

FORM A



**REPUBLIC OF KENYA  
PEST CONTROL PRODUCTS ACT, CAP 346, 1982.**

**APPLICATION FOR THE REGISTRATION OF A PEST CONTROL PRODUCT**

**Information for Applicants**

1. The application form must be completed by a duly authorized person.
2. The application must be submitted in triplicate to:  
**The Managing Director/Secretary,  
 Pest Control Products Board (PCPB)  
 P.O. Box 13794 - 00800 Nairobi.  
 E-mail address: [pcpboard@todays.co.ke](mailto:pcpboard@todays.co.ke)/[md@pcpb.or.ke](mailto:md@pcpb.or.ke)  
 Tel: 254- 020 – 8021846/7/8 Fax: 254- 020- 8021865**
3. Every application must be accompanied by:-
  - a) application fee as prescribed (Registration fee is payable upon approval by the Board).
  - b) 3 copies of the draft label as per PCPB requirements.
4. The applicant may be required to submit:-
  - a) a sample of the pest control product;
  - b) a sample of the technical grade of its active ingredient;
  - c) a sample of the laboratory standard of its active ingredient;
  - d) any other sample as may be required by the Board.
5. List I and II are supplied as a check list and an index to ensure that the applicant has provided the relevant data.
6. The application must be accompanied by a technical dossier as per PCPB data requirements (Lists I and II).
7. An applicant who is not a resident in Kenya must appoint an agent permanently resident in Kenya and duly recognized by the Pest Control Products Board.

**PURPOSE OF APPLICATION (tick as appropriate)**

|  |                          |
|--|--------------------------|
| a. Pest control product containing a new active ingredient   | <input type="checkbox"/> |
| b. Pest control product where source of active and/or formulation is not identical to that of a registered product | <input type="checkbox"/> |
| c. Registration transfer   | <input type="checkbox"/> |
| d. Amendments to existing registration   | <input type="checkbox"/> |
| e. Other (Explain) .....   |                          |
| .....  |                          |
| .....  |                          |

|   |
|---|
| Will the product be marketed under own label?    Yes <input type="checkbox"/> No <input type="checkbox"/> |
| If no specify.....  |
| Proposed date of marketing.....   |

|  |                    |
|--|--------------------|
| <b>1. APPLICANT</b>  |                    |
| 1.1 Identification   |                    |
| Name of applicant / Corporate name of company  |                    |
| Business Reg No.:  |                    |
| Name of registration holder  |                    |
| Name of local agent in country: (if different from registration holder)                |                    |
| 1.2 Status: (Importer/formulator/distributor)  |                    |
| Business Registration No.:   |                    |
| 1.3 Physical Address   |                    |
| 1.4 Postal Address:  |                    |
| 1.5 Telephone: (and area code)   |                    |
| 1.6 Fax: (and area code)   |                    |
| 1.7 e-Mail:  |                    |
| <b>2. PRODUCT</b>  |                    |
| 2.1 Designation (Description of product)   | Trade name:        |
|  | Trade mark:        |
|  | Trade mark holder: |
| 2.2. Function of product: (eg. Insecticide, herbicide etc.)                            |                    |
| 2.3 Intended use: (Veterinary, public health, industrial, agriculture, forestry, etc.) |                    |
| 2.4 Target pest(s) and host(s)   |                    |
| 2.5 Method, dosage rates and frequency of application:                                 |                    |

|   |                                  |  |              |
|---|----------------------------------|--|--------------|
| 2.6 Type of formulation: (eg. EC, WP, etc.)   |                                  | Crop Life International (CLI*) Code (if available) |              |
| 2.7a) Is the product registered in country of manufacture?  | Yes <input type="checkbox"/>     | No <input type="checkbox"/>                        |              |
|   | If no, give reasons              |  |              |
| b) Is the product registered in the country of formulation?   | Yes <input type="checkbox"/>     | No <input type="checkbox"/>                        |              |
|   | If no, give reasons              |  |              |
| 2.8 Registration in SEARCH* country/ies: (names)  |                                  |  |              |
| 2.9 Existing registration No(s) and country(s).   |                                  |  |              |
| 2.10 Customs Tariff Code: (Brussels Tarrif Nomenclature)  |                                  |  |              |
| <b>3. COMPOSITION OF ACTIVE INGREDIENT(S) (Technical grade)</b> (Information on a.i may be attached in sealed envelope) |                                  |  |              |
| Active ingredient(s): (Common name/s)   | Manufacturer: (Name and address) | Minimum a.i.% purity                               | a.i. Range % |
|   |                                  |  |              |
| <b>4. FORMULATION</b>   |                                  |  |              |
| 4.1 Formulator: (Name)  |                                  |  |              |
| Postal Address:   |                                  |  |              |
| Physical address:   |                                  |  |              |
| 4.2 Internal code:  |                                  |  |              |
| 4.3 Composition (Information on composition may be attached in sealed envelope)   |                                  |  |              |
| Ingredients and Function:   | g/l                              | g/kg   | Range        |
|   |                                  |  |              |

\* Formerly GCPF

\* SEARCH - Southern and Eastern African Regulation Committee on Harmonisation of Pesticide Registration

| <b>5. TOXICOLOGY (formulated product)</b>   |  |  |   |
|---|--|--|---|
| 5.1 Rat:  | Acute Oral<br>(LD <sub>50</sub> mg/kg) | Acute Dermal<br>(LD <sub>50</sub> mg/kg) | Inhalation LC <sub>50</sub> (mg/l/hour) |
|   | Experimental                           | Experimental                             | Experimental                            |
|   | Calculated                             | Calculated                               | Calculated                              |
| 5.2 Rabbit:   | Skin irritation                        | Eye irritation                           |   |
|   | None                                   |  |   |
|   | Mild                                   |  |   |
|   | Moderate                               |  |   |
|   | Severe                                 |  |   |
| 5.3 Skin Sensitization in guinea pig: (tick)  |  | None <input type="checkbox"/>            | Mild <input type="checkbox"/>           |
|   |  | Moderate <input type="checkbox"/>        | Severe <input type="checkbox"/>         |
| 5.4 WHO classification:   | Ia                                     | Ib                                       | II                                      |
|   |  |  | III                                     |
| 5.5. Summary of other mammalian toxicological studies: eg. livestock, wildlife, poultry, pets |  |  |   |
| <b>5.6 Summary of environmental effects</b>   |  |  |   |
| 5.6.1 Toxicity to bees:   |  |  |   |
| 5.6.2 Toxicity to fish and other aquatic organisms:   |  |  |   |
| 5.6.3 Toxicity to birds:  |  |  |   |
| 5.6.4 Toxicity to earthworms and soil micro-organisms:  |  |  |   |
| 5.6.5 Toxicity to other non-target organisms:   |  |  |   |
| 5.6.6 Persistence in environment:   |  |  |   |
| 5.6.7 Other effects: Specify  |  |  |   |
| <b>6. PACKAGING</b>   |  |  |   |
| 6.1 Packaging material / container:   |  |  |   |
| 6.2 Pack size(s):   |  |  |   |
| 6.3 Disposal of empty container(s):   |  |  |   |

|   |   |
|---|---|
| <b>7. OTHER SPECIFIC REQUIREMENTS</b>   |   |
| 7.1 Operator exposure   |   |
| a). Dermal absorption.  |   |
| b). Likely operator exposure under field conditions   |   |
| c). Available toxicological data relating to other ingredients in formulation<br>(non-active additives in formulation).   |   |
| <b>8. DECLARATION</b>   |   |
| For and on behalf of ..... I hereby certify that the above mentioned information and data provided in support of this application are to the best of my knowledge true, correct and complete. |   |
| .....<br>Name in full (printed)   | .....<br>Signature  |
| .....<br>Official Title   | .....<br>Date   |
| Official Stamp<br>of Applicant / Company  | <b>FOR OFFICIAL USE</b><br><br>Remarks<br>.....<br>.....<br>.....<br>.....<br>Signed: ..... Date: ..... |

NOTE: The format of this application is recognized by all SEARCH countries.

**ACTIVE INGREDIENT: DOSSIER INDEX**

The dossier accompanying the application must provide full details (as applicable) of the information requested in this list. i.e., details of the methods used, results of toxicological and ecotoxicological studies, methods of analysis, etc. Applicants are advised to use CIPAC methods for physical and chemical properties. Numbering used in the dossier must correspond to that used in the application form. If the product contains more than one active ingredient, compile a separate dossier for each active ingredient.

| <b>ACTIVE INGREDIENT(a.i)</b>  | <b>Annex No. in dossier if study included</b> | <b>Official use only</b> |
|--|---|--------------------------|
| <b>1. DESIGNATION/IDENTITY OF a.i.</b>   |   |                          |
| 1.1 Common name (ISO)  |   |                          |
| 1.2 Manufacturer or Development code   |   |                          |
| 1.3 Source, Name and Address of manufacturer and address and location of manufacturing plants. |   |                          |
| 1.4 Methods of manufacture(synthesis pathways), may be sent direct to PCPB.                    |   |                          |
| 1.5 Chemical name (IUPAC)  |   |                          |
| 1.6 Chemical group   |   |                          |
| 1.7 Structural formula   |   |                          |
| 1.8 Empirical formula  |   |                          |
| 1.9 Patent status  |   |                          |
| Is the a.i. under patent?  |   |                          |
| Who is patent holder   |   |                          |
| Expiry date  |   |                          |
| 1.10 Molecular mass  |   |                          |
| 1.10CAS Number   |   |                          |

**2. PHYSICAL AND CHEMICAL PROPERTIES**

|   |  |  |
|---|--|--|
| 2.1 Physical state  |  |  |
| 2.2 Colour  |  |  |
| 2.3 Odour   |  |  |
| 2.4 Density at 20°C   |  |  |
| 2.5 Vapour pressure at 20/25°C  |  |  |
| 2.6 Volatility  |  |  |
| 2.7 Hydrolysis DT <sub>50</sub> ..... Days ..... °C ..... pH                              |  |  |
| 2.8 Photolysis  |  |  |
| 2.9 Solubility in water ..... °C ..... pH   |  |  |
| 2.10 Solubility in organic solvents   |  |  |
| 2.11 n-octanol/water partition coefficient  |  |  |
| 2.12 Boiling point °C   |  |  |
| 2.13 Melting point °C   |  |  |
| 2.14 Decomposition temperature °C   |  |  |
| 2.15 Method of Analysis and Impurities  |  |  |
| 2.16 Stability in water, hydrolysis rate, effect of light, identity of breakdown products |  |  |
| 2.17 Stability in organic solvents used in formulation                                    |  |  |
| 2.18 Stability in air; effect of light, identity of breakdown products                    |  |  |
| 2.19 Thermal stability, identity of breakdown product.                                    |  |  |
| 2.20 Flammability   |  |  |
| 2.21 Flash point  |  |  |
| 2.22 Explosive properties   |  |  |
| 2.23 Oxidizing properties   |  |  |

| ACTIVE INGREDIENT  | Annex No. in dossier if study included | Official use only |
|--|--|-------------------|
| 2.24 Absorption spectra – UV/Visible, infra-red, IMR, MS |  |                   |
| 2.25 Reactivity towards container material               |  |                   |

### 3. TOXICOLOGY

|  |  |  |
|--|--|--|
| 3.1 ADI  |  |  |
| 3.2 Acute oral LD <sub>50</sub> mg/kg rat/rabbit |  |  |
| 3.3 Acute dermal LD <sub>50</sub> mg/kg (rat)    |  |  |
| 3.4 Inhalation LC <sub>50</sub> mg/l hour (rat)  |  |  |
| 3.5 Skin irritation (rabbit)                     |  |  |
| 3.6 Eye irritation (rabbit)                      |  |  |
| 3.7 Skin sensitisation (guinea pig)              |  |  |
| 3.8 Reproduction (specify species)               |  |  |
| 3.9 Subchronic toxicity 90 day NOEL mg/kg/day    |  |  |
| 3.10 Chronic toxicity NOEL mg./kg/day            |  |  |
| 3.11 Carcinogenicity (life time) NOEL mg/kg/day  |  |  |
| 3.12 Neurotoxicity NOEL mg/kg/day                |  |  |
| 3.13 Teratogenicity NOEL mg/kg/day               |  |  |
| 3.14 Mutagenicity /Genotoxicity                  |  |  |
| 3.15 Metabolism (rat)                            |  |  |
| 3.16 Other studies                               |  |  |

### 4. ACTIVE INGREDIENT

| ECO-TOXICOLOGY (Active ingredient – technical grade) | Annex No. in dossier if study included | Official use only |
|--|--|-------------------|
| 4.1 Birds (2 species)                                | LD <sub>50</sub> mg/kg                 |                   |
|  | NOEL                                   |                   |
|  | LD <sub>50</sub> mg/kg                 |                   |
|  | NOEL                                   |                   |
| 4.2 Fish (2 species)                                 | Reproduction                           |                   |
|  | LD <sub>50</sub> mg/kg                 |                   |
|  | NOEL                                   |                   |
|  | LD <sub>50</sub> mg/kg                 |                   |
|  | NOEL                                   |                   |
| 4.3 Daphnia  | Reproduction                           |                   |
|  | BCF                                    |                   |
|  | LC <sub>50</sub> mg/l                  |                   |
| 4.4 Algae  | NOEL                                   |                   |
|  | LC <sub>50</sub> mg/l                  |                   |
| 4.5 Bees   | NOEL                                   |                   |
|  | LD <sub>50</sub> µg/bee                |                   |
| 4.6 Earthworms                                       | LC <sub>50</sub> mg/kg                 |                   |
| 4.7 Soil micro-organisms                             |  |                   |

### 5. BEHAVIOUR IN ENVIRONMENT

|   |  |  |
|---|--|--|
| 5.1 Behaviour, ways of degradation, degradation products in soil: |  |  |
| 5.11 Major metabolites  |  |  |
| 5.12 DT <sub>50</sub> (days)                                      |  |  |
| 5.13 Mobility of a.i.   |  |  |
| 5.14 Adsorption / desorption                                      |  |  |
| 5.15 Mobility of metabolites                                      |  |  |

|  | Annex No. in dossier if study included. | For official use only. |
|--|---|------------------------|
| 5.2 Behaviour, ways of degradation, degradation products in water  |   |                        |
| 5.21 Major Metabolites   |   |                        |
| 5.22 DT <sub>50</sub> (days)   |   |                        |
| 5.23 Surface   |   |                        |
| 5.24 Ground  |   |                        |
| 5.3 Behaviour, ways of degradation, degradation products in air. Rate and route of degradation in air (for fumigants and other volatile products). |   |                        |
| <b>6. MODE OF ACTION</b>   |   |                        |
| <b>7. RESIDUES</b>   |   |                        |
| 7.1 Major metabolites  |   |                        |
| 7.2 Metabolism   |   |                        |
| 7.3 Behaviour of residues  |   |                        |
| 7.4 Adsorption   |   |                        |
| 7.5 MRL codex  |   |                        |
| 7.6 MRL crops  |   |                        |
| 7.7 Method of residue analysis   |   |                        |
| <b>8. OTHER SPECIFIC REQUIREMENTS</b>  |   |                        |
| 8.1 Residue data from a GLP certified laboratory.  |   |                        |
| 8.2 Proposed pre-harvest intervals, withholding periods in case of post-harvest use.   |   |                        |
| 8.3 Effect on taint, odour, taste, or other quality aspects due to residues in or on fresh or processed products.                                  |   |                        |
| 8.4 Effects on industrial processing and/or household preparation on the nature and magnitude of residues.   |   |                        |
| 8.5 Residue data in succeeding or rotational crops where presence of residues might be expected.   |   |                        |



**FORM A, LIST II**

**FORMULATED PRODUCT: DOSSIER INDEX**

The dossier accompanying the form should provide more details of the information requested in this list. Applicants are advised to use CIPAC methods for Physical/Chemical properties. Summaries of the methods used and the results of toxicological and ecotoxicological studies, methods of analysis etc. should be given. Numbering used in the dossier must correspond with that used in Form A.

| <b>FORMULATED PRODUCT</b>   |   |                          |
|---|---|--------------------------|
| <b>1. PHYSICAL AND CHEMICAL PROPERTIES</b>  | <b>Annex No. in dossier if study included</b> | <b>Official use only</b> |
| 1.1 Source, Name and Address of formulator and address and location of formulation plant.     |   |                          |
| 1.2 Source and specifications for components included in the formulation                      |   |                          |
| 1.3 Physical state / formulation type   |   |                          |
| 1.4 Colour  |   |                          |
| 1.5 Odour   |   |                          |
| 1.6 Effects of light, air, temperature, water on technical characteristics of the formulation |   |                          |
| 1.7 Storage stability in proposed packaging   |   |                          |
| 1.8 Shelf life  |   |                          |
| 1.9 Density   |   |                          |
| 1.10 Bulk density   |   |                          |
| 1.11 Flammability   |   |                          |
| 1.12 Flash point  |   |                          |
| 1.13 Explosivity  |   |                          |
| 1.14 In-compatibility with other pest control products  |   |                          |
| 1.15 pH   |   |                          |
| 1.16 pH of 1% aqueous dilution  |   |                          |
| 1.17 Oxidizing properties   |   |                          |
| 1.18 Corrosiveness  |   |                          |
| 1.19 Water content  |   |                          |
| 1.20 Wettability  |   |                          |
| 1.21 Solubility in water  |   |                          |
| 1.22 Persistent foaming   |   |                          |
| 1.23 Particle size  |   |                          |
| 1.24 Suspensibility / emulsifiability   |   |                          |
| 1.25 Emulsion stability   |   |                          |
| 1.26 Volatility   |   |                          |
| 1.27 Viscosity  |   |                          |
| 1.28 Other properties (where applicable)  |   |                          |
| 1.29 Methods of Analysis  |   |                          |
| <b>2. TOXICOLOGY</b>  | <b>Annex No. in dossier if study included</b> | <b>Official use only</b> |
| 2.1 Rat<br>Acute oral LD <sub>50</sub> mg/kg  |   |                          |
| 2.2 Acute dermal LD <sub>50</sub> mg/kg   |   |                          |
| 2.3 Inhalation LD <sub>50</sub> mg/l /hour  |   |                          |
| 2.4 Rabbit<br>Skin irritation   |   |                          |
| 2.5 Eye irritation  |   |                          |
| 2.6 Sensitisation in guinea pig   |   |                          |
| 2.7 WHO classification  |   |                          |
| 2.8 Other studies   |   |                          |

|  | <b>Annex No. in dossier if study included</b> | <b>Official use only</b> |
|--|---|--------------------------|
| <b>3. EMERGENCY PROCEDURES IN CASE OF ACCIDENTAL EXPOSURE OR POISONING</b> |   |                          |
| 3.1 Symptoms of human poisoning  |   |                          |
| 3.2 Mode of action in man  |   |                          |
| 3.3 First aid treatment  |   |                          |
| 3.4 Skin contact   |   |                          |
| 3.5 Eye contact  |   |                          |
| 3.6 Inhalation   |   |                          |
| 3.7 Ingestion  |   |                          |
| 3.8 Antidote   |   |                          |
| 3.9 Note to physician  |   |                          |
| <b>4. EMERGENCY PROCEDURES IN CASE OF FIRE/SPILLAGE</b>                    |   |                          |
| 4.1 Fire fighting measures   |   |                          |
| 4.2 Procedures in case of spillage   |   |                          |

| <b>5. USES (New label claims with this application)</b>  |   |                          |
|--|---|--------------------------|
| <b>FORMULATED PRODUCT</b>  | <b>Annex No. in dossier if study included</b> | <b>Official use only</b> |
| 5.1 Crop/area of use   |   |                          |
| 5.2 Target organism  |   |                          |
| 5.3 Rate   |   |                          |
| 5.4 Stage of treatment   |   |                          |
| 5.5 Directions for use   |   |                          |
| 5.6 Residue data and pre-harvest interval  |   |                          |
| 5.7 Phytotoxicity  |   |                          |
| 5.8 Contraindications  |   |                          |
| <b>6. MINIMUM LABEL REQUIREMENTS –See PCPB label requirements (provided separately).</b>   |   |                          |
| <b>7. OTHER SPECIFIC REQUIREMENTS</b>  |   |                          |
| 7.1 Medium surveillance, on manufacturing plant personnel  |   |                          |
| 7.2 Health records of occupationally exposed personnel, - industry, agriculture, forestry etc.   |   |                          |
| 7.3 Proposed packaging<br><ul style="list-style-type: none"> <li>. Type of packaging in which the product is imported</li> <li>. Type of packaging for distribution in Kenya</li> <li>. Packaging material</li> <li>. Sizes of individual packaging</li> </ul>   |   |                          |
| 7.4 Procedures of destruction and decontamination of pest control product and its packaging<br><ul style="list-style-type: none"> <li>. Possibility of neutralization</li> <li>. Controlled discharge</li> <li>. Controlled incineration</li> <li>. Water purification</li> <li>. Procedures of cleaning application equipment</li> <li>. Recommended methods and precautions concerning handling, storage, display or transport.</li> </ul> |   |                          |

**GUIDELINE: ACTIVE INGREDIENT DOSSIER**

The dossier accompanying this form should provide details of the information requested on the methods used (physical and chemical), details of the methods used in and results of toxicological and ecotoxicological studies, methods of analysis etc. Numbering used in the dossier must correspond with that used in the application form.

**ACTIVE INGREDIENT (TECHNICAL GRADE)**

**1. DESIGNATION**

| <b>REQUIREMENTS:</b>   | <b>REMARKS:</b>      |
|--|----------------------|
| <b>1. DESIGNATION/IDENTITY OF a.i.</b>   | Specify accordingly. |
| 1.1 Common name (ISO)  |                      |
| 1.2 Manufacturer or Development code   |                      |
| 1.3 Source, Name and Address of manufacturer and address and location of manufacturing plants. |                      |
| 1.5 Methods of manufacture(synthesis pathways)   |                      |
| 1.5 Chemical name (IUPAC)  |                      |
| 1.6 Chemical group   |                      |
| 1.7 Structural formula   |                      |
| 1.8 Empirical formula  |                      |
| 1.9 Patent status  |                      |
| Is the a.i. under patent?  |                      |
| Who is patent holder   |                      |
| Expiry date  |                      |
| 1.10 Molecular mass  |                      |
| 1.11 CAS Number  |                      |

**2. PHYSICAL AND CHEMICAL PROPERTIES  
(active ingredient – technical grade)**

| <b>REQUIREMENTS:</b>  | <b>REMARKS:</b>  |
|---|--|
| 2.1 Physical state  | Where relevant indicate method/test used.  |
| 2.2 Colour  |  |
| 2.3 Odour   |  |
| 2.4 Density at 20°C   |  |
| 2.5 Vapour pressure at 20/25°C  |  |
| 2.6 Volatility  |  |
| 2.7 Hydrolysis DT <sub>50</sub> ..... Days ..... °C pH                                    | Give the DT <sub>50</sub> of the active ingredient, with mention of temperature and pH parameters employed during the determination. |
| 2.8 Photolysis  | Give the DT <sub>50</sub> of the active ingredient (in days).  |
| 2.9 Solubility in water ..... °C ..... pH   | Where relevant indicate method/test used.  |
| 2.10 Solubility in organic solvents   |  |
| 2.11 n-octanol/water partition coefficient  |  |
| 2.12 Boiling point °C   |  |
| 2.13 Melting point °C   |  |
| 2.14 Decomposition temperature °C   |  |
| 2.15 Method of Analysis and Impurities  |  |
| 2.16 Stability in water, hydrolysis rate, effect of light, identity of breakdown products |  |
| 2.17 Stability in organic solvents used in Formulation                                    |  |
| 2.18 Stability in air; effect of light, identity of breakdown products                    |  |

| <b>REQUIREMENTS:</b>                                     | <b>REMARKS:</b>                           |
|--|---|
| 2.19 Thermal stability, identity of breakdown product.   | Where relevant indicate method/test used. |
| 2.20 Flammability  |   |
| 2.21 Flash point   |   |
| 2.22 Explosive properties                                |   |
| 2.23 Oxidizing properties                                |   |
| 2.24 Absorption spectra – UV/Visible, infra-red, IMR, MS |   |
| 2.25 Reactivity towards container material               |   |

**3. TOXICOLOGY**  
**(Active Ingredient – technical grade)**

Include a copy of an executive summary discussing **ALL ISSUES** named under section 3 of List I or provide copies of the individual summaries from each study relating to issues mentioned under section 3. Information on the methods of testing must be provided.

| <b>REQUIREMENTS:</b>                                     | <b>REMARKS:</b>  |
|--|--|
| ADI  | Acceptable Daily Intake in mg product / kg body weight.  |
| NOEL   | Non observable effect level (expressed in mg product / kg weight on animal)  |
| <b>Short term toxicity</b>                               |  |
| Oral cumulative toxicity (28 days study)                 | Not mandatory, but can be useful.  |
| Sub-chronic toxicity test of 90-day duration.            | Oral route on two species – one rodent(rat) and one non-rodent.  |
| Dermal route – 28-days dermal, 90-days dermal.           | Specify accordingly.   |
| Inhalation route 28-days inhalation, 90-days inhalation. | Specify accordingly.   |
| 3.1 Eye irritation (rabbit)                              |  |
| 3.2 Skin sensitisation (guinea pig)                      |  |
| 3.3 Reproduction (specify species)                       |  |
| 3.4 Subchronic toxicity 90 day NOEL mg/kg/day            |  |
| 3.5 Chronic toxicity NOEL mg./kg/day                     |  |
| 3.6 Carcinogenicity (life time) NOEL mg/kg/day           |  |
| 3.7 Neurotoxicity NOEL mg/kg/day                         |  |
| 3.8 Teratogenicity NOEL mg/kg/day                        |  |
| 3.9 Mutagenicity /Genotoxicity                           |  |
| 3.10 Metabolism (rat)                                    |  |
| 3.11 Other studies                                       | Provide further information relevant to the toxicity profile of the product e.g. Toxicity of major metabolites, reaction or breakdown products of the pest control products formed in/or on treated plant/crop etc, which are likely to be consumed – in cases where different from those identified in animal studies. Toxic effects on livestock, poultry, pests etc. should be given. |

**4. ECO-TOXICOLOGY**

Provide either an executive summary or individual summaries of studies on the behaviour of the pest control product in the environment. Provide information requested for in the application form.

| <b>REQUIREMENTS:</b>  | <b>REMARKS:</b>        |  |
|-----------------------|------------------------|--|
| 4.1 Birds (2 species) | LD <sub>50</sub> mg/kg | Provide details of at least one land and one water bird, LD <sub>50</sub> in mg product/kg bird weight and the NOEL. Furthermore provide information on the effect on reproduction.  |
|                       | NOEL                   |  |
|                       | LD <sub>50</sub> mg/kg |  |
|                       | NOEL                   |  |
| 4.2 Fish (2 species)  | Reproduction           | Provide details on at least two species studied, LC <sub>50</sub> (in mg of product / litre of water) and the NOEL. Furthermore provide information on the effect on reproduction. Indicate the bioconcentration factor (BCF) on the active ingredient in tissues. |
|                       | LD <sub>50</sub> mg/kg |  |
|                       | NOEL                   |  |
|                       | LD <sub>50</sub> mg/kg |  |
|                       | BCF                    |  |

| <b>REQUIREMENTS:</b>     | <b>REMARKS</b>          |  |
|--------------------------|-------------------------|--|
| 4.3 Daphnia              | LC <sub>50</sub> mg/l   | Specify and provide details on other organisms according to the information requested on the form. |
|                          | NOEL                    |  |
| 4.4 Algae                | LC <sub>50</sub> mg/l   |  |
|                          | NOEL                    |  |
| 4.5 Bees                 | LD <sub>50</sub> µg/bee |  |
|                          | NOEL                    |  |
| 4.6 Earthworms           | LC <sub>50</sub> mg/kg  |  |
| 4.7 Soil micro-organisms |                         |  |

**5. BEHAVIOUR IN ENVIRONMENT  
(active ingredient – technical grade)**

Provide an executive summary or copies of summaries from each study relating to the issues highlighted in the application form.

| <b>REQUIREMENTS:</b>   | <b>REMARKS:</b>  |
|--|--|
| 5.1 Behaviour, ways of degradation, degradation products in soil:  | Indicate the degradation path of the active ingredient in the soil and the degradation products formed.  |
| 5.11 Major metabolites   | Specify the major metabolites in the soil and their behaviour.   |
| 5.12 DT <sub>50</sub> (days)                                       | Specify the half-life of the active ingredient in various types of soils.  |
| 5.13 Mobility of the a.i.  | Specify the degree of mobility of the active ingredient in the soil hence leaching potential and possibility for ground water contamination. If high, provide details on further studies i.e. lysimeter study. |
| 5.14 Adsorption  | Indicate the degree of adsorption of the active ingredient in the soil.  |
| 5.15 Mobility of metabolites                                       | Indicate the degree of mobility of the metabolites in the soil.  |
| 5.2 Behaviour, ways of degradation, degradation products in water: | Describe ways and speed of degradation of the active ingredient in water.  |
| 5.21 Major Metabolites   | Specify the major break down products formed and their adsorption/desorption on sediments.   |
| 5.22 DT <sub>50</sub> (days)                                       | Specify the half-life of the active ingredient in water  |
| 5.23. Surface  | Describe ways and speed of degradation in surface and ground water.  |
| 5.24 Ground  | Provide an executive summary or copies of summaries from each study relating to the issues highlighted in the form.  |
| 5.3 Behaviour, ways of degradation, degradation products in air:   | Describe ways and speed of degradation in air and break down products formed. (for fumigants and volatile products).   |

**7. RESIDUES**

Provide either an executive summary or individual summaries of studies conducted concerning the issues listed in the application form.

| <b>REQUIREMENTS:</b>           | <b>REMARKS:</b>  |
|--------------------------------|--|
| 7.1 Major metabolites          | Provide either an executive summary or individual summaries of studies conducted concerning the metabolites in plants.<br>. Specify the metabolites<br>. State their toxicological effects.  |
| 7.2 Metabolism                 | Describe the principle of metabolization of the active ingredient in the plant and the degradation products formed.  |
| 7.3 Behaviour of residues      | Indicate the action and the persistence of the metabolites in the plant and animals.   |
| 7.4 Crop                       | Provide either an executive summary or individual summaries of studies conducted by a GLP certified laboratory or as directed by Secretary, PCPB.  |
| 7.5 MRL codex                  | MRL's (if available)   |
| 7.6 MRL of country of origin   | When available state for each crop or vegetable product, the Maximum residue Limit (MRL) recommended by the Codex Alimentarius Commission, two effective MRL's in two different countries and the MRL proposed in the country of application. If the proposed crop is to be exported provide detailed information in the dossier on MRL or import tolerances in the countries exported to. |
| 7.7 Proposed MRL               |  |
| 7.8 Proposed PHI               |  |
| 7.9 Method of residue analysis | Provide a copy in the dossier for countries requiring it.  |

**8. OTHER SPECIFIC REQUIREMENTS**

| <b>REQUIREMENTS:</b>  | <b>REMARKS:</b>   |
|---|---|
| 8.1 Residue data from a GLP certified lab or as directed by Secretary, PCPB.                                      | Provide an executive summary or copies of summaries from each study relating to residues. |
| 8.2 Proposed pre-harvest intervals, withholding periods in cases on post-harvest use.                             |   |
| 8.3 Effects on taint, odour, taste or other quality aspects due to residues in or on fresh or processed products. |   |
| 8.4 Effects of industrial processing and/or household preparation on the nature and magnitude of residues.        |   |
| 8.5 Residue data in succeeding rotational crops where presence of residues might be expected.                     |   |

**GUIDELINE: FORMULATED PRODUCT DOSSIER**

**1. PHYSICAL AND CHEMICAL PROPERTIES OF THE FORMULATED PRODUCT.**

Clearly state methods used to determine properties under the appropriate section of the dossier. CIPAC methods are recommended.

| <b>REQUIREMENTS:</b>                                | <b>REMARKS:</b>   |
|---|---|
| 1.1 Physical state / formulation type               | Solid, liquid etc.  |
| 1.2 Colour  |   |
| 1.3 Odour   |   |
| 1.4 Storage stability                               | Indicate the stability of the preparation after storing at 54°C for 14 days. Other durations and/or other temperatures (e.g. 8 weeks at 40°C, 18 weeks at 30°C) if the preparation is thermo-sensitive.         |
| 1.5 Shelf-life                                      | The shelf-life of the product at room temperatures (30°C) is given in years if it is more than two years, and in months if it is less than two years. The appropriate temperature specifications must be given. |
| 1.6 Density   | Indicate the density of the liquids.  |
| 1.7 Bulk density                                    | Indicate the density of solids after compression.   |
| 1.8 Flammability                                    | Specify if the product is flammable   |
| 1.9 Flash point                                     | To determine flammable hazards.   |
| 1.10 Compatibility with other pest control products | Indicate types of pest control products which the product is or is not compatible with. Give evidence.  |
| 1.11 pH range                                       | State the effect of pH on stability and effectiveness.  |
| 1.12 pH of 1% aqueous dilution                      | Relevant to products to be diluted in water.  |
| 1.13 Oxidizing properties                           | Indicate materials that can be damaged by oxidizing properties of the formulation.  |
| 1.14 Corrosiveness                                  | Specify effect on containers, equipment, skin etc.  |
| 1.15 Water content                                  | Indicate the maximum water content when it has an influence on the quality.   |
| 1.16 Wettability                                    | The wettability has to be indicated for solid formulations used in dilution (wetable powders, powder soluble in water and granules soluble in water).   |
| 1.17 Solubility in water                            | Specify   |
| 1.18 Persistent foaming                             | State the extent to which foaming occurs for formulations diluted in water.   |
| 1.19 Particle size                                  | Specify   |
| 1.20 Wet sieve test                                 |   |
| 1.21 Dry sieve test                                 |   |
| 1.22 Suspensibility / emulsifiability               | Specify   |
| 1.23 Emulsion stability                             |   |
| 1.24 Volatility                                     |   |
| 1.25 Viscosity                                      | For formulations to be used at very low volume, it is necessary to know the viscosity.  |
| 1.26 Other properties (where applicable)            | FAO specifications etc.   |
| 1.27 Method of Analysis                             |   |

**2. TOXICOLOGY**

The dossier must contain a detailed Material Safety Data Sheet(MSDS). Furthermore an executive summary discussing all aspects mentioned under section 2 must be included, or the summaries from each individual toxicity study under 2.1-2.6.

Other studies

Provide detailed studies and any other relevant toxicology or ecotoxicological studies conducted on the formulated product.



The FAO/WHO class must be given as per the table hereunder.

WHO-Classification Scheme

| Class                   | LD <sub>50</sub> for the rat (mg/kg body weight) |            |            |            |
|-------------------------|--|------------|------------|------------|
|                         | Solids   | Liquids    | Solids     | Liquids    |
|                         | Oral   |            | Dermal     |            |
| Ia Extremely Hazardous  | 5 or less  | 20 or less | 10 or less | 40 or less |
| Ib Highly Hazardous     | 5-50   | 20-200     | 10-100     | 40-400     |
| II Moderately Hazardous | 50-500   | 200-2000   | 100-1000   | 400-4000   |
| III Slightly Hazardous  | Over 500   | Over 2000  | Over 1000  | Over 4000  |

**3. EMERGENCY MEASURES IN CASES OF ACCIDENTAL EXPOSURE OR POISONING**

Self explanatory. List relevant information of the form and refer to relevant section in MSDS in section 3 of dossier.

**4. EMERGENCY PROCEDURES IN CASE OF FIRE/SPILLAGE**

Self explanatory. List relevant information of form and refer to relevant section in MSDS in section 2 of dossier.

**5. EFFICACY DATA**

| <b>REQUIREMENTS:</b>                      | <b>REMARKS:</b>   |
|---|---|
| 5.1 Crop/area of use                      | The common name of the crop on which the product is aimed at must be clearly specified.<br>When the product is not aimed at a crop, indicate the area of use, e.g.<br>. Premises and equipment of transportation,<br>. Premises of storage. |
| 5.2. Target organism                      | Target organisms must be identified by common and scientific name.<br>Specify the mode of action of the product on its target, and indicate if the active ingredient is translocated inside the organisms.                                  |
| 5.3 Rate                                  | The rate of application must be indicated on the basis of area treated or volume used e.g. l/ha, g/ha, etc.   |
| 5.4. Stage of treatment                   | Specify the stage of the crop or target organism at which application must be made and/or the minimum interval between the last application and harvest.  |
| 5.5 Directions for use                    | Indicate the recommended directions for use.  |
| 5.6 Residue data and pre-harvest interval | Indicate restrictions.  |
| 5.7 Phytotoxicity                         | Indicate restrictions.  |
| 5.8 Contraindications                     | Indicate restrictions i.e. follow up crops, adjacent crops etc. and particular specifications, as well as possible incompatibilities of the formulation with other products.  |

NB: Efficacy data from country of origin should be attached.

## 6. MINIMUM LABEL REQUIREMENTS

Specify the warnings, use restrictions and safety precautions which must be present on the label in all countries.

The proposed label must be included in the dossier and should contain the specified warnings, use restrictions and safety precautions as well as meet PCPB label requirements, recommendations etc. The PCPB label requirements will be provided separately.

### LIST OF ABBREVIATIONS

|                  |   |
|------------------|---|
| a.i.             | Active Ingredient   |
| ADI              | Acceptable Daily Intake   |
| BCF              | Bio Concentration Factor  |
| CIPAC            | Collaborative International Pesticides Analytical Council Limited.  |
| CLI              | CropLife International  |
| DT <sub>50</sub> | Time it takes for 50% of the parent compound to disappear from soil or water by transformation (half life). |
| EC               | Emulsifiable Concentrate  |
| EC <sub>50</sub> | Median Effective Concentrate  |
| FAO              | Food and Agriculture Organization of the united nations   |
| g/kg             | Grams per Kilogram  |
| g/l              | Grams per Litre   |
| GCPF             | Global Crop Protection Federation   |
| GLP              | Good Laboratory practice  |
| ISO              | International Standards Organisation  |
| IUPAC            | International Union of Pure and Applied Chemistry.  |
| LC <sub>50</sub> | Median Lethal Concentrate   |
| LD <sub>50</sub> | Median Lethal Dose  |
| µg               | Microgram   |
| mg/l             | Milligrams per litre  |
| MRL              | Maximum Residue Limit   |
| MSDS             | Material Safety Data Sheet  |
| NOEL             | Non Observable Effective Level  |
| °C               | Degrees Centigrade  |
| PCPB             | Pest Control Products Board   |
| PHI              | Pre Harvest Interval  |
| SEARCH           | Southern and Eastern African Regulatory Committee on Harmonization of Pesticide Registration.               |
| WHO              | World Health Organization   |
| WP               | Wettable Powder   |