Expected intakes by livestock ≥ 0.1 mg/kg diet (dry weight basis) (yes/no - If yes, specify the level)	10.39 (dairy)* 12.43 (beef)*	1.6 *	4.15 *
Potential for accumulation (yes/no):	no	no	no
Metabolism studies indicate potential level of residues ≥ 0.01 mg/kg in edible tissues (yes/no)	no	no	no

<sup>\*</sup> based on EU evaluation (AIR-DAR and Addendum, May/September 2009, RMS UK)

Table IIIA 8.1.1.5-3: Results of livestock feeding studies on azoxystrobin

	Ruminant:	Poultry:	Pig:
Feeding levels (mg/kg feed dry matter) in feeding	Dairy cattle:	Laying hens	See ruminant
studies	5, 25, 75 and	(metab. study):	
	250	11	
	Relevant dosing 1	evels in feeding stud	dy:
	dairy cows: 25 mg	g/kg feed DM (2N)	
		g feed DM (7 N, from	
	Expected residue	levels in animal ma	trices (mg/kg):
Muscle	< 0.01	<0.01	Not addressed
Liver	0.01 (25 mg/kg	< 0.01	Not addressed
	feed DM)		
	<0.01 (5 mg/kg		
	feed DM)		
Kidney	<0.01	<0.01	Not addressed
Fat	<0.01	<0.01	Not addressed
Milk	< 0.01		Not addressed
Eggs		<0.01	

#### IIIA 8.1.2 Difenoconazole

Table IIIA 8.1.2-1: Information on the active substance difenoconazole

Structural formula	H <sub>3</sub> C O CI
Common Name	difenoconazole

# IIIA 8.1.2.1 Storage stability

A brief summary of the storage stability data on difenoconazole is given in the following table. Data, which has been previously evaluated at EU level, is described in detail in the DAR for difenoconazole (ASB2010-10465) and the corresponding EFSA conclusion (ASB2012-749).

Table IIIA 8.1.2.1-1: Stability of residues (Annex IIA, point 6 Introduction, Annex IIIA, point 8 Introduction)

Stability of difenoconazole and CGA 205375	Studies demonstrated the storage stability of difenoconazole under deep frozen conditions for at least 24 months in commodities with high water content (tomatoes, potatoes, wheat forage), high oil content (cottonseed oil, meal and seeds) and in dry commodities (wheat grain, straw).  In lettuce, soybeans, bananas, eggs, milk, poultry breast, beef liver, fat, milk and tissues from dairy cattle, the storage stability of difenoconazole was demonstrated for at least 10 to 12 months.
	Metabolite CGA 205375 was shown to be stable in animal commodities for at least 10 months upon storage at <-18°C.

# IIIA 8.1.2.2 Metabolism in plants and plant residue definition(s)

A brief summary of the metabolism of difenoconazole in plants is given in the following table. Data, which has been previously evaluated at EU level, is described in detail in the DAR for difenoconazole (ASB2010-10465) and the corresponding EFSA conclusion (ASB2012-749).

Table IIIA 8.1.2.2-1: Metabolism in plants (Annex IIA, point 6.1 and 6.7, Annex IIIA, point 8.1 and 8.6)

Plant groups covered	Fruits and fruiting vegetables (grapes, tomatoes), root
Thank groups covered	vegetables (potatoes), cereals (wheat) and pulses and
	oilseeds (oilseed rape) were covered, all as foliar
	application using [phenyl- <sup>14</sup> C] or [triazole- <sup>14</sup> C] labelled
	difenoconazole. The metabolism was also investigated
	in wheat following seed treatment with difenoconazole
	(phenyl and triazole label).
	(phenyi and triazole laber).
	Difenoconazole was extensively degraded in crops
	investigated, with very similar metabolic pathways in
	all four crop categories. In tomatoes (fruits, foliage),
	potatoes (tubers, foliage) and oilseed rape (seed, pods)
	parent difenoconazole and its metabolite triazole
	alanine were identified as major constituents of the
	TRR (except for mature potato tubers: in the phenyl
	study the main component of the TRR was
	CGA 205375). In wheat straw and grain 1,2,4-triazole,
	triazole acetic acid and triazole alanine were
	dominating after treatment with [triazole- <sup>14</sup> C] labelled
	difenoconazole. In the phenyl study the majority of the
	TRR in straw was parent difenoconazole along with its
	metabolite CGA 2053755 while in grain the conjugates
	of metabolite CGA 1891386 accounted for up to 35%
	of the TRR. Studies on grapes showed that the essential
	part of the TRR in mature plant parts (foliage and
	fruits) was difenoconazole. The available studies with
	wheat, potatoes and oilseed rape indicated translocation
	of triazole related residues to tubers, grain and seed.

Rotational crops	Leafy vegetables (lettuce, spinach), root vegetables (carrot, sugar beet and turnip), cereals (spring and winter wheat, maize), Soil treatment, phenyl and/or triazole labelled difenoconazole.  Residues of triazole alanine (10 - 66 %), triazole lactic acid (9.7 – 54 %) and triazole acetic acid (2.7 – 39 %) were identified as major components of the TRR after application of [triazole- <sup>14</sup> C] difenoconazole. Results from the confined study with [phenyl- <sup>14</sup> C] labelled active substance indicated that the TRR was very low. Therefore no characterization of the TRR was attempted.
Metabolism in rotational crops similar to metabolism in primary crops? (yes/no)	yes
Distribution of the residue in peel/ pulp	no data
Processed commodities (nature of residue)	Difenoconazole is stable under standard conditions representing pasteurisation, boiling and sterilisation.
Residue pattern in raw and processed commodities similar? (yes/no)	yes
Plant residue definition for monitoring	Difenoconazole
Plant residue definition for risk assessment	Two separate residue definitions (provisional):  1) Difenoconazole  2) Triazole derivative metabolites (TDM) pending the definition of a common and harmonised approach for all active substances of the triazole chemical class
Conversion factor(s) (monitoring to risk assessment)	not applicable

# IIIA 8.1.2.3 Metabolism in livestock and animal residue definition(s)

A brief summary of the metabolism of difenoconazole in livestock is given in the following table. Data, which has been previously evaluated at EU level, is described in detail in the DAR for difenoconazole (ASB2010-10465) and the corresponding EFSA conclusion (ASB2012-749).

Table IIIA 8.1.2.3-1: Metabolism in livestock (Annex IIA, point 6.2 and 6.7, Annex IIIA, point 8.Nr and 8.6)

Animals covered	Lactating goats and laying hens were investigated using [phenyl- <sup>14</sup> C] and [triazole- <sup>14</sup> C] labelled difenoconazole.
	Difenoconazole was rapidly metabolised, with the majority of the administered radioactivity being excreted via urine and faeces (up to 97 % in hens and up to 88% in goats). Transfer of radioactivity into milk, eggs and edible tissues was low, thus demonstrating that neither difenoconazole nor its metabolites accumulate. Difenoconazole was identified in all investigated matrices, but the main component of the residues was metabolite CGA 205375 which is regarded as less toxic than the parent compound. As the metabolic pattern in ruminants does not significantly differ from that in rats, a pig study was not required.
Time needed to reach a plateau concentration in	Milk = 2 - 6 days
milk and eggs	Eggs = 5 - 7 days

Animal residue definition for monitoring	Reg. (EC) 396/2005: Difenoconazole
	Proposal from EFSA Conclusion: Difenoconazole alcohol (CGA-205375), expressed as difenoconazole
Animal residue definition for risk assessment	Proposal from EFSA Conclusion: Two separate residue definitions (provisional): 1) Difenoconazole alcohol (CGA-205375), expressed as difenoconazole 2) Triazole derivative metabolites  pending information on metabolism of TDM in animals and pending the definition of a common and harmonised approach for all active substances of the
Conversion factor(s) (monitoring to risk assessment)	triazole chemical class. not concluded
Metabolism in rat and ruminant similar (yes/no)	yes
Fat soluble residue: (yes/no)	yes, log Pow is 4.4 at pH 8 (though results from metabolism and feeding studies do not indicate high fat solubility)

# IIIA 8.1.2.4 Residues in rotational crops

A brief summary of the field rotational crop studies on difenoconazole is given in the following table. Data, which has been previously evaluated at EU level, is described in detail in the DAR for difenoconazole (ASB2010-10465) and the corresponding EFSA conclusion (ASB2012-749).

Table IIIA 8.1.2.4-1: Residues in rotational crops (Annex IIA, point 6.6, Annex IIIA, point 8.5)

Field studies	In confined rotational crop studies the uptake of radioactive residues by succeeding crops was investigated following application to bare soil.  The uptake was generally low, but higher with the [triazole- <sup>14</sup> C] label than with the [phenyl- <sup>14</sup> C] label.
	Field studies showed that residues of difenoconazole and triazole alanine did not occur in carrots and spinach planted 30 days after application of difenoconazole to bare ground.

#### IIIA 8.1.2.5 Residues in livestock

An actual calculation of the dietary burden (based on all relevant uses according to national authorizations in DE) is provided in the following table.

Table IIIA 8.1.2.5-1: Calculation of the dietary burden (according to nationally authorized uses in DE)

	%	Percent of dail	y livestock diet	(dry feed basis)		Residue	Intake (mg/kg, dry feed basis)			
	DM	Chicken 1.9 kg bw daily maximum feed (DM) 120 g	Dairy cattle 550 kg bw daily maximum feed (DM) 20 kg	Beef cattle 350 kg bw daily maximum feed (DM) 15 kg	Pig 75 kg bw daily maximum feed (DM) 3 kg	(mg/kg)	Chicken	Dairy cattle	Beef cattle	Pig
Sugar Beet leaves	16		30	30	25	0.62 <sup>a</sup>		1.163	1.163	0.969
Apple Pomace	23		10	-		0.28 <sup>b</sup>		0.122		
Cereal (grain)	86	70	10		15	0.02 °	0.016	0.002		0.003

Feedstuff	%	Percent of dail	y livestock diet	(dry feed basis)		Residue	Intake (mg/kg, dry feed basis)			
	DM	Chicken	Dairy cattle	Beef cattle	Pig	(mg/kg)	Chicken	Dairy	Beef	Pig
		1.9 kg bw	550 kg bw	350 kg bw	75 kg bw			cattle	cattle	
		daily maximum feed (DM) 120 g	daily maximum feed (DM) 20 kg	daily maximum feed (DM) 15 kg	daily maximum feed (DM) 3 kg					
Cereals (straw)	86		20	50		1.3 °		0.302	0.756	
Fodder beet	10	20	30	20	60	0.1 <sup>a</sup>	0.200	0.300	0.200	0.600
Rape seed	86	10		10		0.02 <sup>e</sup>	0.002	0.007	0.002	0.005
				Intake (mg/kg	dry weight feed	)	0.219	1.899	2.118	1.572
Intake (mg/kg feed as received)							0.077	0.344	0.475	0.203
Intake (mg/kg bw/d)							0.014	0.069	0.091	0.063
	Intake (mg/animal/d) 0.026 37.778 31.775 4.7									4.717

<sup>&</sup>lt;sup>a</sup> HR, based on the following cGAP: 2 x 0.1 kg as/ha, PHI: 28 d

A brief summary of the available livestock feeding study/studies is given in the following table. Data, which has previously been evaluated at EU level, is described in detail in the DAR for difenoconazole (ASB2010-10465) and the corresponding EFSA conclusion (ASB2012-749).

Table IIIA 8.1.2.5-2: Conditions of requirement of livestock feeding studies on difference on a condition of the conditions of the conditi

	Ruminant:	Poultry:	Pig:
Expected intakes by livestock ≥ 0.1 mg/kg diet (dry weight basis) (yes/no - If yes, specify the level)	yes 1.9 (cow) 2.1 (beef)	yes 0.22	yes 1.6
Potential for accumulation (yes/no):	no	no	no
Metabolism studies indicate potential level of residues ≥ 0.01 mg/kg in edible tissues (yes/no)	yes	yes	yes

Table IIIA 8.1.2.5-3: Results of livestock feeding studies on difenoconazole

	Ruminant:	Poultry:	Pig:
Feeding levels (mg/kg feed dry matter) in	Several cow	Hen feeding	See ruminant
feeding studies	feeding studies	study with 4	
	with following	dosing levels:	
	dosing levels:	0.3, 1, 3, 10	
	1, 3, 5, 15, 50	mg/kg feed	
	mg/kg feed	DM	
	DM		
	Relevant dosing l	evels in feeding stud	dy: 1 and 3 mg/kg
	feed for cows, bee	ef and pigs and 0.3 i	ng/kg feed for
	poultry		
	Expected difenoc	onazole residue leve	els in animal
	matrices (mg/kg):		
Muscle	<0.01	< 0.01	<0.01
Liver	<0.01	< 0.01	<0.01
Kidney	<0.01	< 0.01	<0.01
Fat	<0.01	<0.01	<0.01
Milk	<0.01		<0.01
Eggs		<0.01	

<sup>&</sup>lt;sup>b</sup> STMR-P, based on the following cGAP: 4 x 0.019 kg as/ha, 4 x 0.004 kg as/hl, PHI: 28 d, PF = 4 for pomace

<sup>&</sup>lt;sup>c</sup> HR (straw) STMR (grain), based on the following cGAP: 2 x 0.125 kg as/ha, PHI: 35 d

<sup>&</sup>lt;sup>d</sup> STMR, based on the following cGAP: 2 x 0.125 kg as/ha, PHI: F not specified, covered by vegetation period

# IIIA 8.2 <u>Evaluation of the intended use(s)</u>

# IIIA 8.2.1 Selection of critical use and justification

The critical GAP for indoor grown tomato and aubergine which is used for the consumer intake and risk assessment is presented in Table IIIA 8.2-1.

Under consideration of a variable application rate in dependence of the plant height, the cGAP was defined as 2 x 1 L formulation per ha (2 x 0.2 kg azoxystrobin and 2 x 0.125 kg difenoconazole per ha).

Table IIIA 8.2-1: Critical Use (worst case) used for consumer intake and risk assessment

1	2	3	4	5	6	7	8	9	10	11	12	13
Use	Mem-	Crop and/	F	Pests or Group of pests	Application	Application A			Application rate			Remarks:
No.	ber state(s)	or situation (crop destination / purpose of crop)  (a)	G or I (b)	controlled (additionally: developmental stages of the pest or pest group) (c)	Method / Kind (d-f)	Timing / Growth stage of crop & season	Max. number (min. interval between applications) a) per use b) per crop/ season (h)	kg, L product / ha a) max. rate per appl. b) max. total rate per crop/season	g, kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max	(days) (i)	e.g. safener/synergist per ha e.g. recommended or mandatory tank mixtures  (j)
1	DE	Aubergine, Tomato	G	Fungal leaf spot diseases	spraying	from BBCH 19 onwards	a) 2 b) 2 (10-14 days)	0.75 – 1 l/ha (see below)	see below	600-900	3	

Height of plant		Appl	lication rate	Application concentration			
	Formulation	Difenoconazole	azole Azoxystrobin Water		Difenoconazole	Azoxystrobin	
	(kg/ha)	(kg as/ha)	(kg as/ha)	(l/ha)	(kg	g as/hl)	
up to 50 cm	0.75	0.094	0.15	600	0.014-0.016	0.022-0.025	
50 cm up to 125 cm	1.0	0.125	0.2	900	0.014-0.010		

Remarks:

- (a) For crops, the EU and Codex classifications (both) should be used; where relevant, the use situation should be described (*e.g.* fumigation of a structure)
- (b) Outdoor or field use (F), glasshouse application (G) or indoor application (I)
- (c) e.g. biting and suckling insects, soil born insects, foliar fungi, weeds
- (d) All abbreviations used must be explained
- (e) Method, e.g. high volume spraying, low volume spraying, spreading, dusting, drench
- (f) Kind, e.g. overall, broadcast, aerial spraying, row, individual plant, between the plants type of equipment used must be indicated
- (g) Growth stage at last treatment (BBCH Monograph, Growth Stages of Plants, 1997, Blackwell, ISBN 3-8263-3152-4), including where relevant, information on season at time of application
- (h) The minimum and maximum number of application possible under practical conditions of use must be provided
- (i) PHI minimum pre-harvest interval
- (j) Remarks may include: Extent of use/economic importance/restrictions

# IIIA 8.2.2 Aubergine, Tomatoe

# IIIA 8.2.2.1 Residues in primary crops

# **Azoxystrobin**

The following table gives a brief overview of the supervised residue trials selected for the assessment of azoxystrobin in indoor grown tomatoes. All supervised field trials available are overdosed by the number of applications and in some cases conducted with higher application rates as intended. However, resulting residues in mature fruits are all below the established MRLs for azoxystrobin in tomato and aubergine, allowing an assessment of the MRL compliance and a calculation of the dietary intake.

According to the current guidance for extrapolation (SANCO 9525/VI/95 rev.9) supervised field trial data on tomatoes may be used for the evaluation of aubergines. For the detailed evaluation of new/additional residue trials it is referred to Appendix 2.

Table IIIA 8.2.2.1-1: Overview of the selected supervised residue trials for azoxystrobin in tomatoes

Commo- dity	Region	Outdoor/ Indoor	Individual trial results (mg/kg)		STMR (mg/kg) (b)	HR (mg/kg) (c)	Median CF <sup>(d)</sup>	
uity		indoor	Enforcement (azoxystrobin)	Risk assessment (azoxystrobin)	(mg/kg)	(mg/kg)		
Tomato	DE	Indoor	0.08; 0.14; 0.21(2); 0.28; 0.33(2); 0.36; 0.42; 0.47; 0.49; 0.54(2); 0.69(2); 0.84; 1.2 mg/kg	0.08; 0.14; 0.21(2); 0.28; 0.33(2); 0.36; <u>0.42</u> ; 0.47; 0.49; 0.54(2); 0.69(2); 0.84; 1.2 mg/kg	0.42	1.2	1	

- (a): NEU, SEU, EU or Import (country code). In the case of indoor uses there is no necessity to differentiate between NEU and SEU.
- (b): Median value of the individual trial results according to the risk assessment residue definition.
- (c): Highest value of the individual trial results according to the risk assessment residue definition.
- (d): The median conversion factor for enforcement to risk assessment is obtained by calculating the median of the individual conversion factors for each residues trial.

Analytical methods for commodities of high water content such as tomatoes and aubergine are available and acceptable for enforcing azoxystrobin.

#### Difenoconazole

The following table gives a brief overview of the supervised residue trials selected for the assessment of difenoconazole in indoor grown tomatoes. All supervised field trials available are overdosed by the number of applications.

According to the current guidance for extrapolation (SANCO 9525/VI/95 rev.9) supervised field trial data on tomatoes may be used for the evaluation of aubergines. For the detailed evaluation of new/additional residue trials it is referred to Appendix 2.

Table IIIA 8.2.2.1-2: Overview of the selected supervised residue trials for difenoconazole in tomatoes

Commo- dity	Region	Outdoor/ Indoor	Individual trial results (mg/kg)		STMR (mg/kg) (b)	HR (mg/kg) (c)	Median CF <sup>(d)</sup>	
unty		indoor	Enforcement (difenoconazole)	Risk assessment (difenoconazole*)	(mg/kg)	(mg/kg)		
Tomato	DE	Indoor	0.04; 0.07; 0.08(2); 0.1(3); 0.12, 0.46 mg/kg	0.04; 0.07; 0.08(2); <u>0.1</u> (3); 0.12, 0.46 mg/kg	0.1	0.46	1	

<sup>\*</sup> the second part of the residue definition as proposed by EFSA (1. difenoconazole; 2. TDM) is currently not considered since a harmonized EU approach is not yet available.

<sup>(</sup>a): NEU, SEU, EU or Import (country code). In the case of indoor uses there is no necessity to differentiate between NEU and SEU.

<sup>(</sup>b): Median value of the individual trial results according to the enforcement residue definition.

<sup>(</sup>c): Highest value of the individual trial results according to the enforcement residue definition.

(d): The median conversion factor for enforcement to risk assessment is obtained by calculating the median of the individual conversion factors for each residues trial.

Analytical methods for commodities of high water content such as tomatoes or aubergines are available and acceptable for enforcing difenoconazole.

# IIIA 8.2.2.2 Residues in processed commodities

#### **Azoxystrobin**

The following table gives a brief overview of the results of processing studies for azoxystrobin in tomato. For the detailed evaluation of new/additional residue trials it is referred to Appendix 2.

Table IIIA 8.2.2.2-1: Overview of the available processing studies for azoxystrobin in tomato

Processed commodity	Number of studies	Individual PFs (mg/kg)	Median PF <sup>(a)</sup>	Median CF <sup>(b)</sup>	Comments
Fruit, washed	2	0.64, 0.71	0.675	1	
Juice	2	0.29, 0.36	0.325	1	
Puree	2	0.55, 1.4	0.975	1	
Preserves	2	<0.09, <0.14	<0.115	1	
Ketchup	2	0.36, 0.57	0.465	1	

<sup>(</sup>a): The median processing factor is obtained by calculating the median of the individual processing factors of each processing study.

#### **Difenoconazole**

The following table gives a brief overview of the results of processing studies for difenoconazole in tomato. For the detailed evaluation of new/additional residue trials it is referred to Appendix 2.

Table IIIA 8.2.2.2-2: Overview of the available processing studies for difenoconazole in tomato

Processed commodity	Number of studies	Individual PFs (mg/kg)	Median PF <sup>(a)</sup>	Median CF <sup>(b)</sup>	Comments
Fruit, washed	1	0.5, 0.68, 0.72, 0.81	0.7	1	
Juice, pasteurized	4	0.18, 0.18, 0.23, 0.27	0.205	1	
Puree, sterilized	4	0.64, 0.68, 0.68, 0.81	0.68	1	
Preserves, sterilized	4	0.045, 0.045, 0.09, 0.09	0.0675	1	

<sup>(</sup>a): The median processing factor is obtained by calculating the median of the individual processing factors of each processing study.

#### IIIA 8.2.2.3 Proposed Pre-Harvest Intervals, Withholding Periods

The critical GAP includes a PHI of 3 days.

<sup>(</sup>b): The median conversion factor for enforcement to risk assessment is obtained by calculating the median of the individual conversion factors of each processing study.

<sup>(</sup>b): The median conversion factor for enforcement to risk assessment is obtained by calculating the median of the individual conversion factors of each processing study.

#### IIIA 8.3 Consumer intake and risk assessment

# IIIA 8.3.1 Azoxystrobin

The consumer intake and risk assessment is based on the appropriate input values given in Table IIIA 8.3.1-1 and the toxicological reference values stated in Table IIIA 8.3.1-2. For the detailed calculation results it is referred to Appendix 3.

Processing factors were not included in the dietary intake assessment, since no concentration of residues was observed in processed commodities.

Table IIIA 8.3.1-1: Residue input values for the consumer risk assessment

Commodity	Chronic risk a	ssessment	Acute risk assessment		
	Input value (mg/kg)	Comment	Input value (mg/kg)	Comment	
all commodities	variable	MRL	n.n.	not ARfD necessary	

Table IIIA 8.3.1-2: Consumer risk assessment (Annex IIA, point 6.9, Annex IIIA, point 8.8)

ADI	0.2 mg/kg bw
TMDI (% ADI) according to EFSA PRIMo	52.7 % (based on 2- <5 year old DE children)*
NTMDI (% ADI) according to NVS II-model	67.5 % (based on 2- <5 year old DE children)*
IEDI (EFSA PRIMo) (% ADI)	not required
NEDI (% ADI)	not required
Factors included in IEDI and NEDI	not applicable
ARfD	not allocated
IESTI (EFSA PRIMo) (% ARfD)	not necessary
NESTI (% ARfD)	not necessary
Factors included in IESTI and NESTI	not applicable

<sup>\*</sup> both calculations are based on the same underlying consumption data, but due to differences in the models calculation results differ

#### IIIA 8.3.2 Difenoconazole

The consumer intake and risk assessment is based on the appropriate input values given in Table IIIA 8.3.2-1 and the toxicological reference values stated in Table IIIA 8.3.2-2. For the detailed calculation results it is referred to Appendix 3.

Processing factors were not included in the dietary intake assessment, since no concentration of residues was observed in processed commodities.

Table IIIA 8.3.2-1: Residue input values for the consumer risk assessment

Commodity	Chronic risk assessment		Acute risk assessment			
	Input value (mg/kg)	Comment	Input value (mg/kg)	Comment		
Tomato	0.1	STMR	0.46	HR		
Aubergine	0.1	STMR	0.46	HR		
Pome fruit	0.12	STMR, EC, 2008		not relevant for intended uses		
Apricots	0.14	STMR, EC, 2008		not relevant for intended uses		
Peaches	0.15	STMR, EC, 2008		not relevant for intended uses		
Olives	0.47	STMR, EC, 2008		not relevant for intended uses		
Beetroot, swedes, turnips	0.08	STMR, EC, 2008		not relevant for intended uses		
Peppers	0.14	STMR, EFSA, 2010		not relevant for intended uses		
Cucurbits with edible peel	0.01	STMR		not relevant for intended uses		
Fresh herbs	4.65	STMR, EFSA, 2010		not relevant for intended uses		
Celery	0.34	STMR, EC, 2007		not relevant for intended uses		
Fennel	1.66	STMR, EFSA, 2009		not relevant for intended uses		
all other commodities	variable	MRL		not relevant for intended uses		

Table IIIA 8.3.2-2: Consumer risk assessment (Annex IIA, point 6.9, Annex IIIA, point 8.8)

ADI	0.01 mg/kg bw
TMDI (% ADI) according to EFSA PRIMo	182.9 % (based on WHO Cluster diet B)
NTMDI (% ADI) according to NVS II model	164.9 % (based on 2- <5 year old DE children)
IEDI (EFSA PRIMo) (% ADI)	91.5 % (based on WHO Cluster diet B)
NEDI (NVS II model) (% ADI)	92.9 % (based on 2- <5 year old DE children)
Factors included in IEDI and NEDI	STMR values as listed above
ARfD	0.16 mg/kg bw
IESTI (EFSA PRIMo) (% ARfD)	Tomato: 72.7 % (based on BE child) Aubergine: 7.2 % (based on UK children, 4-6 years)
NESTI (NVS II model) (% ARfD)	Tomato: 14 % (based on 2- <5 year old DE children) Aubergine: 6 % (based on DE General population)
Factors included in IESTI and NESTI	none

# IIIA 8.4 <u>Proposed maximum residue levels (MRLs)</u>

The existing EU MRLs and proposals for new MRLs (if required) for the crops applied for in this dossier are summarized in Table IIIA 8.4-1.

The intended uses are not relevant for livestock feeding.

Table IIIA 8.4-1: Overview of the existing EC MRL(s) and new MRL proposals (if required)

Commodity (Code)	Existing EC MRL (mg/kg)	Proposed EC MRL (mg/kg)	Result of OECD calculator	Justification for the proposal/ Comments
Azoxystrobin: Tomato (0231010), Aubergine (0231030)	3	n.n.	n.n.	Existing MRL sufficient, HR: 1.2 mg/kg
Difenoconazole: Tomato (0231010)	2	n.n.	n.n.	Existing MRL sufficient, HR: 0.46 mg/kg
Difenoconazole: Aubergine (0231030)	0.4	n.n.	n.n.	Existing MRL sufficient, HR: 0.46 mg/kg  Supervised trials were overdosed (higher number of applications). Since only one single value was above the MRL and the rest far below (0.04-0.12 mg/kg), compliance with the existing MRL is assumed.

# IIIA 8.5 Conclusion

The available data for azoxystrobin and difenoconazole is considered sufficient for evaluation. No chronic or acute intake concern was identified for any of the two substances.

Azoxystrobin residues were all below the established MRL of 3 mg/kg for tomato and aubergine.

For difenoconazole, one single residue value (0.46 mg/kg) slightly exceeded the MRL of 0.4 mg/kg for aubergine. However, since the corresponding field trial was conducted with a higher number of applications, MRL compliance at cGAP conditions is assumed. For difenoconazole in tomatoes the MRL of 2 mg/kg is also considered sufficient.

The use of azoxystrobin and difenoconazole on tomatoes and aubergines is not relevant for animal feeding purposes.

Indoor uses on fruiting vegetables are also not relevant concerning succeeding crops. Besides this fact, none of the two active substances shows a significant transfer via the roots. However, triazoles metabolites could occur following application of difenoconazole. An overall assessment of triazoles is currently prepared on European level and is not considered in the framework of the present dossier.

In summary it is concluded that the intended uses comply with existing EU MRLs for azoxystrobin and difenoconazole. No dietary intake concern was identified.

# Appendix 1 List of data submitted in support of the evaluation

Table A 1: List of data submitted in support of the evaluation

Annex point/ reference No	Author(s)	Year	Title Source (where different from company)	Data protection claimed	Owner	How considered in dRR
			Report-No.			
			GLP or GEP status (where relevant),			
			Published or not			
			Authority registration No			
OECD: KIIA 6.3	Sapiets, A.; Clarke, D.;	1997	Residue levels in tomatoes from trials conducted in France during 1996		SYD	Used
	Barnard, C.		Syngenta			
			RJ2294B			
			RIP9800951			
OECD: KIIA 6.3	Clarke, D. M.;	1998	Residue levels in tomatoes and process fractions from trials carried out in Italy		SYD	Used
	Bonfanti, F.		Syngenta			
			RJ2488B			
			RIP9800954			
OECD: KIIA 6.3	Clarke, D. M.;	1998	Residue levels in tomatoes from trials carried out in Spain during 1997		SYD	Used
	Gallardo, E.		Syngenta			
			RJ2490B			
			<u>RIP9800957</u>			
OECD: KIIA 6.3	Clarke, D. M.; Renard, C.	1998	Residue levels in glasshouse tomatoes from trials carried out in France during 1997		SYD	Used
			Syngenta			
			RJ2489B			
			RIP9800958			
OECD: KIIA 6.3	Gill, J. P.; Chamier, O. D.	1998	Residue levels in indoor tomatoes from a study carried out in Germany during 1997		SYD	Used
			Syngenta			
			RJ2478B			
			RIP9800959			
OECD: KIIA 6.3	Clarke, D. M.; Bouwman, J.	1998	Residue levels in glasshouse tomatoes from a trial carried out in the Netherlands during 1997		SYD	Used
	J.		Syngenta			
			RJ2552B			
			RIP9800961			
OECD: KIIA 6.3	Clarke, D. M.; Bouwman, J.	1998	Residue levels in glasshouse tomatoes from glasshouse trials carried out in the Netherlands during 1997		SYD	Used
	J.		Syngenta			
			RJ2559B			
			RIP9800963			
OECD: KIIA 6.3	Solé, C.	2002	Residue study with Difenoconazole (CGA169374) in or on tomatoes in Greece; Amendment to the final report		SYD	Used
			of study 2021/01, Amendment No. 1			
			Syngenta			

Annex point/ reference No	Author(s)	Year	Title Source (where different from company)	Data protection claimed	Owner	How considered in dRR
			Report-No.			
			GLP or GEP status (where relevant),			
			Published or not			
			Authority registration No			
			2021/01			
			ASB2011-12607			
OECD: KIIA 6.3	Bour, D.	2006	Difenoconazole (CGA169374): Residue study on protected tomatoes in Northern France and the United Kingdom		SYD	Used
			Syngenta			
			05-0414			
			ASB2011-12608			
OECD: KIIA 6.3	Bour, D.	2006	Difenoconazole (CGA169374): Residue study on protected tomatoes in Southern France and Spain		SYD	Used
			Syngenta			
			05-0413			
			ASB2011-12609			
OECD: KIIA 6.3	Royer, A.	2007	Difenoconazole (CGA169374): Residue study on protected tomatoes in Switzerland in 2006		SYD	Used
			Syngenta			
			T000699-06			
			ASB2011-12610			
OECD: KIIA 6.3	Royer, A.	2007	Difenoconazole (CGA169374): Residue study on protected tomatoes in Spain in 2006		SYD	Used
			Syngenta			
			T000698-06			
			ASB2011-12611			
OECD: KIIA 6.5	Clarke, D. M.; Bonfanti, F.	1998	Residue levels in tomatoes and process fractions from trials carried out in Italy		SYD	Used
			Syngenta			
			RJ2488B RIP9800954			
OECD: KIIA 6.5	Ryan, J.	2006	Difenoconazole (CGA169374): Residue study in or on outdoor tomatoes and processed fraction in France (South)		SYD	Used
			Syngenta			
			04-6049			
			ASB2011-12612			

# Appendix 2 Detailed evaluation of the additional studies relied upon

# A 2.1 Storage stability

No further data submitted.

# A 2.2 Residues in primary crops

No further data submitted.

# A 2.2.1 Nature of residues

No further data submitted.

#### A 2.2.2 Magnitude of residues for azoxystrobin in tomatoes

Reference: RIP9800959, RIP9800954, RIP9800958, RIP9800957, RIP9800951.

RIP9800961, RIP9800963

Report Residue studies with Azoxystrobin in or on indoor grown tomatoes

Guideline(s): Yes (EU Guidance to Dir. 91/414/EEC)

Deviations: none GLP: Yes

Acceptability: Yes

RESIDUES DATA SUMMARY FROM SUPERVISED TRIALS (SUMMARY)

Active ingredient : Azoxystrobin (Application on agricultural and horticultural crops)

Crop / crop group : Tomato

: 1998-08-17

Federal Institute for Risk Assessment, Berlin

Federal Republic of Germany Submission date

(g/kg or g/l) : 250 g/l Content of a.i. Indoors / outdoors : Indoors

: SC Formulation (e.g. WP) Other a. i. in formulation

: Ortiva 004560-00 Commercial product (name) (common name and content)

: 8.1 Azoxystrobin Applicant : Syngenta Agro GmbH Residues calculated as 8.2 R230310

1	2	3		4		5	6	7	8.1	8.2	9	10
Report-No.	Commodity/	Date of	, A	Application		Dates of	Growth	Portion	Residues	Residues	PHI	Remarks
Location	Variety	<ol> <li>Sowing or</li> </ol>	rate	rate per treatment		treatments	stage	analysed	(mg/kg)	(mg/kg)	(days)	
incl.		planting				or no. of	at last					
Postal code		2) Flowering	kg	Water	kg	treatments	treatment					
and date		3) Harvest	a.i./ha	l/ha	a.i./hl	and last date	or date					
	(a)	(b)				(c)		(a)			(d)	(e)
RJ2294B,	Ondina	1) 1996-05-10	0.13	520	0.025	1996-06-14	BBCH	fruit green	0.10	<0.01	0	
S213.96		(planting)	0.13	520	0.025	1996-06-21	71-75		0.12	<0.01	1	analytical method: SOP RAM

1	2	3		4		5	6	7	8.1	8.2	9	10
Report-No. Location	Commodity/ Variety	Date of 1) Sowing or		pplicatio		Dates of treatments	Growth stage	Portion analysed	Residues (mg/kg)	Residues (mg/kg)	PHI (days)	Remarks
incl. Postal code and date		planting 2) Flowering 3) Harvest	kg a.i./ha	Water I/ha	kg a.i./hl	or no. of treatments and last date	at last treatment or date					
	(a)	(b)				(c)		(a)			(d)	(e)
FR-27800 Brionne, Haute- Nomandie		2) 1996-06-14 - 1996-07-12 3) 1996-07-29	0.13 0.13 0.13 0.13 0.13	520 520 520 520 520 520	0.025 0.025 0.025 0.025 0.025	1996-06-28 1996-07-05 1996-07-12 1996-07-19 1996-07-26		fruit, ripe	0.08 0.06 0.06	<0.01 <0.01 <0.01	3 7 10	243/04 (GC-N-TID), LOQ: 0.01 mg/kg, max. sample storage: 4 months RIP9800951
RJ2478B, RS-9702-G1 D-84030 Landshut, Bavaria 1998-05-06	Matador	1) 1997-04-28 (planting) 2) 3)	0.50 0.50 0.50 0.50	2500 2500 2500 2500 2500	0.020 0.020 0.020 0.020	1997-07-02 1997-07-10 1997-07-18 1997-07-28	BBCH 81	fruit	1.2 1.2 1.3 0.95 <u>1.2</u>	0.01 0.01 0.02 0.01 0.02	0 1 2 3 5	analytical method: SOP RAM 243/05 (GC-N-TID), LOQ: 0.01 mg/kg, max. sample storage: 6 months
RJ2478B, RS-9702-K1 D-03058 Groß Gaglow Brandbg. 1998-05-06	Pannory	1) 1997-03-13 (planting) 2) 3)	0.50 0.50 0.50 0.50	2500 2500 2500 2500 2500	0.020 0.020 0.020 0.020	1997-05-13 1997-05-21 1997-05-30 1997-06-09	BBCH 73	fruit	0.38 0.38 0.41 <u>0.33</u> 0.33	<0.01 <0.01 <0.01 <0.01 <0.01	0 1 2 3 5	analytical method: SOP RAM 243/05 (GC-N-TID), LOQ: 0.01 mg/kg, max. sample storage: 6 months
RJ2488B, IT51-97-P319 IT-71043 Manfredonia Puglia 1998-06-02	Galaxy	1) 1997-02-04 (planting) 2) 3)	0.25 0.35 0.40 0.40 0.45 0.45	1000 1400 1600 1600 1800 1800	0.025 0.025 0.025 0.025 0.025 0.025	1997-03-20 1997-03-28 1997-04-05 1997-04-14 1997-04-23 1997-05-02	BBCH 74	fruit	0.33 0.32 0.27	0.01 <0.01 <0.01	3 7 10	analytical method: SOP RAM 243/04 and /05 (GC-N-TID), LOQ: 0.01 mg/kg, max. sample storage: 8 months  RIP9800954

1	2	3		4		5	6	7	8.1	8.2	9	10
Report-No. Location incl. Postal code and date	Commodity/ Variety	Date of 1) Sowing or planting 2) Flowering 3) Harvest		pplication per treatr Water I/ha		Dates of treatments or no. of treatments and last date	Growth stage at last treatment or date	Portion analysed	Residues (mg/kg)	Residues (mg/kg)	PHI (days)	Remarks
	(a)	(b)				(c)		(a)			(d)	(e)
RJ2489B, S215.97 FR-27800 Brionne, Normandie	Tradiro	1) 1997-05-13 (planting) 2) 3)	0.25 0.25 0.25 0.25 0.25 0.25	1000 1000 1000 1000 1000 1000	0.025 0.025 0.025 0.025 0.025 0.025	1997-06-23 1997-06-30 1997-07-08 1997-07-16 1997-07-24 1997-08-01	BBCH 75	fruit	0.21 0.19	<0.01 <0.01	3 7	analytical method: SOP RAM 243/05 (GC-N-TID), LOQ: 0.01 mg/kg, max. sample storage: 4 months  RIP9800958
RJ2489B, S215.97 Part:2 FR-27800 Brionne, Normandie	Tradiro	1) 1997-05-13 (planting) 2) 3)	0.28 0.28 0.30 0.30 0.33 0.33	1100 1100 1200 1200 1300 1300	0.025 0.025 0.025 0.025 0.025 0.025	1997-06-23 1997-06-30 1997-07-08 1997-07-16 1997-07-24 1997-08-01	BBCH 75	fruit	0.54 0.33	0.01 <0.01	3 7	analytical method: SOP RAM 243/05 (GC-N-TID), LOQ: 0.01 mg/kg, max. sample storage: 4 months  RIP9800958
RJ2489B, S622.97 FR-37510 Saint Genouph Loire-Valley 1998-06-02	Paola	1) 1997-03-27 (planting) 2) 3)	0.25 0.25 0.25 0.25 0.25 0.25 0.25	1000 1000 1000 1000 1000 1000	0.025 0.025 0.025 0.025 0.025 0.025	1997-05-20 1997-05-28 1997-06-04 1997-06-11 1997-06-19 1997-06-27	BBCH 75	fruit	0.14 0.08	<0.01 <0.01	3 7	analytical method: SOP RAM 243/05 (GC-N-TID), LOQ: 0.01 mg/kg, max. sample storage: 4 months  RIP9800958
RJ2489B, S622.97 Part:2 FR-37510 Saint Genouph Loire-Valley	Paola	1) 1997-03-27 (planting) 2) 3)	0.30 0.31 0.33 0.34 0.35 0.38	1200 1250 1300 1350 1400 1500	0.025 0.025 0.025 0.025 0.025 0.025	1997-05-20 1997-05-28 1997-06-04 1997-06-11 1997-06-19 1997-06-27	BBCH 75	fruit	0.21 0.15	<0.01 <0.01	3 7	analytical method: SOP RAM 243/05 (GC-N-TID), LOQ: 0.01 mg/kg, max. sample storage: 4 months  RIP9800958

1	2	3		4		5	6	7	8.1	8.2	9	10
Report-No. Location incl. Postal code and date	Commodity/ Variety	Date of 1) Sowing or planting 2) Flowering 3) Harvest		pplication per treatr Water I/ha		Dates of treatments or no. of treatments and last date	Growth stage at last treatment or date	Portion analysed	Residues (mg/kg)	Residues (mg/kg)	PHI (days)	Remarks
	(a)	(b)				(c)		(a)			(d)	(e)
RJ2489B, S623.97 FR-37700 St. Pierre des Corps Loire-Valley 1998-06-02	Sweet Cherry	1) 1997-06-07 (planting) 2) 3)	0.25 0.25 0.25 0.25 0.25 0.25	1000 1000 1000 1000 1000 1000	0.025 0.025 0.025 0.025 0.025 0.025	1997-07-12 1997-07-21 1997-07-29 1997-08-06 1997-08-14 1997-08-22	BBCH 77-78	fruit	0.49 0.43	<0.01 <0.01	3 7	analytical method: SOP RAM 243/05 (GC-N-TID), LOQ: 0.01 mg/kg, max. sample storage: 4 months  RIP9800958
RJ2489B, S623.97 Part:2 FR-37700 St. Pierre des Corps Loire-Valley	Sweet Cherry	1) 1997-06-07 (planting) 2) 3)	0.30 0.31 0.34 0.36 0.40 0.43	1200 1250 1350 1450 1600 1700	0.025 0.025 0.025 0.025 0.025 0.025	1997-07-12 1997-07-21 1997-07-29 1997-08-06 1997-08-14 1997-08-22	BBCH 77-78	fruit	<u>0.84</u> <u>0.73</u>	<0.01 <0.01	3 7	analytical method: SOP RAM 243/05 (GC-N-TID), LOQ: 0.01 mg/kg, max. sample storage: 4 months  RIP9800958
RJ2490B, ES10- 97SP001 ES-04113 Nijar, Almeria 1998-06-02	Gabriela	1) 1996-10-24 (planting) 2) 3) 1997-04-25	0.17 0.26 0.24 0.29 0.32 0.32	688 1047 953 1172 1275 1300	0.025 0.025 0.025 0.025 0.025 0.025	1997-03-18 1997-03-25 1997-04-02 1997-04-11 1997-04-18 1997-04-25	BBCH 87-89	fruit	0.51 0.69 0.35 0.51	0.02 0.02 0.01 0.01	0 3 7 10	analytical method: SOP RAM 243/04 and 05 (GC-N-TID), LOQ: 0.01 mg/kg, max. sample storage: 9 months  RIP9800957
RJ2490B, ES10- 97SP001 Part:2 ES-04113 Nijar, Almeria		1) 1996-10-24 (planting) 2) 3) 1997-04-25	0.17 0.21 0.21 0.21 0.27 0.26	688 828 844 853 1078 1044	0.025 0.025 0.025 0.025 0.025 0.025	1997-03-18 1997-03-25 1997-04-02 1997-04-11 1997-04-18 1997-04-25	BBCH 87-89	fruit	0.39 0.40 0.32 <u>0.42</u>	<0.01 0.01 <0.01 0.01	0 3 7 10	analytical method: SOP RAM 243/04 and 05 (GC-N-TID), LOQ: 0.01 mg/kg, max. sample storage: 9 months  RIP9800957

1	2	3		4		5	6	7	8.1	8.2	9	10
Report-No. Location incl. Postal code and date	Commodity/ Variety	Date of 1) Sowing or planting 2) Flowering 3) Harvest		opplicatio per treati Water I/ha		Dates of treatments or no. of treatments and last date	Growth stage at last treatment or date	Portion analysed	Residues (mg/kg)	Residues (mg/kg)	PHI (days)	Remarks
	(a)	(b)				(c)		(a)			(d)	(e)
RJ2490B, ES10- 97SP101 ES-04113 Nijar, Almeria 1998-06-02	Gabriela	1) 1996-10-24 (planting) 2) 3) 1997-04-25	0.17 0.21 0.25 0.30 0.33 0.32	672 859 997 1201 1319 1291	0.025 0.025 0.025 0.025 0.025 0.025	1997-03-18 1997-03-25 1997-04-02 1997-04-11 1997-04-18 1997-04-25	BBCH 87-89	fruit,	0.42 <u>0.54</u> 0.41 0.43	<0.01 0.01 0.01 0.01	0 3 7 10	analytical method: SOP RAM 243/04 and 05 (GC-N-TID), LOQ: 0.01 mg/kg, max. sample storage: 9 months  RIP9800957
RJ2490B, ES1097SP101 Part:2 ES-04113 Nijar, Almeria 1998-06-02	Gabriela	1) 1996-10-24 (planting) 2) 3) 1997-04-25	0.17 0.22 0.19 0.21 0.27 0.23	688 884 754 853 1088 903	0.025 0.025 0.025 0.025 0.025 0.025	1997-03-18 1997-03-25 1997-04-02 1997-04-11 1997-04-18 1997-04-25	BBCH 87-89	fruit	0.48 <u>0.36</u> 0.34 0.32	<0.01 0.01 <0.01 <0.01	0 3 7 10	analytical method: SOP RAM 243/04 and 05 (GC-N-TID), LOQ: 0.01 mg/kg, max. sample storage: 9 months  RIP9800957
RJ2552B, NL10-97-P519 NL- Bospolder 39 Honselersdijk 1998-05-28	Favorita (cherry tomato)	1) 1996-12-01 (planting) 2) 3)	0.42 0.49 0.52 0.45 0.44 0.47	1661 1939 2082 1796 1754 1896	0.025 0.025 0.025 0.025 0.025 0.025	1997-07-01 1997-07-09 1997-07-17 1997-07-25 1997-08-02 1997-08-11	BBCH 80-81	fruit	0.24 <u>0.28</u>	<0.01 <0.01	3 7	analytical method: SOP RAM 243/05 (GC-N-TID), LOQ: 0.01 mg/kg, max. sample storage: 3 months  RIP9800961
RJ2559B, NL10-97-P127 NL-1695 GK Blokker, West of The Netherlands 1998-06-05	Aromata	1) 1996-12-10 (planting) 2) 3) 1997-05-16	0.70 0.93 0.58 0.87 0.83 0.77	2862 3805 2385 3538 3400 3149	0.025 0.025 0.024 0.025 0.025 0.025	1997-05-01 1997-05-09 1997-05-16 1997-05-24 1997-06-02 1997-06-09	BBCH 81-83	fruit	0.65 0.57 <u>0.69</u> 0.55 0.49	0.02 <0.01 0.03 <0.01 <0.01	0 1 3 7 9	analytical method: SOP RAM 243/04 and 05 (GC-N-TID), LOQ: 0.01 mg/kg, max. sample storage: 4 months  RIP9800963

1	2	3		4		5	6	7	8.1	8.2	9	10
Report-No.	Commodity/	Date of		Applicatio		Dates of	Growth	Portion	Residues	Residues	PHI	Remarks
Location	Variety	Sowing or	rate	per treat	ment	treatments	stage	analysed	(mg/kg)	(mg/kg)	(days)	
incl.		planting				or no. of	at last					
Postal code		2) Flowering	kg	Water	kg	treatments	treatment					
and date		3) Harvest	a.i./ha	l/ha	a.i./hl	and last date	or date					
	(a)	(b)				(c)		(a)			(d)	(e)
RJ2559B,	Cheetah	1) 1997-03-27	0.54	1991	0.027	1997-05-09	BBCH	fruit	0.37	0.01	0	
NL10-97-P128		(planting)	0.47	1731	0.027	1997-05-16	81-83		0.42	< 0.01	1	analytical method: SOP RAM
		2)	0.65	2389	0.027	1997-05-24			0.43	< 0.01	3	243/04 and 05 (GC-N-TID),
NL-1852 RH		3) 1997-05-24	0.56	2065	0.027	1997-06-02			0.47	< 0.01	7	LOQ: 0.01 mg/kg, max.
Heiloo,			0.55	2037	0.027	1997-06-09			0.32	<0.01	10	sample storage: 4 months
West of The			0.51	1875	0.027	1997-06-17						
Netherlands												RIP9800963
1998-06-05												

Remarks: (a) According to CODEX Classification / Guide (b) Only if relevant

- (c) Year must be indicated
- (d) Days after last application (Label pre-harvest interval, PHI, underline)
   (e) Remarks may include: Climatic conditions; Reference to analytical method and information which metabolites are included

Note: All entries to be filled in as appropriate

Comments of zRMS: Acceptable

## A 2.2.3 Magnitude of residues for difenoconazole in tomatoes

Reference: <u>ASB2011-12607</u>, <u>ASB2011-12608</u>, <u>ASB2011-12609</u>, <u>ASB2011-12610</u>, <u>ASB2011-12611</u>

Report Residue studies with Difenoconazole (CGA169374) in or on indoor grown tomatoes

Guideline(s): Yes (EU Guidance for Dir. 91/414/EEC)

Deviations: none
GLP: Yes
Acceptability: Yes

RESIDUES DATA SUMMARY FROM SUPERVISED TRIALS (SUMMARY)

Active ingredient : Difenoconazole (CGA 169374)

Other a.i. in formulation

(Application on agricultural and horticultural crops)

Crop / crop group : Tomato

Federal Institute for Risk Assessment, Berlin

Federal Republic of Germany Submission date : 2011-10-28

Content of a.i. (g/kg or g/l) : 250 g/l Indoors : Indoors

Formulation (e.g. WP) : EC

Commercial product (name) : A7402T, EC (submitted to *GV1* **006902-00/07**) (content and common name) :

treated with formulation A7402T, EC 250

Applicant : Syngenta Agro GmbH Residues calculated as : Difenoconazole (CGA 169374)

1	2	3	4			5	6	7	8	9	10
Report-No.	Commodity/	Date of		Application	1	Dates of	Growth	Portion	Residues	PHI	Remarks
Location	Variety	1) Sowing or	ra	te per treatn	nent	treatments	stage	analysed	(mg/kg)	(days)	
incl.		planting				or no. of	at last				
Postal code		2) Flowering	kg	Water	kg	treatments	treatment				
and date		3) Harvest	a.i./ha	l/ha	a.i./hl	and last date	or date				
	(a)	(b)				(c)		(a)		(d)	(e)
T000698-06-REG, study T000698-06, trial ES-FR-06-0100 Spain 04745 Almeria 2007-10-26	Tibet	1) 2006-01-26 (planting) 2) 3) 2006-04	0.12 0.13 0.12	1134 1231 1194	0.010 0.010 0.010	2006-05-26 2006-06-02 2006-06-09 <sup>4)</sup>	BBCH 88	fruit	0.070	3	4) spraying analytical method: REM 147.08 (HPLC-MS/MS), LOQ: 0.01 mg/kg, max. sample storage: 4 months  ASB2011-12611

1	2	3		4		5	6	7	8	9	10
Report-No.	Commodity/	Date of		Application		Dates of	Growth	Portion	Residues	PHI	Remarks
Location incl.	Variety	1) Sowing or	ra	te per treatr	nent	treatments	stage	analysed	(mg/kg)	(days)	
Postal code		planting 2) Flowering	kg	Water	ka	or no. of treatments	at last treatment				
and date		3) Harvest	a.i./ha	l/ha	kg a.i./hl	and last date	or date				
und date	(a)	(b)	a.i./iia	1/114	α.ι./111	(c)	or date	(a)		(d)	(e)
T000698-06-REG.	Bond	1) 2006-02-03	0.13	1004	0.012	2006-05-25	BBCH 81	fruit	0.10	3	4) spraying
study T000698-06, trial ES-FR-06-0101		(planting) 2) 2006-03-10 3) 2006-06	0.12 0.13	960 1064	0.013 0.012	2006-06-01 2006-06-09 <sup>4)</sup>					analytical method: REM 147.08 (HPLC-MS/MS), LOQ: 0.01
Spain 41720 Sevilla											mg/kg, max. sample storage: 4 months
2007-10-26											ASB2011-12611
T000699-06-REG, study T000699-06, trial CH-FR-06-0218 Switzerland 1926 Fully / VS	Migello	1) 2006-03-14 (planting) 2) 3) 2006-07	0.14 0.12 0.14	1090 960 1070	0.013 0.013 0.013	2006-05-24 2006-06-01 2006-06-09 <sup>4)</sup>	BBCH 74-82	fruit	0.080	3	4) spraying analytical method: REM 147.08 (HPLC-MS/MS), LOQ: 0.01 mg/kg, max. sample storage: 4 months
2007-11-21											ASB2011-12610
T000699-06-REG, study T000699-06, trial CH-FR-06-0219 Switzerland 1926 Fully / VS 2007-11-21	Petula	1) 2006-04-01 (planting) 2) 3) 2006-07	0.13 0.13 0.13	1240 1210 1220	0.010 0.010 0.010	2006-06-14 2006-06-22 2006-06-30 <sup>4)</sup>	BBCH 69-85	fruit	0.080	3	4) spraying analytical method: REM 147.08 (HPLC-MS/MS), LOQ: 0.01 mg/kg, max. sample storage: 3 months  ASB2011-12610
05-0413, study 05- 0413, trial AF/8578/SY1 France 82370 Orgueil 2006-05-11	Brenda	1) 2005-06-15 (planting) 2) 3) 2005-09	0.13 0.13 0.13	1000 1067 981	0.013 0.012 0.013	2005-08-11 2005-08-19 2005-08-29 <sup>4)</sup>	BBCH 79	fruit	0.050 0.040 0.060 <u>0.10</u> 0.050	0 <sup>5)</sup> 0 1 3 7	4) spraying 5) before last treatment analytical method: REM 147.08 (HPLC-MS/MS), LOQ: 0.01 mg/kg, max. sample storage: 2 months  ASB2011-12609

1	2	3		4		5	6	7	8	9	10
Report-No. Location incl.	Commodity/ Variety	Date of 1) Sowing or	ra	Application te per treatn		Dates of treatments	Growth stage at last	Portion analysed	Residues (mg/kg)	PHI (days)	Remarks
Postal code and date		planting 2) Flowering 3) Harvest	kg a.i./ha	Water I/ha	kg a.i./hl	or no. of treatments and last date	treatment or date				
	(a)	(b)				(c)		(a)		(d)	(e)
05-0413, study 05- 0413, trial AF/8578/SY2 Spain 41920 Los Palacios 2006-05-11	Dici	1) 2005-02-10 (planting) 2) 3) 2005-06	0.13 0.13 0.13	1000 988 973	0.013 0.013 0.013	2005-05-24 2005-06-03 2005-06-13 <sup>4)</sup>	BBCH 75	fruit	0.070 0.16 0.16 <u>0.12</u> 0.12	0 <sup>5)</sup> 0 1 3 7	4) spraying 5) before last treatment analytical method: REM 147.08 (HPLC-MS/MS), LOQ: 0.01 mg/kg, max. sample storage: 3 months
05-0414, study 05- 0414, trial AF/8577/SY1 United Kingdom TF6 5EW Charlton, Shropshire 2006-05-15	Espiro	1) 2005-05-01 (planting) 2) 3) 2005-08	0.13 0.13 0.13	1025 1038 1038	0.012 0.012 0.012	2005-07-15 2005-07-23 2005-08-01 <sup>4)</sup>	BBCH 81-85	fruit	0.11 0.11 0.13 0.090 <u>0.10</u>	0 <sup>5)</sup> 0 1 3 7	ASB2011-12609  4) spraying 5) before last treatment  analytical method: REM 147.08 (HPLC-MS/MS), LOQ: 0.01 mg/kg, max. sample storage: 2 months  ASB2011-12608
05-0414, study 05- 0414, trial AF/8577/SY2 France 49650 Allonnes 2006-05-15	Belle	1) 2005-04-05 (planting) 2) 3) 2005-07	0.13 0.13 0.13	1000 1016 1011	0.013 0.012 0.012	2005-06-20 2005-06-28 2005-07-06 <sup>4)</sup>	BBCH 81-82	fruit	0.030 0.040 0.080 0.030 0.040	0 <sup>5)</sup> 0 1 3 7	4) spraying 5) before last treatment analytical method: REM 147.08 (HPLC-MS/MS), LOQ: 0.01 mg/kg, max. sample storage: 3 months  ASB2011-12608

1	2	3		4		5	6	7	8	9	10
Report-No.	Commodity/	Date of		Application		Dates of	Growth	Portion	Residues	PHI	Remarks
Location incl.	Variety	1) Sowing or	ra	te per treatn	nent	treatments or no. of	stage at last	analysed	(mg/kg)	(days)	
Postal code		planting 2) Flowering	kg	Water	kg	treatments	treatment				
and date		3) Harvest	a.i./ha	l/ha	a.i./hl	and last date	or date				
	(a)	(b)				(c)		(a)		(d)	(e)
2021/01, study 2021/01, trial AF/8570/SY2 Greece 35009 Kenourgio Locridos 2002-06-11	Noa	(planting) 2)	0.12 0.12 0.12 0.12	1240 1243 1240 1238	0.010 0.010 0.010 0.010	2001-05-28 2001-06-04 2001-06-11 2001-06-18 <sup>4)</sup>	BBCH 89	fruit	0.20 0.51 0.24 0.16 <u>0.46</u> 0.26 0.19 0.26	0 <sup>5)</sup> 0 1 3 7 7 14 14	4) spraying 5) before last treatment use formulation: A-7402 G (250 g/l Difenoconazole), analytical method: AG 575 A modified (ECD), LOQ: 0.01mg/kg, max. sample storage: 10 months, replicate field samples  ASB2011-12607

According to CODEX Classification / Guide Only if relevant Remarks: (a)

- (b) Only if relevant(c) Year must be indicated
- Days after last application (Label pre-harvest interval, PHI, underline)
  Remarks may include: Climatic conditions; Reference to analytical method and information which metabolites are included

Note: All entries to be filled in as appropriate

Comments of zRMS: Acceptable.

## A 2.3 Residues in processed commodities

## A 2.3.1 Magnitude of residues for azoxystrobin

Reference: RIP9800954

Report Residue levels in tomatoes and process fractions from trials carried out in

Italy, Clarke, D. M.; Bonfanti, F., 1998, RJ2488B

Guideline(s): Yes (Guidance according to Dir. 91/414/EEC)

Deviations: No GLP: Yes Acceptability: Yes

## Materials and methods

In two supervised field trials involving treatment of outdoor grown tomatoes with azoxystrobin the fruits were processed into washed fruits, peeled, fruits, puree, ketchup, juice and preserves. Processing was conducted following common commercial practice using fruits samples three days after the final application.

Analysis of all samples was performed with Method SOP RAM 243 Ver. 04 and 05, involving extraction with acetonitrile:water, partitioning into dichloromethane, clean-up by adsorption chromatography on silica and finally GC-NPD detection (LOQ: 0.01 mg/kg, Recoveries 99-107%, RSD: 3-7%).

## Results and discussions

The analytical method as well as the processing procedure itself is acceptable.

The results are summarized in the following tables.

RESIDUES DATA SUMMARY FROM SUPERVISED TRIALS (SUMMARY)

Active ingredient : Azoxystrobin (Application on agricultural and horticultural crops) Crop / crop group : Tomato

Federal Institute for Risk Assessment, Berlin

Federal Republic of Germany Submission date : 1998-08-17

Content of a.i. (g/kg or g/l) : 250 g/l Formulation (e.g. WP) : SC

Other a. i. in formulation : Ortiva 004560-00 Commercial product (name) (common name and content)

: 8.1 Azoxystrobin 8.2 R230310 Applicant : Syngenta Agro GmbH Residues calculated as

Indoors / outdoors

: Outdoors (European South)

1	2	3		4		5	6	7	8.1	8.2	9	10
Report-No.	Commodity/	Date of	Α	pplication	1	Dates of	Growth	Portion	Residues	Residues	PHI	Remarks
Location	Variety	<ol> <li>Sowing or</li> </ol>	rate	per treatn	nent	treatments	stage	analysed	(mg/kg)	(mg/kg)	(days)	
incl.		planting				or no. of	at last					
Postal code		2) Flowering	kg	Water	kg	treatments	treatment					
and date		<ol><li>3) Harvest</li></ol>	a.i./ha	l/ha	a.i./hl	and last date	or date					
	(a)	(b)				(c)		(a)			(d)	(e)
RJ2488B IT33-	Ideal Peel	1)1997-04-13	0.30	1200	0.025	1997-06-16	BBCH 87	fruit	0.15	< 0.01	3	
97-P317		(planting)	0.30	1200	0.025	1997-06-23			0.15	0.01	7	
		2)	0.30	1200	0.025	1997-07-01			0.14	0.01	10	analytical method: SOP
IT-29017		3)	0.30	1200	0.025	1997-07-09						RAM 243/04 and 05 (GC-
Fiorenzuola d'		,	0.30	1200	0.025	1997-07-17		fruit, RAC	0.07	< 0.01	3	N-TID), LOQ: 0.01
Arda, Emilia			0.30	1200	0.025	1997-07-25		fruit, washed	0.05	< 0.01	3	mg/kg, max. sample
Romagna								fruit, peeled	< 0.01	< 0.01	3	storage: 3 months
								juice	0.02	< 0.01	3	
1998-06-02								peel	0.13	< 0.01	3	
								purée	0.10	< 0.01	3	
								preserves	< 0.01	< 0.01	3	RIP9800954
								ketchup	0.04	<0.01	3	

1	2	3		4		5	6	7	8.1	8.2	9	10
Report-No. Location	Commodity/ Variety	Date of 1) Sowing or		pplication per treatn		Dates of treatments	Growth stage	Portion analysed	Residues (mg/kg)	Residues (mg/kg)	PHI (days)	Remarks
incl. Postal code and date		planting 2) Flowering 3) Harvest	kg a.i./ha	Water I/ha	kg a.i./hl	or no. of treatments and last date	at last treatment or date					
	(a)	(b)				(c)		(a)			(d)	(e)
RJ2488B IT42- 97-P318 IT-41007 Borgo Sabotino Lazio 1998-06-02	Snob	1) 1997-04-17 (planting) 2) 3)	0.20 0.20 0.25 0.25 0.25 0.25 0.25	800 800 1000 1000 1000 1000 1000	0.025 0.025 0.025 0.025 0.025 0.025 0.025	1997-06-04 1997-06-12 1997-06-20 1997-06-28 1997-07-07 1997-07-15 1997-07-22	BBCH 88-89	fruit, RAC fruit, washed fruit, peeled juice peel purée preserves ketchup	0.16 0.09 0.06 0.11 0.07 <0.01 0.04 0.14 0.06 <0.01 0.04	<0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01	3 7 10 3 3 3 3 3 3	analytical method: SOP RAM 243/04 and 05 (GC- N-TID), LOQ: 0.01 mg/kg, max. sample storage: 3 months

Remarks: (a)

- According to CODEX Classification / Guide
  Only if relevant
  Year must be indicated
  Days after last application (Label pre-harvest interval, PHI, underline)
  Remarks may include: Climatic conditions; Reference to analytical method and information which metabolites are included (b) (c) (d) (e)

Note: All entries to be filled in as appropriate

Table A 2: Residue data from tomato processing study with azoxystrobin

RAC	Residues in RAC (mg/kg)	PHI (days)	Processed commodity	Residue (mg/kg)	PF*	Comments/ Reference
fruit	0.07 / 0.11	3	fruit, washed	0.05 / 0.07	0.71 / 0.64	RIP9800954
fruit	0.07/ 0.11	3	juice	0.02 / 0.04	0.29 / 0.36	RIP9800954
fruit	0.07/ 0.11	3	puree	0.10 / 0.06	1.4 / 0.55	RIP9800954
fruit	0.07/ 0.11	3	preserve	<0.01 / <0.01	0.14 / 0.09	RIP9800954
fruit	0.07/ 0.11	3	ketchup	0.04 / 0.04	0.57 / 0.36	RIP9800954

<sup>\*</sup> processing factor

#### Conclusion

Based on the presented study, PFs for azoxystrobin in processed tomatoes can be derived (see summary).

Comments of	Aggertable
Comments of	Acceptable
-DMC.	
zRMS:	

## A 2.3.2 Magnitude of residues for difenoconazole

Reference: <u>ASB2011-12612</u>

Report Difenoconazole (CGA169374): Residue study in or on outdoor tomatoes

and processed fraction in France (South), Ryan, J., 2006, 04-6049

Guideline(s): Yes (EU, Dir. 91/414/EEC)

Deviations: No GLP: Yes Acceptability: Yes

#### Materials and methods

In the study submitted, one supervised field trial was conducted involving application of difenoconazole to tomatoes outdoors. From the treated field four replicate samples were collected and separately processed into washed tomatoes, tomato juice, tomato puree and tomato preserve. In addition to the balance part of the study, three follow-ups were conducted for the relevant processing products.

All residues were analysed with method REM 147.08. Extraction was achieved with methanol/ammonium hydroxide at reflux followed by SPE and determination using HPLC-MS/MS. The LOQ was validated at 0.01 mg/kg (Average recovery: 90%, RSD: 11%).

#### Results and discussions

The analytical method as well as the processing procedure itself is acceptable.

The results are summarized in the following tables.

RESIDUES DATA SUMMARY FROM SUPERVISED TRIALS (SUMMARY)

Active ingredient : Difenoconazole (CGA 169374) Crop / crop group : Tomato

(Application on agricultural and horticultural crops)

Federal Institute for Risk Assessment, Berlin

Federal Republic of Germany Submission date : 2011-10-28

(g/kg or g/l) : 250 g/l Content of a.i. (e.g. WP) : EC Formulation

: A7402T, EC (submitted to GV1 006902-00/07) Commercial product (name) (content and common name)

treated with formulation A7402T, EC 250

Applicant : Syngenta Agro GmbH : Difenoconazole (CGA 169374) Residues calculated as

Indoors / outdoors

Other a.i. in formulation

: Outdoors (European South)

1	2	3		4		5	6	7	8	9	10
Report-No. Location	Commodity/ Variety	Date of 1) Sowing or		opplication per treat		Dates of treatments	Growth stage	Portion analysed	Residues (mg/kg)	PHI (days)	Remarks
incl. Postal code and date		planting 2) Flowering 3) Harvest	kg a.i./ha	Water I/ha	kg a.i./hl	or no. of treatments and last date	at last treatment or date				
	(a)	(b)				(c)		(a)		(d)	(e)
04-6049,	Netico	1) 2004-04-20	0.38	614	0.061	2004-08-10	BBCH 85-87	fruit, crushed	0.24	7	4) spraying
study 04-6049, trial AF/7870/SY/1,		(planting) 2)	0.38 0.38	720 717	0.052 0.052	2004-08-17 2004-08-24 <sup>4)</sup>		fruit, RAC	0.22	7	analytical method: REM
balance study, juice		3) 2004-0 8						juice, pasteurized	0.050	7	147.08 (HPLC-MS/MS), LOQ: 0.01 mg/kg,
France 82210 St. Nicolas de la								juice, raw	0.070	7	max. sample storage: 14 months
Grave								pomace, wet	0.39	7	ACD0011 10610
2006-01-06								pomace, dry	5.1	7	ASB2011-12612
04-6049,	Netico	1) 2004-04-20	0.38	614	0.061	2004-08-10	BBCH 85-87	fruit, RAC	0.22	7	4) spraying
study 04-6049, trial AF/7870/SY/1,		(planting) 2)	0.38 0.38	720 717	0.052 0.052	2004-08-17 2004-08-24 <sup>4)</sup>		fruit, peeled	<0.01	7	analytical method: REM
balance study,		3) 2004-08						peel	1.9	7	147.08 (HPLC-MS/MS),
canned fruit France 82210								preserves, sterilized	0.01	7	LOQ: 0.01 mg/kg, max. sample storage: 14 months
St. Nicolas de la								preserves, raw	0.020	7	
Grave 2006-01-06								blanching water	0.020	7	ASB2011-12612
								cooling water	<0.01	7	

1	2	3	1	4		5	6	7	8	9	10
Report-No. Location incl.	Commodity/ Variety	Date of 1) Sowing or planting		opplication per treat		Dates of treatments or no. of	Growth stage at last	Portion analysed	Residues (mg/kg)	PHI (days)	Remarks
Postal code and date		2) Flowering 3) Harvest	kg a.i./ha	Water I/ha	kg a.i./hl	treatments and last date	treatment or date				
	(a)	(b)				(c)		(a)		(d)	(e)
04-6049, study 04-6049, trial AF/7870/SY/1,	Netico	1) 2004-04-20 (planting) 2)	0.38 0.38 0.38	614 720 717	0.061 0.052 0.052	2004-08-10 2004-08-17 2004-08-24 <sup>4)</sup>	BBCH 85-87	fruit, sieved fruit, crushed	0.18 0.22	7	spraying     analytical method: REM
balance study, puree		3) 2004-08						fruit, RAC	0.22	7	147.08 (HPLC-MS/MS),
France 82210								pomace, wet	1.3	7	LOQ: 0.01 mg/kg, max. sample storage:
St. Nicolas de la Grave								puree, sterilized	0.18	7	14 months
2006-01-06								puree, raw	0.16	7	ASB2011-12612
								paste	0.39	7	
04-6049,	Netico	1) 2004-04-20	0.38	614	0.061	2004-08-10	BBCH 85-87	fruit, RAC	0.22	7	4) spraying
study 04-6049, trial AF/7870/SY/1, balance study,		(planting) 2) 3) 2004-08	0.38 0.38	720 717	0.052 0.052	2004-08-17 2004-08-24 <sup>4)</sup>		fruit, without calyx, sorted	0.19	7	analytical method: REM 147.08 (HPLC-MS/MS),
washed fruit France 82210								fruit, washed, without calyx	0.15	7	LOQ: 0.01 mg/kg, max. sample storage: 14 months
St. Nicolas de la								calyx	10.6	7	14 months
Grave								washing water	0.020	7	ASB2011-12612
2006-01-06											
04-6049,	Netico	1) 2004-04-20	0.38	614	0.061	2004-08-10	BBCH 85-87	fruit, RAC	0.22	7	4) spraying
study 04-6049, trial AF/7870/SY/1,		(planting) 2)	0.38 0.38	720 717	0.052 0.052	2004-08-17 2004-08-24 <sup>4)</sup>		fruit, washed	0.11	7	analytical method: REM
follow up 1		3) 2004-08						juice, pasteurized	0.040	7	147.08 (HPLC-MS/MS), LOQ: 0.01 mg/kg,
France 82210 St. Nicolas de la								pomace, wet	0.54	7	max. sample storage: 14 months
Grave								pomace, dry	5.2	7	
2006-01-06								puree, sterilized	0.15	7	ASB2011-12612
								preserves, sterilized	0.020	7	

1	2	3	1	4		5	6	7	8	9	10
Report-No.	Commodity/	Date of	Α	pplicatio	n	Dates of	Growth	Portion	Residues	PHI	Remarks
Location	Variety	1) Sowing or	rate	per treati	ment	treatments	stage	analysed	(mg/kg)	(days)	
incl.		planting				or no. of	at last				
Postal code		2) Flowering	kg	Water	kg	treatments	treatment				
and date		3) Harvest	a.i./ha	l/ha	a.i./hl	and last date	or date				
	(a)	(b)				(c)		(a)		(d)	(e)
04-6049,	Netico	1) 2004-04-20	0.38	614	0.061	2004-08-10	BBCH 85-87	fruit, RAC	0.22	7	4) spraying
study 04-6049, trial AF/7870/SY/1,		(planting) 2)	0.38 0.38	720 717	0.052 0.052	2004-08-17 2004-08-24 <sup>4)</sup>		fruit, washed	0.18	7	analytical method: REM
follow up 2		3) 2004-08						juice, pasteurized	0.060	7	147.08 (HPLC-MS/MS), LOQ: 0.01 mg/kg,
France 82210 St. Nicolas de la								pomace, wet	0.58	7	max. sample storage: 14 months
Grave								pomace, dry	5.7	7	ASB2011-12612
2006-01-06								puree, sterilized	0.14	7	7.052011 1201 <u>2</u>
								preserves, sterilized	<0.01	7	
04-6049,	Netico	1) 2004-04-20	0.38	614	0.061	2004-08-10	BBCH 85-87	fruit, RAC	0.22	7	4) spraying
study 04-6049, trial AF/7870/SY/1,		(planting) 2)	0.38 0.38	720 717	0.052 0.052	2004-08-17 2004-08-24 <sup>4)</sup>		fruit, washed	0.16	7	analytical method: REM
follow up 3		3) 2004-08						juice, pasteurized	0.040	7	147.08 (HPLC-MS/MS), LOQ: 0.01 mg/kg,
France 82210 St. Nicolas de la								pomace, wet	0.47	7	max. sample storage: 14 months
Grave								pomace, dry	4.8	7	ASP2011 12612
2006-01-06								puree, sterilized	0.15	7	ASB2011-12612
								preserves, sterilized	0.020	7	

According to CODEX Classification / Guide Only if relevant Year must be indicated Remarks: (a)

- (b) (c)
- Days after last application (Label pre-harvest interval, PHI, underline)
  Remarks may include: Climatic conditions; Reference to analytical method and information which metabolites are included

Note: All entries to be filled in as appropriate

Table A 3: Residue data from tomato processing study with difenoconazole

RAC	Residues in RAC (mg/kg)	PHI (days)	Processed commodity	Residue (mg/kg)	PF*	Comments/ Reference
fruit	0.22	7	fruit, washed	0.11, 0.15, 0.16, 0.18	0.5, 0.68, 0.72, 0.81	ASB2011- 12612
fruit	0.22	7	juice, pasteurized	0.04 (2), 0.05, 0.06	0.18, 0.18, 0.23, 0.27	ASB2011- 12612
fruit	0.22	7	puree, sterilized	0.14, 0.15(2), 0.18	0.64, 0.68, 0.68, 0.81	ASB2011- 12612
fruit	0.22	7	preserve, sterilized	<0.01, 0.01, 0.02 (2),	<0.045, 0.045, 0.09, 0.09	ASB2011- 12612

<sup>\*</sup> processing factor

Figure A 1: Processing flowchart for washed tomatoes

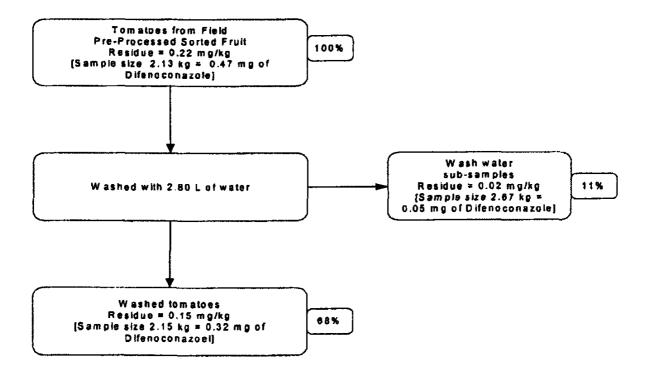


Figure A 2: Processing flowchart for tomato juice

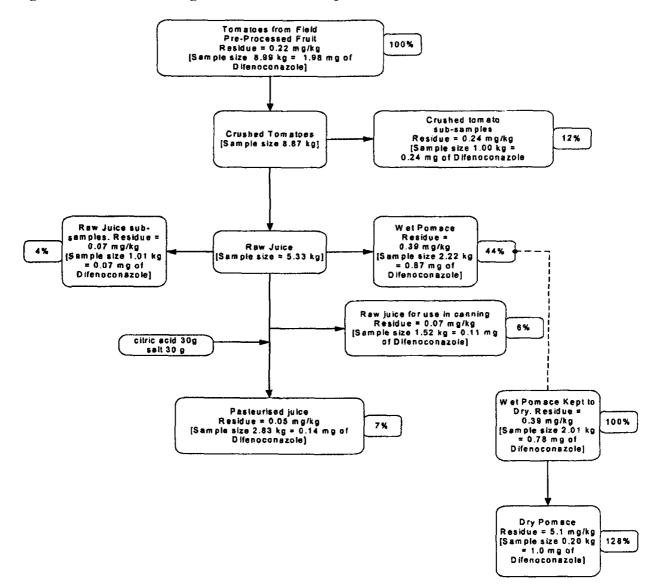


Figure A 3: Processing flowchart for tomato puree

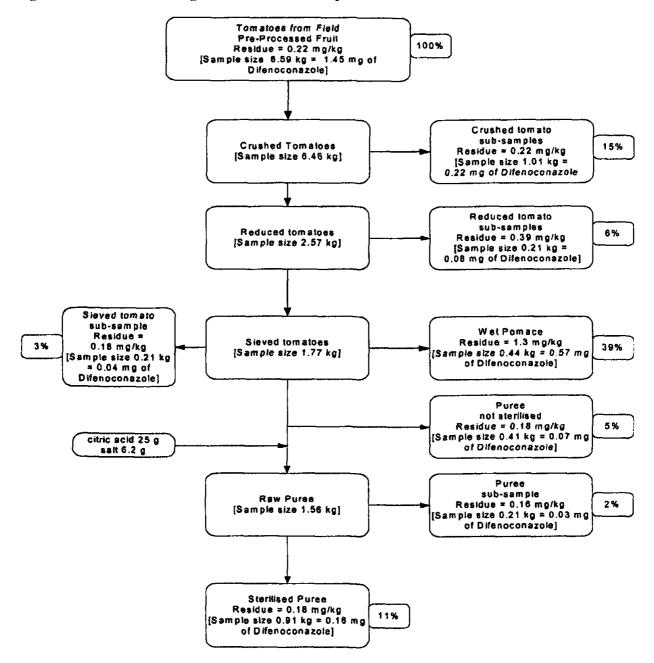
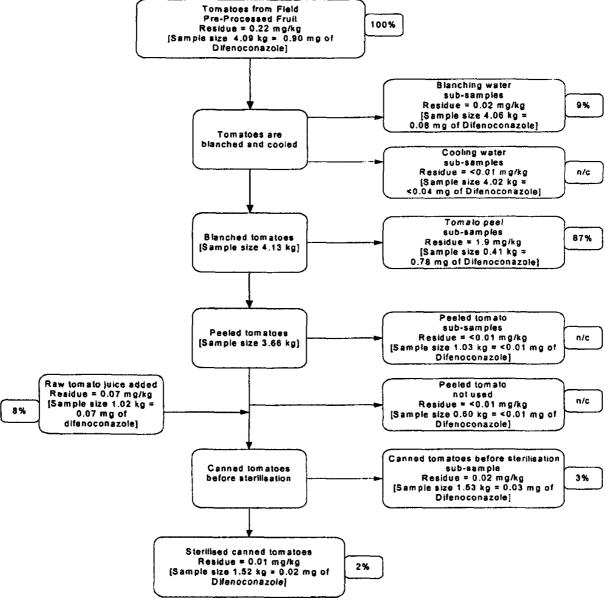


Figure A 4: Processing flowchart for canned tomato



## Conclusion

Based on the presented study, PFs for difenoconazole in processed tomatoes can be derived (see summary).

Comments of	Acceptable
zRMS:	

## A 2.4 Residues in rotational crops

No further data submitted.

## A 2.5 Residues in livestock

No further data submitted.

### A 2.6 Other studies/information

No further data submitted.

# **Appendix 3** Pesticide Residue Intake Modell (PRIMo)

	A	zoxystro	bin		Prepar	e workbook for refined calculations
	Status of the active substance:		Code no.			
	LOQ (mg/kg bw):		proposed LOQ:			
	Toxic	cological en	d points			
	ADI (mg/kg bw/day):	0,2	ARfD (mg/kg bw):	n.n.	Undo	refined calculations
	Source of ADI:	EFSA	Source of ARfD:	EFSA		
	Year of evaluation:	2010	Year of evaluation:	2010		
Explain choice of toxicological reference values.						

The risk assessment has been performed on the basis of the MRLs collected from Member States in April 2006. For each pesticide/commodity the highest national MRL was identified (proposed temporary MRL = pTMRL). The pTMRLs have been submitted to EFSA in September 2006.

			Chronic risk	assessment			
			, ,	e) in % of ADI			
				ı - maximum			
			6	53			
		No of diets excee	ding ADI:				
Highest calculated		Highest contributor		2nd contributor to		3rd contributor to	
TMDI values in %		to MS diet	Commodity /	MS diet	Commodity /	MS diet	Commodity /
of ADI	MS Diet	(in % of ADI)	group of commodities	(in % of ADI)	group of commodities	(in % of ADI)	group of commodities
52,7	DE child	34,5	Citrus fruit	2,4	Strawberries _	1,9	Solanacea
50,1	NL child	30,5	Citrus fruit	3,3	Root and tuber vegetables	3,2	Brassica vegetables
39,9	UK Toddler	17,3	Citrus fruit	11,4	Sugar beet (root)	2,0	Root and tuber vegetables
39,5	IE adult	20,0	Citrus fruit	2,2	Brassica vegetables	2,0	Root and tuber vegetables
39,2	WHO Cluster diet B	11,7	Citrus fruit	5,8	Solanacea	4,5	Bulb vegetables
38,3	FR toddler	17,5	Citrus fruit	4,0	Root and tuber vegetables	3,6	Leek
27,1	ES child	17,6	Citrus fruit	17	Solanacea	1,2	Rice
27,0	SE general population 90th percentile	10,4	Citrus fruit	2,8	Root and tuber vegetables	2,8	Brassica vegetables
26,8	UK Infant	10,1	Citrus fruit	5,0	Sugar beet (root)	2,4	Root and tuber vegetables
24,3	NL general	13,9	Citrus fruit	1,8	Brassica vegetables	1,5	Root and tuber vegetables
23,6	PT General population	6,5	Brassica vegetables	5,8	Citrus fruit	2,8	Table and wine grapes
23,6	WHO cluster diet E	6,3	Citrus fruit	2,6	Root and tuber vegetables	2,1	Brassica vegetables
21,3	FR infant	7,9	Citrus fruit	3,6	Root and tuber vegetables	2,4	Strawberries
21,3	WHO regional European diet	6,1	Citrus fruit	2,5	Bulb vegetables	2,3	Root and tuber vegetables
21,2	WHO cluster diet D	3,5	Citrus fruit	3,0	Brassica vegetables	2,9	Bulb vegetables
19,7	WHO Cluster diet F	8,5	Citrus fruit	2,2	Root and tuber vegetables	1,7	Brassica vegetables
18,7	ES adult	10,9	Citrus fruit	1,5	Solanacea	1,1	Bulb vegetables
18,0	UK vegetarian	7,9	Citrus fruit	1,9	Sugar beet (root)	1,3	Bulb vegetables
15,3	FR all population	4,9	Citrus fruit	4,1	Table and wine grapes	0,8	Root and tuber vegetables
15,2	IT kids/toddler	5,5	Citrus fruit	2,4	Solanacea	1,0	Wheat
14,1	UK Adult	5,2	Citrus fruit	2,0	Sugar beet (root)	1,1	Table and wine grapes
13,4	FI adult	8,5	Citrus fruit	0,7	Root and tuber vegetables	0,7	Solanacea
13,0	IT adult	4,3	Citrus fruit	2,0	Solanacea	0,8	Lettuce and other salad plants
12,6	DK child	2,3	Citrus fruit	1,9	Root and tuber vegetables	1,4	Bulb vegetables
9,2	PL general population	2,0	Root and tuber vegetables	1,6	Bulb vegetables	1,5	Solanacea
8,6	DK adult	1,9	Citrus fruit	1,5	Table and wine grapes	1,0	Root and tuber vegetables
6,3	LT adult	1,7	Root and tuber vegetables	1,0	Solanacea	1,0	Brassica vegetables

	Dif	enocon	azole		Prepar	e workbook for refined calculations
	Status of the active substance:		Code no.			
	LOQ (mg/kg bw):		proposed LOQ:			
	Toxi	cological en	d points		11	
	ADI (mg/kg bw/day):	0,01	ARfD (mg/kg bw):	0,16	Unac	refined calculations
	Source of ADI:		Source of ARfD:			
	Year of evaluation:		Year of evaluation:			
Explain choice of toxicological reference values.						

he risk assessment has been performed on the basis of the MRLs collected from Member States in April 2006. For each pesticide/commodity the highest national MRL was identified (proposed temporary MRL = pTMRL). he pTMRLs have been submitted to EFSA in September 2006.

		C	hronic risk	assessmei	nt - refined ca	alculations		
				, ,	e) in % of ADI n - maximum			
				16	92			
		No of diets excee	ding ADI:					
Highest calculated		Highest contributor			2nd contributor to		3rd contributor to	
TMDI values in %		to MS diet	Commodity /		MS diet	Commodity /	MS diet	Commodity /
of ADI	MS Diet	(in % of ADI)	group of commoditi	es	(in % of ADI)	group of commodities	(in % of ADI)	group of commodities
92,0	WHO Cluster diet B	22,2	Tomatoes		10,8	Lettuce _	9,0	Olives for oil production
76,5	UK Toddler	45,7	Sugar beet (root)		4,2	Tomatoes	3,9	Wheat
73,1	FR toddler	14,2	Spinach		11,0	Beans (with pods)	7,3	Carrots
69,5	NL child	7,6	Apples		7,4	Spinach	5,9	Potatoes
68,6	DE child	14,5	Apples		7,0	Tomatoes	6,3	Table grapes
61,7	IE adult		Wine grapes		4,0	Other leafy brassica	3,5	Sweet potatoes
51,9	UK Infant	20,2	Sugar beet (root)		5,7	Peas (without pods)	4,0	Carrots
50,2	WHO cluster diet E	8,0	Wine grapes		3,9	Wheat	3,8	Potatoes
49,9	FR infant	8,9	Spinach		8.4	Beans (with pods)	7,9	Carrots
48,2	WHO regional European diet	11,3	Lettuce		7,9	Tomatoes	4,0	Potatoes
45,1	ES child	12.5	Lettuce		7.1	Tomatoes	4.4	Wheat
42,0	PT General population	12.4	Wine grapes		6.4	Tomatoes	5,3	Potatoes
40.9	ES adult	16.1	Lettuce		5,6	Tomatoes	2,3	Wheat
	FR all population	20,0	Wine grapes			Wheat	3,1	Tomatoes
39.9	WHO cluster diet D	7,3	Tomatoes		6.5	Wheat	4.1	Potatoes
38,6	WHO Cluster diet F	9,0	Lettuce		4.9	Tomatoes	3,6	Wheat
38.6	IT kids/toddler	10,3	Tomatoes		8.7	Lettuce	6,6	Wheat
38.4	SE general population 90th percentile	5,5	Tomatoes		4.2	Potatoes	4,0	Chinese cabbage
37.5	IT adult	11,3	Lettuce		8,4	Tomatoes	4.1	Wheat
37.2	DK child	5,5	Wheat		4.4	Rye	4,2	Lettuce
35,3	NL general	3,6	Lettuce		3,1	Wine grapes	3,1	Tomatoes
32,8	UK vegetarian	7,6	Sugar beet (root)		4.5	Tomatoes	4,2	Lettuce
30,1	UK Adult		Sugar beet (root)			Wine grapes	3,5	Lettuce
22,0	DK adult		Wine grapes		3.0	Tomatoes	2,0	Wheat
21,2	PL general population	6,4	Tomatoes		3.4	Potatoes	2,5	Apples
18.0	LT adult	4,5	Tomatoes		3,2	Potatoes	2,2	Apples
15.9	FL adult	31	Tomatoes		23	Lettuce	15	Wine granes