# Monograph

January 2004

## Metconazole

## Volume 2

Listing of Data and
Information submitted

**Rapporteur Member State: Belgium**

TABLE OF CONTENTS


| **A** | **List of the tests and studies submitted and of information available** | **Page** |
|---|---|---|
| A.1 | Identity | 3 |
| A.1.1 | Identity of the active substance (Annex IIA 1; Annex IIIA 1, 3.1 to 3.4) | 3 |
| A.1.2 | Identity of the formulation (Annex IIIA 1, 3.1 to 3.7, 3.9 and 12.1) | 6 |
| A.2 | Physical and chemical properties (Annex IIA 2; Annex IIIA 2) | 7 |
| A.2.1 | Physical and chemical properties of the active substance (Annex IIA 2) | 7 |
| A.2.2 | Physical and chemical properties of the formulation (Annex IIIA 2) | 10 |
| A.3 | Further information | 12 |
| A.3.1 | Further information on the active substance (Annex IIA 3) | 12 |
| A.3.2 | Further information on the formulation ( Annex IIIA 3, 4 and 12.1) | 12 |
| A.4 | Classification, packaging and labeling | 12 |
| A.5 | Methods of analysis | 13 |
| A.5.1 | Methods of analysis for the active substance (Annex IIA 4) | 13 |
| A.5.2 | Methods of analysis for the formulation (Annex IIIA 5) | 16 |
| A.6 | Toxicology and metabolism (Annex IIA 5; Annex IIIA 7) | 17 |
| A.6.1 | Toxicology and metabolism of the active substance (Annex IIA 5) | 17 |
| A.6.2 | Toxicology and metabolism of the formulation (Annex IIIA 7) | 22 |
| A.7 | Residue data | 23 |
| A.8 | Environmental fate and behaviour | 28 |
| A.8.1 | Environmental fate and behaviour of the active substance (Annex IIA 7) | 28 |
| A.8.2 | Environmental fate and behaviour of the formulation ( Annex IIIA 9) | 32 |
| A.9 | Ecotoxicology | 33 |
| A.9.1 | Ecotoxicology of the active substance (Annex IIA 8) | 33 |
| A.9.2 | Ecotoxicology of the formulation (Annex IIIA 10) | 37 |

## A.1 Identity

### A.1.1 Identity of the active substance (Annex IIA 1; Annex IIIA 1, 3.1 to 3.4)

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| Document J<br>II A 1.8/1 | Searfass M.T. | 1998 | Description of materials used to produce the product and description of production process as applied to Caramba technical Metconazole<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-140-006<br>No<br>unpublished | N | BASF |
| Document J<br>II A 1.8/2 | Harrington P. | 1999 | Production process information for technical Metconazole<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-140-007<br>No<br>unpublished | N | BASF |
| EG:AIIA-1.8 | Ohnsorge, U. | 15.08.2002 | Process of Manufacture and Beginning Materials (Ibaraki Kasai, Japan)<br>2002/1008816<br>no<br>unpublished | Y | BASF |
| EG:AIIA-1.8 | Ohnsorge, U. | 15.08.2002 | Process of Manufacture and Beginning Materials (Rallis India, India)<br>2002/1008817<br>no<br>unpublished | Y | BASF |
| EG:AIIA-1.8 | Ohnsorge, U. | 12.08.2003 | Comparison of Material from Alternate Sources (Ibaraki Kasai, Japan and Rallis India, India)<br>2003/1013955<br>no<br>unpublished | Y | BASF |
| EG:AIIA-1.8 | Ohnsorge, U. | 12.08.2002 | Composition of the Technical Active Ingredient (Rallis India, India)<br>2003/1013956<br>no<br>unpublished | Y | BASF |
| EG:AIIA-1.8 | Evans, F. | 17.01.2002 | Compositional Analysis of Metconazole (AC 900768, BAS 555 F) Technical Grade Active Ingredient Manufactured at Rallis India Ltd for the Kureha Chemical Industry Company, Tokyo, Japan in Support of Registration with World-Wide Regulatory Authorities<br>(Rallis India Ltd., India)<br>BASF Agro Research Princeton, U.S.A.<br>MK-380-015<br>yes<br>unpublished | Y | BASF |
| EG:AIIA-1.8 | Tagawa, Y. and Ohzeki, T. | 03/10/2003 | BAS 555 F - certificate issued by Ibarakikasei Chemicals Japan to confirm origin of five batches as analysed in MK-380-014<br>2003/1016760<br>no<br>unpublished | Y | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| Document J<br>II A 1.9/1 | Huang L.Y. | 2000 | The analytical profile for representative manufacturing batches of CL 900768 (Metconazole) TGAI and minimum and maximum content of each component for the reregistration of CL 900768 (Metconazole) TGAI with the EU<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-380-014<br>No<br>unpublished | N | BASF |
| Document J<br>II A 1.10/1 | Huang L.Y. | 2000 | The analytical profile for representative manufacturing batches of CL 900768 (Metconazole) TGAI and minimum and maximum content of each component for the reregistration of CL 900768 (Metconazole) TGAI with the EU<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-380-014<br>No<br>unpublished | N | BASF |
| EG:AIIA-1.10 | Yang, H. | 12.03.1997 | Screening of Metconazole Technical Grade Samples for N-Nitrosamines<br>American Cyanamid, U.S.A.<br>MK-390-017<br>yes<br>unpublished | Y | BASF |
| EG:AIIA-1.10 | Ohnsorge, U. | 22.11.2003 | Metconazole TC: Nomenclature of A.I. and potential impurities<br>2003/1016615<br>no<br>unpublished | Y | BASF |
| DocumentJ<br>II A 1.11/1 | Huang L.Y. | 2000 | The analytical profile for representative manufacturing batches of CL 900768 (Metconazole) TGAI and minimum and maximum content of each component for the reregistration of CL 900768 (Metconazole) TGAI with the EU<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-380-014<br>No<br>unpublished | N | BASF |
| EG:JII-1.11 | Ahuja, E.S. | 1998 | Additional Information for the Registration of CARAMBA, (Containing Metconazole) Technical Grade Active Ingredient Requested by the Pesticides Safety Directorate (PSD) of the United Kingdom's Ministry of Agriculture, Fisheries, and Food<br>American Cyanamid, Agricultural Products Research Division, Princeton, U.S.A.<br>MK-380-007<br>Yes<br>Unpublished | Y | BASF |
| EG:JII-1.11 | Ahuja, E.S. | 1998 | Raw Data of MK-380-007 (APBR 848) (RTP Archive Object # 81293): *'Additional Information for the Registration of CARAMBA, (Containing Metconazole) Technical Grade Active Ingredient Requested by the Pesticides Safety Directorate (PSD) of the United Kingdom's Ministry of Agriculture, Fisheries, and Food'*<br>American Cyanamid, Agricultural Products Research Division, Princeton, U.S.A.<br>Raw Data of MK-380-007<br>Yes<br>Unpublished | Y | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| EG:AIIA-1.11 | Huang, L.Y. | 22/09/1999 | Structural Identification of the Minor Components and Residual Solvents in AC 900768 (Metconazole) Technical Grade Active Ingredient (TGAI)<br>American Cyanamid, Agricultural Products Research Division, Princeton, U.S.A.<br>MK-380-013<br>no<br>unpublished | Y | BASF |
| EG:JII-1.11 | Thomson, M. | 2002 | Raw Data of MK-380-015 (APBR 1215) (RTP Archive Object # 105505): '*Compositional Analysis of Metconazole (AC 900768, BAS 555 F) Technical Grade Active Ingredient Manufactured at Rallis India Ltd for the Kureha Chemical Industry Company, Tokyo, Japan in Support of Registration with World-Wide Regulatory Authorities*'<br>BASF Agro Research, Princeton, U.S.A.<br>Raw Data of MK-380-015<br>yes<br>unpublished | Y | BASF |
| EG:JII-1.11 | Wang, Ch. | 1999 | RTP Archive Object # 88178, Lot: AC 9339-114, Secondary Standard Analyses and COAs Re-Certifications and Analytical Raw Data / Chromatograms: APBR # 99-Sep-15-5, Report numbers 94-ASA-0256, 96-ASA-0149, 99-ASA-0275, '*Analytical Standard – Retired Lot # AC 9339-114*'<br>American Cyanamid, Process and Analytical Research, Princeton, U.S.A.<br>Raw Data of RTP Archive Object # 88178<br>Yes<br>Unpublished | Y | BASF |
| Document J II A 3.7/1 | Anonymous | 2002a | Material safety data sheet for Metconazole (AC 900,768/BAS 555 F), Caramba technical<br>BASF Corporation Agricultural Products Center; Research Triangle Park, NC 27709; USA<br>MK-950-013<br>No<br>unpublished | N | BASF |

### A.1.2 Identity of the formulation (Annex IIIA 1, 3.1 to 3.7, 3.9 and 12.1)

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| Document J<br>IIIA 12.3/1 | BASF Corporation Agricultural Products | 2002 | MSDS for Caramba 60 g/L Soluble Liquid (BAS 555 00 F)<br>BASF Corporation Agricultural Products, RTP, NC USA<br>MK-950-015<br>No<br>unpublished | N | BASF |

## A.2 Physical and chemical properties

### A.2.1 Physical and chemical properties of the active substance (Annex IIA 2)

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 2.1.1/1 | Mangels G. | 1995 | AC 900,768 (WL 148271): Determination of the melting point<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-303-002<br>Yes<br>unpublished | N | BASF |
| II A 2.2/1 | Bashir M. | 1995 | Product chemistry determination for CL 900,768 (Boiling point, surface tension and relative density)<br>Corning Hazleton Wisconsin Inc.; Madison WI 53704; United States of America<br>MK-301-003<br>Yes<br>unpublished | N | BASF |
| II A 2.3.1/1 | Tremain S.,An D. | 2000 | Metconazole (AC 900768): Determination of vapour pressure<br>Safepharm Laboratories Ltd.; Derby DE1 2BT; United Kingdom<br>MK-306-002<br>Yes<br>unpublished | N | BASF |
| II A 2.3.2/1 | Martin C.A. | 2002 | BAS 555 F (Metconazole): Calculation of Henry's law constant<br>BASF Corporation Agro Research; Princeton NJ 08543-0400; United States of America<br>MK-336-001<br>No<br>unpublished | Y | BASF |
| II A 2.4.1/1 | Cevasco A.A. | 1996 | Product chemistry determinations for Metconazole CL 900,768 (TGAI and PAI): Color, physical state and odor<br>Corning Hazleton Inc; Vienna VA 22182; United States of America<br>MK-301-004<br>Yes<br>unpublished | N | BASF |
| II A 2.4.2/1 | Cevasco A.A. | 1996 | Product chemistry determinations for Metconazole CL 900,768 (TGAI and PAI): Color, physical state and odor<br>Corning Hazleton Inc; Vienna VA 22182; United States of America<br>MK-301-004<br>Yes<br>unpublished | N | BASF |
| II A 2.5.1/1 | Jones M.T. | 2001 | Metconazole Spectral database (Report amendment 3)<br>BASF Corporation Agro Research; Princeton NJ 08543-0400; United States of America<br>MK-360-005<br>Yes<br>unpublished | N | BASF |
| II A 2.6/1 | Madsen S. | 1995a | Solvent solubility of AC 900,768 (WL 148,271)<br>ABC Laboratories Inc.; Columbia, Missouri 65202; United States of America<br>MK-312-004<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 2.7/1 | Madsen S. | 1995a | Solvent solubility of AC 900,768 (WL 148,271)<br>ABC Laboratories Inc.; Columbia, Missouri 65202; United States of America<br>MK-312-004<br>Yes<br>unpublished | N | BASF |
| II A 2.7/2 | Martin C.A. | 1999 | Solvent solubility of Metconazole (AC 900768) Technical grade<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-312-005<br>No<br>unpublished | N | BASF |
| II A 2.8/1 | Madsen S. | 1995b | Octanol/Water partition coefficient of AC 900,768 (WL 148,271)<br>ABC Laboratories Inc.; Columbia, Missouri 65202; United States of America<br>MK-315-001<br>Yes<br>unpublished | N | BASF |
| II A 2.9.1/1 | Fisk P.R. | 1991 | WL148271 (KNF-S-474m): Hydrolysis as a function of pH<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-322-001<br>Yes<br>unpublished | N | BASF |
| II A 2.9.1/2 | Mangels G. | 1996b | Hydrolysis of Metconazole<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-322-002<br>No<br>unpublished | N | BASF |
| II A 2.9.2/1 | Williams M.D.,Heim L.G. | 1996 | Determination of the aqueous photolysis rate with AC 900,768 (WL 148,271)<br>ABC Laboratories Inc.; Columbia, Missouri 65202; United States of America<br>MK-324-001<br>Yes<br>unpublished | N | BASF |
| II A 2.9.2/2 | Knoch E.,Martin C.A. | 1999 | Metconazole AC (900768): Determination of the direct phototransformation in buffered medium at pH 7<br>Institut Fresenius, Chemische und Biologische Laboratorien GmbH; Taunusstein; Germany Fed. Rep.<br>MK-324-003<br>Yes<br>unpublished | N | BASF |
| II A 2.9.3/1 | Knoch E.,Martin C.A. | 1999 | Metconazole AC (900768): Determination of the direct phototransformation in buffered medium at pH 7<br>Institut Fresenius, Chemische und Biologische Laboratorien GmbH; Taunusstein; Germany Fed. Rep.<br>MK-324-003<br>Yes<br>unpublished | N | BASF |
| II A 2.9.4/1 | Madsen S.,Barton T.E. | 1995 | Dissociation constant determination of AC 900,768 (WL 148,271)<br>ABC Laboratories Inc.; Columbia, Missouri 65202; United States of America<br>MK-320-001<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| EG:AIIA-2.9.4 | Kroehl, T. | 24.09.2003 | Report Amendment to MK-320-001 'Dissociation Constant Determination of AC900,768', only valid in combination with MK-320-001<br>2003/1016614<br>no<br>unpublished | Y | BASF |
| II A 2.10/1 | Mangels G. | 1996a | Metconazole (AC 900768): Estimation of the photochemical oxidation rate in the atmosphere<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-324-002<br>No<br>unpublished | N | BASF |
| II A 2.11.1/1 | Van Helvoirt J.A. | 1990b | Determination of the flammability of WL148271<br>RCC Notox B.V.; Hertogenbosch; Netherlands<br>MK-330-001<br>Yes<br>unpublished | N | BASF |
| II A 2.11.2/1 | Van Helvoirt J.A. | 1990a | Determination of the auto-flammability of WL148271<br>RCC Notox B.V.; Hertogenbosch; Netherlands<br>MK-330-002<br>Yes<br>unpublished | N | BASF |
| II A 2.13/1 | Van Helvoirt J.A. | 1990c | Determination of explosive properties of WL148271<br>RCC Notox B.V.; Hertogenbosch; Netherlands<br>MK-334-001<br>Yes<br>unpublished | N | BASF |
| II A 2.14/1 | Bashir M. | 1995 | Product chemistry determination for CL 900,768 (Boiling point, surface tension and relative density)<br>Corning Hazleton Wisconsin Inc.; Madison WI 53704; United States of America<br>MK-301-003<br>Yes<br>unpublished | N | BASF |
| II A 2.15/1 | Van Helvoirt J.A. | 1990d | Determination of the oxidising properties of WL148271<br>RCC Notox B.V.; Hertogenbosch; Netherlands<br>MK-356-001<br>Yes<br>unpublished | N | BASF |

## A.2.2 Physical and chemical properties of the formulation (Annex IIIA 2)

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| III A 2.1/1 | Schmidt F. | 2000 | Metconazole (CL 900768) 60 G/L SL (SF09381): determination of physical/chemical stability data in polyethylene bottles<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-323-003<br>Yes<br>unpublished | N | BASF |
| III A 2.1/2 | Schmidt F. | 1999 | Metconazole (CL900768) 60 G/L SL (SF09381): Odor<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-390-020<br>No<br>unpublished | N | BASF |
| III A 2.2.1/1 | Perlitz M. | 1996 | Metconazole (CL900768) 60 G/L SL (SF09381): Determination of explosive properties, oxidizing properties and auto ignition temperature<br>RCC Notox B.V.; Hertogenbosch; Netherlands<br>MK-334-002<br>Yes<br>unpublished | N | BASF |
| III A 2.2.2/1 | Perlitz M. | 1996 | Metconazole (CL900768) 60 G/L SL (SF09381): Determination of explosive properties, oxidizing properties and auto ignition temperature<br>RCC Notox B.V.; Hertogenbosch; Netherlands<br>MK-334-002<br>Yes<br>unpublished | N | BASF |
| III A 2.3/1 | Schmidt F. | 2000 | Metconazole (CL 900768) 60 G/L SL (SF09381): determination of physical/chemical stability data in polyethylene bottles<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-323-003<br>Yes<br>unpublished | N | BASF |
| III A 2.4/1 | Schmidt F. | 2000 | Metconazole (CL 900768) 60 G/L SL (SF09381): determination of physical/chemical stability data in polyethylene bottles<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-323-003<br>Yes<br>unpublished | N | BASF |
| III A 2.5.1/1 | Baker I.P. | 2000b | Surface tension and viscosity data for metconazole 60 g/l SL formula reference SF09381 - final report<br>Cyanamid of Great Britain Ltd.; Gosport; United Kingdom<br>MK-342-001<br>Yes<br>unpublished | N | BASF |
| III A 2.5.3/1 | Baker I.P. | 2000a | Surface tension and viscosity data for metconazole 60 g/l SL formula reference SF09381 - final report<br>Cyanamid of Great Britain Ltd.; Gosport; United Kingdom<br>MK-340-001<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| III A 2.6.1/1 | Schmidt F. | 2000 | Metconazole (CL 900768) 60 G/L SL (SF09381): determination of physical/chemical stability data in polyethylene bottles<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-323-003<br>Yes<br>unpublished | N | BASF |
| III A 2.7.1/1 | Schmidt F. | 2000 | Metconazole (CL 900768) 60 G/L SL (SF09381): determination of physical/chemical stability data in polyethylene bottles<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-323-003<br>Yes<br>unpublished | N | BASF |
| III A 2.7.2/1 | Schmidt F. | 2000 | Metconazole (CL 900768) 60 G/L SL (SF09381): determination of physical/chemical stability data in polyethylene bottles<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-323-003<br>Yes<br>unpublished | N | BASF |
| III A 2.7.3/1 | Schmidt F. | 2000 | Metconazole (CL 900768) 60 G/L SL (SF09381): determination of physical/chemical stability data in polyethylene bottles<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-323-003<br>Yes<br>unpublished | N | BASF |
| III A 2.8.2/1 | Schmidt F. | 2000 | Metconazole (CL 900768) 60 G/L SL (SF09381): determination of physical/chemical stability data in polyethylene bottles<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-323-003<br>Yes<br>unpublished | N | BASF |
| III A 2.8.4/1 | Schmidt F. | 2000 | Metconazole (CL 900768) 60 G/L SL (SF09381): determination of physical/chemical stability data in polyethylene bottles<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-323-003<br>Yes<br>unpublished | N | BASF |
| III A 2.9.1/1 | Horsler C.W. | 2002 | Metconazole 60g/L SL (BAS 555 00 F) and Metconazole 90g/L SL (BAS 555 01 F): Compatibility of tank mixes<br>BASF Agro Research Gosport; Gosport; United Kingdom<br>MK-390-024<br>No<br>unpublished | Y | BASF |
| EG:AIIIA-2 | Allmann, A. | 05.02.1997 | Analytical Method FAMS 074-01 of 05 February 1997<br>American Cyanamid, U.S.A.<br>MK-220-006<br>no<br>unpublished | Y | BASF |
| EG:AIIIA-2 | Weil, H. | 13.08.1998 | Viscosity determination with the Haake RV20<br>Haake, Karlsruhe, F.R.G.<br>1998/1002677<br>yes<br>unpublished | Y | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| EG:AIIIA-2 | Duch, T. | 11/03/1998 | Standard Operating Procedure DF/022/06: Determination of the surface tension with Lauda Tensiometer TD1<br>Cyanamid Forschung GmbH, Zur Probstei, Schwabenheim, F.R.G<br>Yes<br>Unpublished | Y | BASF |
| EG:AIIIA-2 | Allmann, A. and Förster, R. | 19/11/1996 | Metconazole CL 900768: Validation of Method CFS-CA M 11 / 3 / P for the Formulation Metconazole 60 g/1 SL (SF09381) - High Performance Liquid Chromatographic Method for the Determination of Metconazole (CL 900768) in Metconazole 60 g/1 SL (SF09381) (later FAMS 074-O1)<br>Cyanamid Forschung GmbH, Zur Probstei, Schwabenheim, F.R.G<br>1998/1003434<br>Yes<br>Unpublished | Y | BASF |

## A.3 Further information

### A.3.1 Further information on the active substance (Annex IIA 3)

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 3.9/1 | Schenk W. | 2001 | Possible procedures for the decontamination of water from Metconazole (BAS 555 F)<br>BASF AG; Ludwigshafen/Rhein; Germany Fed.Rep.<br>MK-390-023<br>No<br>unpublished | Y | BASF |

### A.3.2 Further information on the formulation (Annex IIIA 4)

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| III A 4.1.2/1 | Anonymous | 1996 | UN certificate of 4 x 5L HDPE used for Caramba<br>Ministere De L'equipement Des Transports Et Due Tourisme<br>MK-390-021<br>No<br>unpublished | N | BASF |
| EG:AIIIA-4.1.2 | Schreier, D. | 2004 | EU performance test of BAS 555 00 F (HDPE Standard bottle, 1 L, Spec.-No. 7755107)<br>BASF AG, Ludwigshafen; Werkstofftechnik / materials engineering, Germany Fed. Rep.<br>2004/1000001<br>No<br>Unpubished | Y | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| III A 4.1.3/1 | Schmidt F. | 2000 | Metconazole (CL 900768) 60 G/L SL (SF09381): determination of physical/chemical stability data in polyethylene bottles<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-323-003<br>Yes<br>unpublished | N | BASF |
| III A 4.2/1 | Ohnsorge U. | 2001 | Caramba 60 SL: Effectiveness of procedures for cleaning application equipment and protective clothing<br>BASF AG, Agrarzentrum Limburgerhof; Limburgerhof; Germany Fed.Rep.<br>MK-390-022<br>No<br>unpublished | Y | BASF |

## A.4 Classification, packaging and labelling

-

## A.5 Methods of analysis

### A.5.1 Methods of analysis for the active substance (Annex IIA 4)

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 4.1.1/1 | Zhang Y. | 1995b | CL 354801 and CL 354802 metconazole high resolution gas chromatographic method of assay for cis and trans isomers of Metconazole TGAI<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-210-007<br>No<br>unpublished | N | BASF |
| EG:AIIA-4.1.2 and 4.1.3 | -- | -- | Raw data of MK-210-011: Precision data for CL 357625, CL 356785, CL 359609 and CL 359608 precision data, generated by analysis of five replicate samples of fortified test substance, 10 pages<br>American Cyanamid, Agricultural Products Research Division, Princeton, U.S.A.<br>--<br>no<br>unpublished | Y | BASF |
| II A 4.1.3/1 | Zhang Y. | 1995a | Validation of the high resolution gas chromatographic method M-2417.01 to assay for CL 354,801 and CL 354,802 in technical grade Metconazole (CL 900,768)<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-210-008<br>Yes<br>unpublished | N | BASF |
| II A 4.2.1/1 | Memmesheimer H. | 1996a | Metconazole (CL900768): Validation of method FAMS 050-01 for the determination of residues in cereals (Germany, 1995)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-244-010<br>Yes<br>unpublished | N | BASF |
| II A 4.2.1/2 | Memmesheimer H. | 1999b | Metconazole (CL900768): Analytical method FAMS 050-01 for the determination of CL 900768 residues as cis- (CL354801) and trans-isomer (CL354802) in cereals - Additional validation data<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-244-026<br>No<br>unpublished | N | BASF |
| II A 4.2.1/3 | Weeren R.D. | 1996 | Validation of Cyanamid analytical method FAMS 050-01 for the determination of residues of Metconazole in cereals<br>Dr. Specht & Partner, Chemische Laboratorien GmbH; Hamburg; Germany Fed.Rep.<br>MK-244-016<br>Yes<br>unpublished | N | BASF |
| II A 4.2.1/4 | Tillkes M. | 1996d | Validation of DFG method S19 (modified extraction) for the determination of the residues of Metconazole in cereals<br>Dr. Specht & Partner, Chemische Laboratorien GmbH; Hamburg; Germany Fed.Rep.<br>MK-244-017<br>No<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 4.2.1/5 | Memmesheimer H. | 1996c | Metconazole (CL900768): Validation of method FAMS 059-01 for the determination of residues as cis-(CL354801) and trans-(CL354802) isomer in oil seed rape and rape oil (Germany, 1995)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-244-014<br>Yes<br>unpublished | N | BASF |
| II A 4.2.1/6 | Memmesheimer H. | 1997e | Metconazole (CL900768): Validation of method FAMS 059-02 for the determination of CL 900768 residues as cis-(CL 354801) or trans-(CL354802) isomer in oilseed rape (Germany, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-244-019<br>Yes<br>unpublished | N | BASF |
| II A 4.2.1/7 | Memmesheimer H. | 1999a | Metconazole (CL900768): Analytical method FAMS 059-02 for the determination of CL 900768 residues as cis- (CL354801) and trans-isomer (CL354802) in oil seed rape - Additional validation data<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-244-025<br>No<br>unpublished | N | BASF |
| II A 4.2.1/8 | Kwasniok A.,Pelz S. | 1997 | Independent laboratory validation (ILV) of Cyanamid analytical method FAMS 059-02 for the determination of residues of Metconazole (CL900768) in oilseed rape<br>Dr. Specht & Partner, Chemische Laboratorien GmbH; Hamburg; Germany Fed.Rep.<br>MK-244-018<br>Yes<br>unpublished | N | BASF |
| II A 4.2.1/9 | Memmesheimer H. | 1996b | Metconazole (CL900768): Validation of method FAMS 057-01 for the determination of residues as cis- (CL354801) and trans- (CL354802) isomer in sugarbeet roots and leaves (Germany, 1995)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-244-011<br>Yes<br>unpublished | N | BASF |
| II A 4.2.1/10 | Class T. | 1999 | Metconazole: Assessment & validation of method DFG S19 with modified extraction for determination of residue of Metconazole (CL 900768) in plant material and in foodstuff of animal origin)<br>PTRL Europe; Ulm; Germany Fed.Rep.<br>MK-240-002<br>Yes<br>unpublished | N | BASF |
| II A 4.2.1/11 | Weeren R.D.,Pelz S. | 1999 | Metconazole (CL900768): Validation of DFG method S 19 for the determination of residues of Metconazole (CL900768) as cis- (CL354801) and trans-isomer (CL 354802) in plant material, foodstuff of animal origin and soil<br>Dr. Specht & Partner, Chemische Laboratorien GmbH; Hamburg; Germany Fed.Rep.<br>MK-240-003<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| EG:AIIA-4.2.1 | Claas, T. | 22.09.2003 | Report Amendment to MK-240-002 'Metconazole (CL 900768): Assessment and Validation of the Multi-Residue Enforcement Method DFG S19 with Modified Extraction (and with DFG Cleanup Method 5 for Fatty/Oily Matrices) for the Determination of Residues of Metconazole (CL 900768) in Plant Material (Wheat Grain, Grape, Pea and Oilseed Rape Seed) and in Foodstuff of Animal Origin (Milk, Egg, Bovine Muscle and Fat)' only valid in combination with MK-240-002<br>PTRL Europe, Ulm, F.R.G.<br>2003/1016623<br>yes<br>unpublished | Y | BASF |
| II A 4.2.2/1 | Bissinger H.J. | 1995a | Metconazole (CL900768): Validation of method FAMS 055-02 for the determination of active ingredient as cis-(CL354801) and trans-isomer (CL354802) in soil (Germany, 1995)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-242-003<br>Yes<br>unpublished | N | BASF |
| II A 4.2.2/2 | Bissinger H.J. | 1999 | Metconazole (AC 900768): Analytical method FAMS 055-02 for the determination of residues of the cis-(CL 354801) and trans-isomer (CL 354802) in soil - additional validation data<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-242-007<br>No<br>unpublished | N | BASF |
| II A 4.2.3/1 | Leak T. et al. | 1996 | Validation of method FAMS 058-01 for the determination of CL 900768 in water<br>ABC Laboratories Inc.; Columbia, Missouri 65202; United States of America<br>MK-243-003<br>Yes<br>unpublished | N | BASF |
| II A 4.2.3/2 | Class T.,Hausmann S. | 1998 | Metconazole (CL900768): Independent laboratory validation of the GC method FAMS 058-01 for the determination of Metconazole as cis-(CL 354801) and trans-isomer (CL 354802) in water<br>PTRL Europe; Ulm; Germany Fed.Rep.<br>MK-243-005<br>Yes<br>unpublished | N | BASF |
| II A 4.2.3/3 | McCambley C.,Christensen G. | 1998 | Validation of method FAMS 058-01 for the determination of AC 900768 in water<br>ABC Laboratories Europe; Coleraine; Northern Ireland<br>MK-243-008<br>Yes<br>unpublished | N | BASF |
| II A 4.2.3/4 | Hausmann S. | 1999 | Metconazole (CL 900768): Validation of the GC method FAMS 058-01 for the determination of Metconazole as cis- (CL 354801) and trans-isomer (CL 354802) in surface (pond) water<br>PTRL Europe; Ulm; Germany Fed.Rep.<br>MK-243-009<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 4.2.4/1 | Howald M.,Mirbach M. | 1997 | Metconazole (CL900768): Validation of method FAMS 067-01 for the determination of active ingredient as cis-(CL354801) and trans-isomer (CL354802) in air (Germany, 1996)<br>RCC Umweltchemie AG; Itingen; Switzerland<br>MK-241-002<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| Document J<br>II A 4.1.2/1 | Ahuja E.S. et al. | 1996 | CL 900,768: High resolution gas chromatographic method to assay for the residual solvents in the technical grade of Metconazole (CARAMBA CL 900,768)<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-210-016<br>No<br>unpublished | N | BASF |
| Document J<br>II A 4.1.2/2 | DeSilva K. | 1999 | CL 354801 and CL 354802 (Metconazole): High resolution gas chromatographic method to assay for the major and minor components in the technical grade of Metconazole (CARAMBA)<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-210-015<br>No<br>unpublished | N | BASF |
| Document J<br>II A 4.1.3/2 | Ahuja E. | 1997a | Validation of HRGC method M-2479.01 to assay for major and minor components in the metconazole (CL 900,768) technical grade active ingredient (Report amendment 1)<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-210-011<br>Yes<br>unpublished | N | BASF |
| Document J<br>II A 4.1.3/3 | Ahuja E. | 1997b | Validation of HRGC method M-2689.01 to assay for residual solvents in Metconazole (CL 900,768) technical grade active ingredient (Report amendment 1)<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-210-012<br>Yes<br>unpublished | N | BASF |

## A.5.2 Methods of analysis for the formulation (Annex IIIA 5)

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| III A 5.1.3/1 | Weatherhead P. | 2000 | Method validation of RLA 12495.00 HPLC method for the determination of metconazole SL formulation<br>BASF Agro Research Gosport; Gosport; United Kingdom<br>MK-220-007<br>No<br>unpublished | N | BASF |
| EG:AIIIA- 5.1.1 and 5.1.3 | Fries, J. | 2004 | Supplement to the Method Validation of RLA 12495.00 HPLC method for the determination of metconazole SL formulation (Technical Report No. RLG 4572)<br>BASF AG, Agricultural Center Limburgerhof, Ecology and Environmental Analytics, Germany Fed. Rep.<br>2003/1021955<br>Yes<br>Unpublished | Y | BASF |

## A.6 Toxicology and metabolism (Annex IIA 5; Annex IIIA 7)

### A.6.1 Toxicology and metabolism of the active substance (Annex IIA 5)

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 5.1.1/1 | Hawkins D. et al. | 1991 | The excretion of 14C- WL 136184 in bile-duct cannulated rats<br>Huntingdon Research Centre; Huntingdon; United Kingdom<br>MK-440-006<br>Yes<br>unpublished | N | BASF |
| II A 5.1.1/2 | Morrison B.J.,Richardson K.A. | 1990 | The fate of [cyclopentyl-14C] WL148271 in the Fischer 344 rat following a single low oral dose of 2 mg per kg I. Elimination and distribution<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-440-002<br>Yes<br>unpublished | N | BASF |
| II A 5.1.1/3 | Morrison B.J.,Richardson K.A. | 1992b | Metconazole (WL136184): Fate of a single oral low dose (2 mg/kg) of 14C-Metconazole in the Fischer 344 rat following 14 daily oral low doses (2 mg/kg) of unlabelled Metconazole<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-440-010<br>Yes<br>unpublished | N | BASF |
| II A 5.1.2/1 | Richardson K.A. | 1991a | [triazole-14C] WL136184 (KNF-S-474c): The isolation and identification of metabolites following a single oral dose 200 mg/kg-1 to the rat<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-440-004<br>Yes<br>unpublished | N | BASF |
| II A 5.1.2/2 | Richardson K.A. | 1991b | [Cyclopentyl-14C] WL148271 (KNF-S-474m): Fate in the fischer 344 rat following a single low oral dose of 2 mg/kg II Metabolite identification<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-440-007<br>Yes<br>unpublished | N | BASF |
| II A 5.1.2/3 | Morrison B.J.,Richardson K.A. | 1992a | [Cyclopentyl-14C] wL148271 (KNF-S-474m): The fate of a single oral dose of 164 mg/kg in the fischer 344 rats<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-440-009<br>Yes<br>unpublished | N | BASF |
| II A 5.1.3/1 | Little E.J. | 1992 | WL136184 (KNF-S-474c): A study of absorption and excretion following dermal application to the rat<br>Hazleton UK; Harrogate North Yorkshire; United Kingdom<br>MK-440-008<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 5.2.1/1 | Gardner J.R. | 1990a | WL148271: Acute oral and dermal toxicity<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-411-001<br>Yes<br>unpublished | N | BASF |
| II A 5.2.1/2 | Gardner J.R. | 1991 | WL136184: Acute oral and dermal toxicity in rat, skin and eye irritancy in rabbit and skin sensitization potential in guinea pig<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-410-001<br>Yes<br>unpublished | N | BASF |
| II A 5.2.2/1 | Gardner J.R. | 1990a | WL148271: Acute oral and dermal toxicity<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-411-001<br>Yes<br>unpublished | N | BASF |
| II A 5.2.2/2 | Gardner J.R. | 1991 | WL136184: Acute oral and dermal toxicity in rat, skin and eye irritancy in rabbit and skin sensitization potential in guinea pig<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-410-001<br>Yes<br>unpublished | N | BASF |
| II A 5.2.3/1 | Collins C.J. | 1990 | WL148271 (KNF-S-474m): Acute inhalation toxicity study - LC50 rats (4 hour exposure)<br>Hazleton UK; Harrogate North Yorkshire; United Kingdom<br>MK-413-001<br>Yes<br>unpublished | N | BASF |
| II A 5.2.4/1 | Gardner J.R. | 1990b | WL148271: Skin and eye irritancy and skin sensitization potential<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-415-001<br>Yes<br>unpublished | N | BASF |
| II A 5.2.5/1 | Gardner J.R. | 1990b | WL148271: Skin and eye irritancy and skin sensitization potential<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-415-001<br>Yes<br>unpublished | N | BASF |
| II A 5.2.6/1 | Glaza S.M. | 1995 | Dermal sensitization study of CL 900,768 in guinea pigs - maximization test (EC guidelines)<br>Hazleton Wisconsin Inc.; Madison WI 53704; United States of America<br>MK-416-001<br>Yes<br>unpublished | N | BASF |
| II A 5.3.1.1/1 | Esdaile D.J. | 1990 | WL148271 (KNF-S-474m): A 28 day feeding study in rats<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-420-002<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 5.3.1.1/2 | Esdaile D.J. | 1991a | WL136184: A 28 day feeding study in rats<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-420-003<br>Yes<br>unpublished | N | BASF |
| II A 5.3.1.3/1 | Pickersgill N. | 1991a | WL 148271: 28 day oral (dietary administration) toxicity study in the beagle<br>Hazleton UK; Harrogate North Yorkshire; United Kingdom<br>MK-420-004<br>Yes<br>unpublished | N | BASF |
| II A 5.3.2.1/1 | Esdaile D.J. | 1991b | KNF-S-474m/WL148271: A 90 day feeding study in rats<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-425-002<br>Yes<br>unpublished | N | BASF |
| II A 5.3.2.1/2 | Fokkema G.N. | 1992 | KNF-S-474c/WL136184: A 90 day feeding study in rats<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-425-004<br>Yes<br>unpublished | N | BASF |
| II A 5.3.2.2/1 | Clay H. | 1991 | WL 148271: 90 day oral (dietary administration) toxicity study in the mouse<br>Hazleton UK; Harrogate North Yorkshire; United Kingdom<br>MK-425-003<br>Yes<br>unpublished | N | BASF |
| II A 5.3.2.3/1 | Pickersgill N. | 1991b | WL 148271: 90 day oral (dietary administration) toxicity study in the beagle<br>Hazleton UK; Harrogate North Yorkshire; United Kingdom<br>MK-425-001<br>Yes<br>unpublished | N | BASF |
| II A 5.4.1.1/1 | Brooks T.M.,Wiggins D.E. | 1990 | Bacterial mutagenicity studies with WL148271 (KNF-S-474M)<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-435-001<br>Yes<br>unpublished | N | BASF |
| II A 5.4.1.2/1 | Clements J. | 1991 | Study to determine the ability of WL 136184 (KNF-s-474c) to induce mutations at the thymidine kinase (tk) locus in mouse lymphoma L5178Y cells using a fluctuation assay<br>Hazleton Microtest; Harrogate; United Kingdom<br>MK-435-007<br>Yes<br>unpublished | N | BASF |
| II A 5.4.1.3/1 | Brooks T.M.,Wiggins D.E. | 1991 | WL148271 (KNF-S-474m): In vitro chromosome studies<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-435-002<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 5.4.2.1/1 | Xu J. | 1995 | In vivo test for chemical induction of micronucleated polychromatic erythrocytes in mouse bone marrow cells - CL 900,768<br>SITEK Research Laboratories; Rockville MD 20850; United States of America<br>MK-435-009<br>Yes<br>unpublished | N | BASF |
| II A 5.4.2.2/1 | Pant K.J. | 1995 | Test for chemical induction of unscheduled DNA synthesis in rat primary hepatocytes obtained from rats treated in vivo - CL 900,768<br>SITEK Research Laboratories; Rockville MD 20850; United States of America<br>MK-435-008<br>Yes<br>unpublished | N | BASF |
| II A 5.5.1/1 | Clay H. | 1992a | WL 148271: 52 week oral (dietary administration) toxicity study in the beagle<br>Hazleton UK; Harrogate North Yorkshire; United Kingdom<br>MK-427-002<br>Yes<br>unpublished | N | BASF |
| II A 5.5.2/1 | Taupin P.J.Y. | 1992a | WL148271: A two year chronic toxicity feeding study in rats<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-427-003<br>Yes<br>unpublished | N | BASF |
| II A 5.5.3/1 | Taupin P.J.Y. | 1992b | WL148271: A two year oncogenicity feeding study in rats<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-428-001<br>Yes<br>unpublished | N | BASF |
| II A 5.5.4/1 | Clay H. | 1992b | WL 148271: 91 Week oral (dietary administration) carcinogenicity study in the mouse<br>Hazleton UK; Harrogate North Yorkshire; United Kingdom<br>MK-428-002<br>Yes<br>unpublished | N | BASF |
| II A 5.6.1/1 | Willoughby C.R. | 1992a | WL 136184: Reproductive performance study in rats treated continuously through two successive generations<br>Life Science Research Ltd.; Eye Suffolk IP23 7PX; United Kingdom<br>MK-430-003<br>Yes<br>unpublished | N | BASF |
| II A 5.6.2.1/1 | Masters R.E. et al. | 1991b | A study of the effect of WL148271/KNF-S-474m on pregnancy of the rat (incorporating pilot and preliminary studies SLL 163/164)<br>Huntingdon Research Centre; Huntingdon; United Kingdom<br>MK-432-005<br>Yes<br>unpublished | N | BASF |
| II A 5.6.2.1/2 | Willoughby C.R. | 1992b | WL 136184: Teratology study in the rat<br>Life Science Research Ltd.; Eye Suffolk IP23 7PX; United Kingdom<br>MK-432-009<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 5.6.2.2/1 | Hoberman A.M. | 1997 | A definitive oral developmental toxicity (embryo-fetal toxicity/teratogenicity) study with AC 900768 in rabbits<br>Argus Research Laboratories, Inc.; Horsham, Pennsylvania; United States of America<br>MK-432-015<br>Yes<br>unpublished | N | BASF |
| II A 5.6.2.2/2 | Masters R.E. | 1990 | A preliminary study of the effect of three isomers of KNF-S-474 on pregnancy of the rabbit<br>Huntingdon Research Centre; Huntingdon; United Kingdom<br>MK-432-002<br>Yes<br>unpublished | N | BASF |
| II A 5.6.2.2/3 | Masters R.E. et al. | 1991a | A study of the effect of WL148271/KNF-S-474m (technical) on pregnancy of the rabbit (incorporating the pilot, preliminary and two main studies SLL 167/161/162/179)<br>Huntingdon Research Centre; Huntingdon; United Kingdom<br>MK-432-003<br>Yes<br>unpublished | N | BASF |
| II A 5.6.2.2/4 | Masters R.E. et al. | 1992a | A study of the effect of WL136184/KNF-S-474c on pregnancy of the rabbit (incorporating the preliminary study SLL 205)<br>Huntingdon Research Centre; Huntingdon; United Kingdom<br>MK-432-007<br>Yes<br>unpublished | N | BASF |
| II A 5.6.2.2/5 | Masters R.E. et al. | 1992b | A study of the effect of WL136184/KNF-S-474c on pregnancy of the rabbit<br>Huntingdon Research Centre; Huntingdon; United Kingdom<br>MK-432-010<br>Yes<br>unpublished | N | BASF |
| II A 5.8.1/1 | Bradley D. | 1997 | Oral LD50 study in albino rats with AC 382390<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-470-025<br>Yes<br>unpublished | N | BASF |
| II A 5.8.2/1 | Worrell N.R. | 1991 | Study to investigate the effects of WL136184 on rat and mouse hepatic xenobiotic metabolising enzymes<br>Bibra Toxicology International; Carshalton Surrey SM5 4DS; United Kingdom<br>MK-440-005<br>Yes<br>unpublished | N | BASF |
| II A 5.8.2/2 | Goodman J. et al. | 1991 | Symposium overview Mouse liver carcinogenesis: mechanisms and relevance<br>MK-905-013<br>No<br>Fundamental and Applied Toxicology 17,651-665 (1991) | N | public |
| II A 5.8.2/3 | Haseman J.K. et al. | 1990 | Tumor incidences in fischer 344 rats: NTP historical data<br>MK-905-011<br>No<br>Pathology of the Fischer Rat, 555-564 (1990) | N | public |
| II A 5.8.2/4 | Christian M.S. | 1996 | Expert report effect of metconazole on pregnancy of the rabbit<br>Argus Research Laboratories, Inc.; Horsham, Pennsylvania; United States of America<br>MK-432-012<br>No<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 5.8.2/5 | Anonymous | 1992 | Historical control data for developmental toxicity studies conducted during 1990-1992 on Sprague-Dawley rats supplied by Charles River UK and Charles River USA<br>Huntingdon Life Sciences Ltd.; Huntingdon Cambridgeshire PE28 4HS; United Kingdom<br>MK-432-013<br>No<br>unpublished | N | BASF |

## A.6.2. Toxicology and metabolism of the formulation (Annex III A 7)

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| III A 7.1.1/1 | Bradley D. | 1995a | Oral LD50 study in albino rats with AC 900,768 60 g/L SL formulation<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-460-004<br>Yes<br>unpublished | N | BASF |
| III A 7.1.2/1 | Bradley D. | 1995b | Dermal LD50 study in albino rats with AC 900,768 60 g/L SL formulation<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-460-005<br>Yes<br>unpublished | N | BASF |
| III A 7.1.3/1 | Hoffman G.M. | 1996 | Acute inhalation toxicity study with CL 900,768 60 g/l SL (SF09381) in rats<br>Huntingdon Life Sciences; East Millstone, New Jersey 08875-2360; United States of America<br>MK-460-009<br>Yes<br>unpublished | N | BASF |
| III A 7.1.4/1 | Boczon L.M. | 1995b | Skin irritation study in albino rabbits with AC 900,768 60 g/L SL formulation<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-460-006<br>Yes<br>unpublished | N | BASF |
| III A 7.1.5/1 | Boczon L.M. | 1995a | Eye irritation study in albino rabbits with AC 900,768 60 g/L SL formulation<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-460-007<br>Yes<br>unpublished | N | BASF |
| III A 7.1.6/1 | Glaza S.M. | 1995 | Dermal sensitization study of CL 900,768 60 g/l SL formulation in guinea pigs - maximization test (EC guidelines)<br>Corning Hazleton Wisconsin Inc.; Madison WI 53704; United States of America<br>MK-460-008<br>Yes<br>unpublished | N | BASF |

## A.7 Residue data

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 6.1/1 | Edwards V.T. | 1991a | [Triazole-14C] WL136184 (KNF-S-474c) : Metabolism in wheat<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-640-001<br>Yes<br>unpublished | N | BASF |
| II A 6.1/2 | Edwards V.T. | 1991b | [Cyclopentyl-14C] WL148271(KNF-S-474m): Metabolism in wheat<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-640-002<br>Yes<br>unpublished | N | BASF |
| II A 6.1/3 | Kao M.L. | 1997a | CL 900768 (Metconazole): Metabolism of [triazole-3,5-14C] CL 900768 in canola under field conditions<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-640-006<br>Yes<br>unpublished | N | BASF |
| II A 6.1/4 | Kao M.L. | 1997b | CL 900768 (Metconazole): Metabolism of [p-chlorophenyl-U-14C] CL 900768 in canola under field conditions<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-640-007<br>Yes<br>unpublished | N | BASF |
| II A 6.1/5 | Anonymous | 1989 | Pesticide residues in food - 1989 evaluations. Part II - Toxicology. FAO Plant Production and Protection Paper 100/2. P. 237-244<br>MK-905-021<br>No<br>Food and agriculture organization pp 237-244 | N | public |
| II A 6.1/6 | Ikegami F.,Komada Y. | 1990 | Biosynthesis of ß-(1,2,4-triazol-1-yl) alanine in higher plants<br>MK-905-003<br>No<br>Phytochemistry Vol. 29 No. 8 pp 2507-2508 | N | public |
| II A 6.1/7 | Massini P. | 1963 | Aminotriazolylalanine a metabolic product of aminotriazole from plants<br>MK-905-006<br>No<br>Acta Botanica Neerlandica, Vol.12, pp. 64-72 | N | public |
| II A 6.2.1/1 | Johnston A.M. et al. | 1992 | The disposition of [14C]-WL148271 (KNF-S-474M) in the lactating goat (nature of residue study to EPA guidelines)<br>Inveresk Research International Ltd.; Tranent, EH33 2NE; United Kingdom<br>MK-440-013<br>Yes<br>unpublished | N | BASF |
| II A 6.2.1/2 | Richardson K.A. | 1993 | [Cyclopentyl-14C]-WL136184 (Metconazole, KNF-S-474c): Fate of WL136184 in the lactating goat following 5 consecutive daily doses (23 mg/day)<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-440-015<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 6.2.2/1 | Johnston A. et al. | 1991 | The disposition of [14C]-WL136184 (KNF-S-474C) in the laying hen (nature of residue study to EPA guidelines)<br>Inveresk Research International Ltd.; Tranent, EH33 2NE; United Kingdom<br>MK-440-011<br>Yes<br>unpublished | N | <none> |
| II A 6.2.2/2 | Johnston A.,Young C. | 1992 | The disposition of 14c wl136184 in the laying hen nature of residue study to epa guidelines<br>Inveresk Research International Ltd.; Tranent, EH33 2NE; United Kingdom<br>MK-440-012<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/1 | Jungblut D. et al. | 1996b | Metconazole (CL 900768) 60 g ai/l SL (SF09381)*: At harvest residue study in winter wheat (Germany, 1995)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-033<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/2 | Bleif J. et al. | 1996c | Metconazole (CL 900768) 60 g ai/l SL (SF 09381): Decline curve residue study in winter wheat (Germany, 1995)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-035<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/3 | Dombo P. et al. | 1996e | Metconazole (CL 900768) 60 g ai/l SL (SF 09381)*: Decline curve residue study in winter wheat (Germany, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-041<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/4 | Class T.,Kretschmer S. | 1999 | Metconazole 60 g ai/l SL (SF09381): At harvest residue study on metconazole & its metabolite triazoylalanine in wheat (Germany 1998): Analysis of residues of metconazole and metabolite triazolylalanine in wheat grain samples<br>PTRL Europe; Ulm; Germany Fed.Rep.<br>MK-730-045<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/5 | Bleif J. et al. | 1996e | Metconazole (CL 900768) 60 g ai/l SL (SF 09381)*: At harvest residue study in winter wheat (UK, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-037<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/6 | Dombo P. et al. | 1996d | Metconazole (CL 900768) 60 g ai/l SL (SF 09381)*: Decline curve residue study in winter wheat (UK, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-039<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 6.3.1/8 | Young H.E. | 2002 | BAS 555 F (Metconazole) 60 g a.s./L SL (SF09381) and 90 g a.s./L SL (RLF 12307/RLM 11237): Decline curve residue study on BAS 555 F in winter wheat - South France 2000<br>BASF Agro Research Gosport; Gosport; United Kingdom<br>MK-730-049<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/9 | Jones S. | 2002 | Study on the residue behaviour of BAS 555 F in wheat after application of BAS 555 00 F under field conditions in France (S), United Kingdom, 2001<br>BASF Agro Research Gosport; Gosport; United Kingdom<br>MK-730-050<br>Yes<br>unpublished | Y | BASF |
| II A 6.3.1/10 | Bleif J. | 1996c | Metconazole (CL 900768) 60 g ai/l SL (SF09381)*: Decline curve residue study in winter rye (Germany, 1995)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-027<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/11 | Jungblut D. et al. | 1996a | Metconazole (CL 900768) 60 g ai/l SL (SF 09381)*: At harvest residue study in triticale (Germany, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-030<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/12 | Bleif J. | 1996a | Metconazole (CL 900768) 60 g ai/l SL (SF 09381)*: Residue study in winter barley (Germany, 1995)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-025<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/13 | Dombo P. et al. | 1996a | Metconazole (CL 900768) 60 g ai/l SL (SF 09381)*: At harvest residue study in winter barley (UK, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-028<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/14 | Bleif J. | 1996d | Metconazole (CL 900768) 60 g ai/l SL (SF 09381)*: At harvest residue study in winter barley (UK, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-029<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/15 | Bleif J. et al. | 1996a | Metconazole (CL 900768) 60 g ai/l SL (SF 09381)*: At harvest residue study in winter barley (Germany, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-032<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 6.3.1/16 | Bleif J. et al. | 1996d | Metconazole (CL 900768) 60 g ai/l SL (SF 09381): At harvest residue study in spring barley (UK,1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-036<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/17 | Bleif J. et al. | 1997a | Metconazole (CL 900768) 60 g ai/l SL (SF09381): At harvest residue study of metconazole (CL 900768) in spring barley (UK, 1997)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-042<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/18 | Bleif J. | 1996b | Metconazole (CL 900768) 60 g ai/l SL (SF09381)*: Decline curve residue study in winter barley (Germany, 1995)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-026<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/19 | Dombo P. et al. | 1996b | Metconazole (CL 900768) 60 g ai/l SL (SF 09381)*: Decline curve residue study in winter barley (UK, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-031<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/20 | Bleif J. et al. | 1996b | Metconazole (CL 900768) 60 g ai/l SL (SF 09381)*: Decline curve residue study in winter barley (Germany, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-034<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/21 | Dombo P. et al. | 1996c | Metconazole (CL 900768) 60 g ai/l SL (SF 09381)*: Decline curve residue study in winter barley (UK, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-038<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/22 | Bleif J. et al. | 1996f | Metconazole (CL 900768) 60 g ai/l SL (SF 09381): Decline curve residue study in spring barley (UK, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-040<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/23 | Bleif J. et al. | 1997b | Metconazole (CL 900768) 60 g ai/l SL (SF09381): Decline curve residue study of metconazole (CL 900768) in spring barley (UK, 1997)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-730-043<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 6.3.1/24 | Beggs C.J. et al. | 1996 | Metconazole (CL 900768) 60 G a.i./L SL (SF 09381) at harvest residue study in autumn oil seed rape - (France, 1995)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-750-003<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/25 | Bleif J. et al. | 1997d | Metconazole (CL 900768) 60 g ai/l SL (SF09381): At harvest residue study in oil seed rape (France-north, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-750-005<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/26 | Dombo P. et al. | 1997a | Metconazole (CL 900768) 60 g ai/l SL (SF 09381): Decline curve residue study in oil seed rape (France-north, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-750-006<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/27 | Dombo P. et al. | 1997b | Metconazole (CL 900768) 60 g/l SL (SF 09381): At harvest residue study in oilseed rape (France-south, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-750-007<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/28 | Scharm M. et al. | 1999 | Metconazole (CL 900768) 90 g ai/l SL (RLF 12307): At harvest residue study on metconazole (CL 900768) in oil seed rape (South-France, 1998)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-750-009<br>Yes<br>unpublished | N | BASF |
| II A 6.3.1/29 | Bleif J. et al. | 1997c | Metconazole (CL 900768) 60 g ai/l SL (SF 09381): Decline curve residues study in oil seed rape (France-south, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-750-004<br>Yes<br>unpublished | N | BASF |
| II A 6.3.2/1 | Memmesheimer H. | 1997a | Metconazole (CL 900768): Storage stability of CL 900768 residues of cis-(CL 354801) and trans-(CL 354802) isomer at <-18 degrees C. in cereal grain (Germany, 1995)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-326-004<br>Yes<br>unpublished | N | BASF |
| II A 6.3.2/2 | Memmesheimer H. | 1997b | Metconazole (CL 900768): Storage stability of CL 900768 residues as cis-(CL 354801) and trans-(CL 354802) isomer at <-18 degrees C. in cereal green plant and straw (Germany, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-326-005<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 6.3.2/3 | Memmesheimer H. | 1997c | Metconazole (CL 900768): Storage stability of CL 900768 residues as cis-(CL 354801) and trans-(CL 354802) isomer at <-18 degrees C. in carrots and lettuce (Germany, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-326-006<br>Yes<br>unpublished | N | BASF |
| II A 6.3.2/4 | Memmesheimer H. | 1997d | Metconazole (CL 900768): Storage stability of CL 900768 residues as cis-(CL 354801) and trans-(CL 354802) isomer at <- 18 degrees C. in rape seed and rape oil (Germany, 1996)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-326-007<br>Yes<br>unpublished | N | BASF |
| II A 6.3.2/5 | Kretschmer S. | 2000 | Metconazole (CL 900768): Storage stability of residues of the metabolite triazolyalanine (CL 147267) in wheat grain<br>PTRL Europe; Ulm; Germany Fed.Rep.<br>MK-326-016<br>Yes<br>unpublished | N | BASF |
| II A 6.6/1 | Hill A.D.,Standen M.E. | 1993 | Metconazole: Confined rotational crop study using [cyclopentyl-14C] and [triazole-14C]- WL148271<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-640-004<br>Yes<br>unpublished | N | BASF |
| II A 6.6/2 | Memmesheimer H. | 1996d | Metconazole (CL 900768) 60 g ai/l SL (SF09381): Determination of CL 900768 residues in following crops (Germany, 1995)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-790-010<br>Yes<br>unpublished | N | BASF |

## A.8 Environmental fate and behaviour

### A.8.1 Environmental fate and behaviour of the active substance (Annex IIA 7)

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 7.1.1.1.1/1 | Gedik L.,Fullard D.C. | 2002 | Metconazole (BAS 555 F): Degradation in soil under aerobic conditions<br>Inveresk Research International Ltd.; Tranent, EH33 2NE; United Kingdom<br>MK-620-020<br>Yes<br>unpublished | Y | BASF |
| II A 7.1.1.1.1/2 | Edwards V.T. | 1990 | WL148271 (KNF-S-474m): Degradation rate in five soils<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-620-002<br>Yes<br>unpublished | N | BASF |
| II A 7.1.1.1.2/1 | Gedik L. et al. | 2001 | Metconazole (BAS 555F): Degradation in soil under anaerobic conditions<br>Inveresk Research International Ltd.; Tranent, EH33 2NE; United Kingdom<br>MK-620-018<br>Yes<br>unpublished | Y | BASF |
| II A 7.1.1.1.2/2 | Baranowski D.,VanDijk A. | 1992 | Photodegradation study of 14C-WL 136184 on soil<br>RCC Umweltchemie AG; Itingen; Switzerland<br>MK-620-005<br>Yes<br>unpublished | N | BASF |
| II A 7.1.1.1.2/3 | Bissinger H.J. | 1996a | Photochemical degradation of Metconazole (CL900768) in soil<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-620-013<br>Yes<br>unpublished | N | BASF |
| II A 7.1.1.2.1/1 | Edwards V.T. | 1990 | WL148271 (KNF-S-474m): Degradation rate in five soils<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-620-002<br>Yes<br>unpublished | N | BASF |
| II A 7.1.1.2.1/2 | Rice P. | 2002b | Calculation of DT50 and DT90 values of Metconazole (BAS 555 F) in five soils<br>BASF Corporation Agro Research; Princeton NJ 08543-0400; United States of America<br>MK-620-021<br>No<br>unpublished | Y | BASF |
| II A 7.1.1.2.1/3 | Gedik L.,Fullard D.C. | 2002 | Metconazole (BAS 555 F): Degradation in soil under aerobic conditions<br>Inveresk Research International Ltd.; Tranent, EH33 2NE; United Kingdom<br>MK-620-020<br>Yes<br>unpublished | Y | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 7.1.1.2.1/4 | Hall B.E.,Lowrie C. | 2002 | Metconazole (BAS 555 F): Rate of degradation in soil under aerobic conditions at 10 degrees C<br>BASF Corporation Agro Research; Princeton NJ 08543-0400; United States of America<br>MK-620-019<br>Yes<br>unpublished | N | BASF |
| II A 7.1.1.2.1/5 | Gedik L. et al. | 2001 | Metconazole (BAS 555F): Degradation in soil under anaerobic conditions<br>Inveresk Research International Ltd.; Tranent, EH33 2NE; United Kingdom<br>MK-620-018<br>Yes<br>unpublished | Y | BASF |
| II A 7.1.1.2.2/1 | Bissinger H. et al. | 1996 | Metconazole (CL 900768) 60 g a.i./L SL (SF09381): Soil dissipation study (Germany, 1995)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-790-011<br>Yes<br>unpublished | N | BASF |
| II A 7.1.1.2.2/2 | Bissinger H.J.,Burgess J. | 1996 | Metconazole (CL900768) 60 g a.i./L SL (SF09381): Soil dissipation study (UK, 1995)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-790-012<br>Yes<br>unpublished | N | BASF |
| II A 7.1.1.2.2/3 | Davies E.H. | 1993 | Metconazole (WL136184, KNF-S-474c): The dissipation from soil at 6 field sites in the UK, France and Germany following application of 60 g/l SL and 100 g/l EC formulation, SF07455 and SF07355 - 1991/1992<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-620-010<br>Yes<br>unpublished | N | BASF |
| II A 7.1.1.2.2/4 | Bosio P.G. | 1992 | Residues of Metconazole in soil from France treated with KNF-S-474<br>Shell Chimie France; ; France<br>MK-790-004<br>Yes<br>unpublished | N | BASF |
| II A 7.1.1.2.2/5 | Wright D.R. | 1992b | Metconazole: Residues in soil following application of WL136184 (KNF-S-474c) as EC formulation SF07355 and SL formulation SF07455 - UK trials, 1991/92<br>Hazleton UK; Harrogate North Yorkshire; United Kingdom<br>MK-790-016<br>Yes<br>unpublished | N | BASF |
| II A 7.1.1.2.2/6 | Wright D.R. | 1992a | Metconazole: Residues in soil following application of WL136184 (KNF-S-474c) as EC formulation SF07355 and SL formulation SF07455 - Germany 1991/92<br>Hazleton UK; Harrogate North Yorkshire; United Kingdom<br>MK-790-008<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 7.1.1.2.2/7 | Smalley R. | 2002 | BAS 555 F (Metconazole) (BAS 555 00 F, Caramba 60g/l SL): Soil accumulation study (UK, 1995)<br>BASF Agro Research Gosport; Gosport; United Kingdom<br>MK-790-015<br>Yes<br>unpublished | Y | BASF |
| II A 7.1.1.2.2/8 | Beigel C. | 2001 | Estimation of the accumulation potential of BAS 555 F (Metconazole) in Northern European soils following applications of Caramba 60 SL to cereals and oilseed rape using the Focus groundwater scenarios shell Pearl<br>BASF Corporation Agro Research; Princeton NJ 08543-0400; United States of America<br>MK-902-014<br>No<br>unpublished | Y | BASF |
| II A 7.1.1.2.3/1 | Clements B. | 1994 | Metconazole (KNF-S-474): Evaluation of residues stability in soil under deep-freeze storage conditions<br>Hazleton UK; Harrogate North Yorkshire; United Kingdom<br>MK-326-002<br>Yes<br>unpublished | N | BASF |
| II A 7.1.2/1 | Webb J.D. | 1991 | [Triazole-14C] WL136184 (KNF-S-474c): Adsorption and desorption for a range of soils<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-620-003<br>Yes<br>unpublished | N | BASF |
| II A 7.1.2/2 | Bissinger H.J. | 1995b | Adsorption / desorption of Metconazole (cis / trans approx. 85:15)<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-620-012<br>Yes<br>unpublished | N | BASF |
| II A 7.1.3.1/1 | Richardson K.A. | 1989 | The mobility of WL136184 (KNF-S-474c) in soil - soil thin layer chromatography<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-620-001<br>Yes<br>unpublished | N | BASF |
| II A 7.1.3.2/1 | Croucher A.,Hill A.D. | 1992 | WL148271 (KNF-S-474m): Leaching of aged residues<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-620-007<br>Yes<br>unpublished | N | BASF |
| II A 7.2.1.1/1 | Fisk P.R. | 1991 | WL148271 (KNF-S-474m): Hydrolysis as a function of pH<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-322-001<br>Yes<br>unpublished | N | BASF |
| II A 7.2.1.2/1 | Williams M.D.,Heim L.G. | 1996 | Determination of the aqueous photolysis rate with AC 900,768 (WL 148,271)<br>ABC Laboratories Inc.; Columbia, Missouri 65202; United States of America<br>MK-324-001<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 7.2.1.2/2 | Fang C. | 2002 | 14C-Metconazole (BAS 555 F): Natural water photolysis<br>BASF Corporation Agro Research; Princeton NJ 08543-0400; United States of America<br>MK-630-005<br>Yes<br>unpublished | Y | BASF |
| II A 7.2.1.2/3 | Knoch E.,Martin C.A. | 1999 | Metconazole AC (900768): Determination of the direct phototransformation in buffered medium at pH 7<br>Institut Fresenius, Chemische und Biologische Laboratorien GmbH; Taunusstein; Germany Fed. Rep.<br>MK-324-003<br>Yes<br>unpublished | N | BASF |
| II A 7.2.1.3.1/1 | Battersby N.S. | 1990 | WL148271 (KNF-S-474M): An assessment of ready biodegradability<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-690-001<br>Yes<br>unpublished | N | BASF |
| II A 7.2.1.3.1/2 | Battersby N.S. | 1991 | KNF-S-474 cis isomer (WL136184): An assessment of ready biodegradability<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-690-002<br>Yes<br>unpublished | N | BASF |
| II A 7.2.1.3.2/1 | Steinfuhrer T. | 1996 | 14C-Metconazole (CL 900768): Degradation in water/sediment systems<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-630-002<br>Yes<br>unpublished | N | BASF |
| II A 7.2.1.3.2/2 | Rice P. | 2002a | Calculation of DT50 and DT90 values of Metconazole (BAS 555 F) in two water-sediment systems<br>BASF Corporation Agro Research; Princeton NJ 08543-0400; United States of America<br>MK-630-006<br>No<br>unpublished | Y | BASF |
| II A 7.2.2/1 | Martin C.A. | 2002 | BAS 555 F (Metconazole): Calculation of Henry's law constant<br>BASF Corporation Agro Research; Princeton NJ 08543-0400; United States of America<br>MK-336-001<br>Yes<br>unpublished | Y | BASF |
| II A 7.2.2/2 | Bissinger H.J. | 1996b | Metconazole (CL 900768) 60 g/l SL (SF09381): The volatilization behaviour from soil and plant surface<br>Cyanamid Forschung GmbH; Schwabenheim; Germany Fed.Rep.<br>MK-640-005<br>Yes<br>unpublished | N | BASF |
| II A 7.2.2/3 | Mangels G. | 1996a | Metconazole (AC 900768): Estimation of the photochemical oxidation rate in the atmosphere<br>American Cyanamid Company; Princeton NJ 08543-0400; United States of America<br>MK-324-002<br>No<br>unpublished | N | BASF |

## A.8.2 Environmental fate and behaviour of the formulation (Annex IIIA 9)

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| III A 9.1.3/1 | Rice P. | 2002 | Predicted environmental concentrations of BAS 555 F (Metconazole) in soil, groundwater, surface water, and sediment following applications of CARAMBA (Metconazole 60 g a.s./l SL) to cereals and oilseed rape in the EU<br>BASF Corporation Agro Research; Princeton NJ 08543-0400; United States of America<br>MK-601-003<br>No<br>unpublished | Y | BASF |
| III A 9.2.1/1 | Rice P. | 2002 | Predicted environmental concentrations of BAS 555 F (Metconazole) in soil, groundwater, surface water, and sediment following applications of CARAMBA (Metconazole 60 g a.s./l SL) to cereals and oilseed rape in the EU<br>BASF Corporation Agro Research; Princeton NJ 08543-0400; United States of America<br>MK-601-003<br>No<br>unpublished | Y | BASF |
| III A 9.2.3/1 | Rice P. | 2002 | Predicted environmental concentrations of BAS 555 F (Metconazole) in soil, groundwater, surface water, and sediment following applications of CARAMBA (Metconazole 60 g a.s./l SL) to cereals and oilseed rape in the EU<br>BASF Corporation Agro Research; Princeton NJ 08543-0400; United States of America<br>MK-601-003<br>No<br>unpublished | Y | BASF |
| III A 9.2.4/1 | Rice P. | 2002 | Predicted environmental concentrations of BAS 555 F (Metconazole) in soil, groundwater, surface water, and sediment following applications of CARAMBA (Metconazole 60 g a.s./l SL) to cereals and oilseed rape in the EU<br>BASF Corporation Agro Research; Princeton NJ 08543-0400; United States of America<br>MK-601-003<br>No<br>unpublished | Y | BASF |

## A.9 Ecotoxicology

### A.9.1 Ecotoxicology of the active substance (Annex IIA 8)

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 8.1.1/1 | Hakin B. et al. | 1992 | WL 148271: Acute oral toxicity (LD50) to bobwhite quail<br>Huntingdon Research Centre; Huntingdon; United Kingdom<br>MK-505-001<br>Yes<br>unpublished | N | BASF |
| II A 8.1.1/2 | Johnson A. et al. | 1998 | Metconazole 85:15 cis:trans, Metconazole 95% cis, A comparative acute oral toxicity (LD50) study with northern bobwhite<br>Huntingdon Life Sciences Ltd.; Huntingdon Cambridgeshire PE28 4HS; United Kingdom<br>MK-505-007<br>Yes<br>unpublished | N | BASF |
| II A 8.1.2/1 | Hakin B. et al. | 1991a | Dietary toxicity (LC50) of WL148271 to the bobwhite quail<br>Huntingdon Research Centre; Huntingdon; United Kingdom<br>MK-505-002<br>Yes<br>unpublished | N | BASF |
| II A 8.1.2/2 | Hakin B. et al. | 1991b | Dietary toxicity (LC50) of WL148271to the mallard duck<br>Huntingdon Research Centre; Huntingdon; United Kingdom<br>MK-505-003<br>Yes<br>unpublished | N | BASF |
| II A 8.1.3/1 | Hakin B.et al. | 1992 | WL136184 Reproduction in the bobwhite quail<br>Huntingdon Research Centre; Huntingdon; United Kingdom<br>MK-505-005<br>Yes<br>unpublished | N | BASF |
| II A 8.1.3/2 | Hakin B.et al | 1992 | WL136184 Reproduction in the mallard duck<br>Huntingdon Research Centre; Huntingdon; United Kingdom<br>MK-505-004<br>Yes<br>unpublished | N | BASF |
| II A 8.1.3/3 | Johnson A.J.,Ahmed S. | 1999 | Metconazole 85:15 cis:trans, assessment to determine the effects on reproduction in the northern bobwhite<br>Huntingdon Life Sciences; East Millstone, New Jersey 08875-2360; United States of America<br>MK-505-010<br>Yes<br>unpublished | N | BASF |
| II A 8.2.1/1 | Toy R. | 1990 | WL148271 (KNF-S-474m): Acute toxicity to Salmo gairdneri, Daphnia magna and Selenastrum capricornutum<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-510-001<br>Yes<br>unpublished | N | BASF |
| II A 8.2.1/2 | Toy R. | 1991 | WL148271 (KNF-S-474m): 96 h acute toxicity to Pimephales promelas<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-511-001<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 8.2.1/3 | Mitchell G. et al. | 1996a | Acute toxicity of AC 900,768 (metconazole) to common carp (Cyprinus carpio) under flow-through test conditions<br>T. R. Wilbury Laboratories, Inc.; Marblehead, Massachusetts 01945; United States of America<br>MK-511-002<br>Yes<br>unpublished | N | BASF |
| II A 8.2.2.1/1 | Mitchell G. et al. | 1996b | Toxicity of AC 900,768 (metconazole) technical to rainbow trout (Oncorhynchus mykiss) in a flow-through prolonged toxicity test<br>T. R. Wilbury Laboratories, Inc.; Marblehead, Massachusetts 01945; United States of America<br>MK-513-001<br>Yes<br>unpublished | N | BASF |
| II A 8.2.2.2/1 | Zok S. | 2001 | BAS 555 F - Early life-stage toxicity test on the rainbow trout (Oncorhynchus mykiss)<br>BASF AG; Ludwigshafen/Rhein; Germany Fed.Rep.<br>MK-512-002<br>Yes<br>unpublished | Y | BASF |
| II A 8.2.3/1 | Kao M.L. | 1996 | CL 900,768 (Metconazole): Bioconcentration and elimination of [Triazole-3,5-14c] CL 900,768-derived residues by bluegill sunfish<br>ABC Laboratories Inc.; Columbia, Missouri 65202; United States of America<br>MK-519-002<br>Yes<br>unpublished | N | BASF |
| II A 8.2.3/2 | | 2002 | BAS 555 F (AC 900768, Metconazole): Bioconcentration and elimination of p-chlorophenyl-U-14C] AC 900768-derived residues by bluegill sunfish<br>ABC Laboratories Inc.; Columbia, Missouri 65202; United States of America<br>MK-519-003<br>Yes<br>unpublished | Y | BASF |
| II A 8.2.4/1 | Toy R. | 1990 | WL148271 (KNF-S-474m): Acute toxicity to Salmo gairdneri, Daphnia magna and Selenastrum capricornutum<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-510-001<br>Yes<br>unpublished | N | BASF |
| II A 8.2.5/1 | Jatzek H.-J. | 2002 | BAS 555 F - Determination of the chronic effect on the reproduction of the water flea Daphnia magna STRAUS<br>BASF AG; Ludwigshafen/Rhein; Germany Fed.Rep.<br>MK-523-002<br>Yes<br>unpublished | Y | BASF |
| II A 8.2.6/1 | Toy R. | 1990 | WL148271 (KNF-S-474m): Acute toxicity to Salmo gairdneri, Daphnia magna and Selenastrum capricornutum<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-510-001<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 8.2.7/1 | England D.C. et al. | 1997 | Effects of AC 900,768 (metconazole) on the development of sediment-dwelling larvae of chironomus riparius in a water-sediment system<br>ABC Laboratories Inc.; Columbia, Missouri 65202; United States of America<br>MK-549-006<br>Yes<br>unpublished | N | BASF |
| II A 8.3.1.1/1 | Harrison E.G.,Hillaby J.M. | 1991 | WL148271;KNF-S-474m : Acute topical and oral toxicity to the honey bee, Apis mellifera L.<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-541-001<br>Yes<br>unpublished | N | BASF |
| II A 8.3.2/1 | Candolfi M.P. | 1996 | Laboratory contact toxicity test with AC 900,768 in a 60 g a.i./L soluble liquid formulation on the ground beetle Poecilus cupreus (Coleoptera: carabidae)<br>Springborn Laboratories (Europe) AG; Horn; Switzerland<br>MK-549-002<br>Yes<br>unpublished | N | BASF |
| II A 8.3.2/2 | Mead-Briggs M.,Strnad S. | 1998b | An extended laboratory test to determine the effects of fresh residues of metconazole (AC 900768) in a 60 g/L soluble concentrate (60 SL) formulation (SF09381), on spiders of the genus Pardosa (Araneae, lycosidae)<br>Agrochemical Evaluation Unit; Southampton SO16 7PX; United Kingdom<br>MK-549-009<br>Yes<br>unpublished | N | BASF |
| II A 8.3.2/3 | Candolfi M.,van der Kolk J. | 1996b | Laboratory contact toxicity test with AC 900,768 in a 60 g ai/L soluble liquid formulation on the sevenspotted lady beetle Coccinella septempunctata L. (Coleoptera, coccinellidae)<br>Springborn Laboratories (Europe) AG; Horn; Switzerland<br>MK-549-003<br>Yes<br>unpublished | N | BASF |
| II A 8.3.2/4 | Mead-Briggs M.,Strnad S. | 1998a | An extended laboratory test to determine the effects of fresh residues of metconazole (AC 900768) in a 60 g/L soluble concentrate (60 SL) formulation (SF09381), on Coccinella septempunctata (Coleoptera, coccinellidae)<br>Agrochemical Evaluation Unit; Southampton SO16 7PX; United Kingdom<br>MK-549-008<br>Yes<br>unpublished | N | BASF |
| II A 8.3.2/5 | Vinall S.,Strnad S. | 1998 | An extended laboratory test to determine the effects of fresh residues of metconazole (AC 900768) in a 60 g/L soluble concentrate (60 SL) formulation (SF09381), on the plant-active predator Orius laevigatus (Heteroptera; Anthocoridae)<br>Agrochemical Evaluation Unit; Southampton SO16 7PX; United Kingdom<br>MK-560-009<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 8.3.2/6 | Candolfi M.,van der Kolk J. | 1996a | Laboratory contact toxicity test with AC 900,768 in a 60 g ai/L soluble liquid formulation on the parasitic wasp, Aphidius rhopalosiphi (Hymenoptera: braconidae)<br>Springborn Laboratories (Europe) AG; Horn; Switzerland<br>MK-549-001<br>Yes<br>unpublished | N | BASF |
| II A 8.3.2/7 | Mead-Briggs M.,Strnad S. | 1998c | An extended laboratory test to determine the effects of fresh residue of metconazole (AC 900768) in a 60 g/L soluble concentrate (60 SL) formulation (SF09381), on Aphidius rhopalosiphi (Hymenoptera, braconidae)<br>Agrochemical Evaluation Unit; Southampton SO16 7PX; United Kingdom<br>MK-549-010<br>Yes<br>unpublished | N | BASF |
| II A 8.3.2/8 | Candolfi M.,van der Kolk J. | 1996c | Laboratory contact toxicity test with AC 900,768 in a 60 g ai/L Soluble Liquid Formulation on the predacious mite, Typhlodromus pyri scheuten (Acari, Phytoseiidae)<br>Springborn Laboratories (Europe) AG; Horn; Switzerland<br>MK-549-004<br>Yes<br>unpublished | N | BASF |
| II A 8.3.2/9 | Engelhard E.K. et al. | 1998b | A laboratory contact toxicity test with drift rates of AC 900768 in a 60g ai/L soluble concentrate formulation (SF09381) on the predaceous mite, Typhlodromus pyri scheuten (Acari, phytoseiidae)<br>Springborn Laboratories (Europe) AG; Horn; Switzerland<br>MK-549-007<br>Yes<br>unpublished | N | BASF |
| II A 8.3.2/10 | Taruza S.,Strnad S. | 2002 | An aged-residue extended laboratory test to determine the effects of Metconazole (AC 900768), in a 60 g/L SL formulation (BAS 555 00 F), on the predatory mite, Typhlodromus pyri (Acari: phytoseiidae)<br>Mambo-Tox Ltd.; Southampton; United Kingdom<br>MK-560-020<br>Yes<br>unpublished | Y | BASF |
| II A 8.4.1/1 | Hillaby J.M.,Harrison E.G. | 1991 | WL136184 (KNF-S-474c) : Toxicity to the earthworm, Eisenia foetida, in a 14 day artificial soil test<br>Sittingbourne Research Centre; Kent ME9 8AG; United Kingdom<br>MK-531-001<br>Yes<br>unpublished | N | BASF |
| II A 8.4.2/1 | Engelhard E.K. et al. | 1998a | A chronic toxicity and reproduction test exposing the earthworm Eisenia fetida to AC 900768 technical material in OECD artificial soil, following the ISO-draft (ISO/DIA 11268-2)<br>Springborn Laboratories (Europe) AG; Horn; Switzerland<br>MK-534-001<br>Yes<br>unpublished | N | BASF |
| II A 8.5/1 | van der Kolk J. | 1996 | The effects of AC 900,768 in a 60 g a.i./L soluble liquid formulation on the respiration and nitrification of soil microflora<br>Springborn Laboratories (Europe) AG; Horn; Switzerland<br>MK-625-003<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| II A 8.6/1 | Aufderheide J. et al. | 2000b | Effect of metconazole (AC 900768) 60 g/L SL (SF 09381) on the seedling emergence and growth of selected non-target terrestrial plants<br>ABC Laboratories Inc.; Columbia, Missouri 65202; United States of America<br>MK-540-002<br>Yes<br>unpublished | N | BASF |
| II A 8.6/2 | Aufderheide J. et al. | 2000a | Effect of metconazole (AC 900768) 60 g/L SL (SF 09381) on the vegetative vigor of selected non-target terrestrial plants<br>ABC Laboratories Inc.; Columbia, Missouri 65202; United States of America<br>MK-540-001<br>Yes<br>unpublished | N | BASF |
| II A 8.7/1 | Heim D.,Yan Z. | 1999 | Metconazole (AC 900768): Activated sludge, respiration inhibition test<br>ABC Laboratories Inc.; Columbia, Missouri 65202; United States of America<br>MK-690-005<br>Yes<br>unpublished | N | BASF |

## A.9.2 Ecotoxicology of the formulation (Annex IIIA 10)

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| III A 10.2.1/1 | Zok S. | 2001 | Acute toxicity study on the rainbow trout (Oncorhynchus mykiss) in a static system over 96 hours<br>BASF AG; Ludwigshafen/Rhein; Germany Fed.Rep.<br>MK-560-019<br>Yes<br>unpublished | Y | BASF |
| III A 10.2.1/2 | Mitchell G.C. et al. | 1998 | Acute toxicity of AC 900768 (metconazole) 60 g/l SL formulation (SF09381) to Daphnia magna under static test conditions<br>T. R. Wilbury Laboratories, Inc.; Marblehead, Massachusetts 01945; United States of America<br>MK-560-007<br>Yes<br>unpublished | N | BASF |
| III A 10.2.1/3 | Aufderheide J.A.,Mitchell G.C. | 1998 | AC900768 (metconazole) 60 g/l SL formulation (SF09381): Acute toxicity to Daphnia magna in a static water system<br>ABC Laboratories Europe; Coleraine; Northern Ireland<br>MK-560-008<br>Yes<br>unpublished | N | BASF |
| III A 10.2.1/4 | Mitchell G.C. et al. | 1996b | Effects of a AC 900768 (metconazole) 60 g/l SL formulation (SF09381) on the growth of Selenastrum capricornutum<br>T. R. Wilbury Laboratories, Inc.; Marblehead, Massachusetts 01945; United States of America<br>MK-560-004<br>Yes<br>unpublished | N | BASF |

| Annex point(s) | Author(s) | Year | Title<br>Source<br>BASF Document No.<br>GLP or GEP status<br>Published or not | Data Protection Claimed Y/N | Owner |
|---|---|---|---|---|---|
| III A 10.2.1/5 | Mitchell G.C. et al. | 2001 | Acute toxicity of formulation SF 09747 to Daphnia magna under static test conditions<br>T. R. Wilbury Laboratories, Inc.; Marblehead, Massachusetts 01945; United States of America<br>MK-560-018<br>Yes<br>unpublished | Y | BASF |
| III A 10.2.4/1 | Mitchell G.C. et al. | 1996a | Toxicity of AC 900,768 (metconazole) 60 g/l SL formulation (SF09381) to rainbow trout (Oncorhynchus mykiss) in a flow-through prolonged toxicity test<br>T. R. Wilbury Laboratories, Inc.; Marblehead, Massachusetts 01945; United States of America<br>MK-560-003<br>Yes<br>unpublished | N | BASF |
| III A 10.2.4/2 | Mitchell G.C. et al. | 1996c | Chronic toxicity of AC 900,768 (metconazole) in a 60 g/l SL formulation (SF09381) during the complete life-cycle of Daphnia magna under static renewal test conditions<br>T. R. Wilbury Laboratories, Inc.; Marblehead, Massachusetts 01945; United States of America<br>MK-560-005<br>Yes<br>unpublished | N | BASF |
| III A 10.4.1/1 | Engelhard E.K. et al. | 1998 | An acute contact and oral toxicity study with AC 900768 in a 60 g ai/L soluble concentrate (60 SL) formulation (SF 09381) on the honey bee Apis mellifera based on EPPO guideline # 170<br>Springborn Laboratories (Europe) AG; Horn; Switzerland<br>MK-560-006<br>Yes<br>unpublished | N | BASF |
| III A 10.4.1/2 | Schmitzer S. | 1999b | Laboratory testing for toxicity (acute contact and oral LD50) of metconazole (CL 900,768) 60 g a.i./L SL (SF 09381) to honey bees (Apis mellifera L.) (Hymenoptera, apidae)<br>Institut für Biologische Analytik und Consulting IBACON GmbH; Rossdorf; Germany Fed.Rep.<br>MK-541-008<br>Yes<br>unpublished | N | BASF |
| III A 10.6.1.1/1 | Candolfi M.P.,Ott U. | 1996 | AC 900,768 in a 60 g ai/L soluble liquid formulation (SF09381): 14-day acute toxicity test with the earthworm (Eisenia foetida) based on OECD guideline # 207<br>Springborn Laboratories (Europe) AG; Horn; Switzerland<br>MK-560-002<br>Yes<br>unpublished | N | BASF |
| III A 10.6.2/1 | Walker H.M. et al. | 2001a | A field evaluation of the effects of metconazole (AC 900768) in a 60 g/L suspended liquid (SL) formulation (1027) on the degradation of buried leaf material<br>Ecotox Ltd; Tavistock Devon PL19 0YU; United Kingdom<br>MK-560-015<br>Yes<br>unpublished | N | BASF |
| III A 10.6.2/2 | Walker H.M. et al. | 2001b | A field evaluation of the effects of metconazole (AC 900768) in a 60 g/L suspended liquid (SL) formulation (SF 09381) on the degradation of buried leaf material<br>Ecotox Ltd; Tavistock Devon PL19 0YU; United Kingdom<br>MK-560-017<br>Yes<br>unpublished | N | BASF |