WHO Prequalification of Vector Control Products

Matrix of selected mosquito strains

|  |  |
| --- | --- |
| Company | [Company name] |
| Product name | [Product name] |
| PQ ref # | [PQ Product Ref Number] (if not yet assigned, leave blank) |
| Product intended effect | [State the intended effect of the product] The intended effect of the product should describe the intended entomological impact of the product, e.g. induce mortality and decrease flight activity, on the target population |

# Section A. Active ingredient(s) mode of action, intended effect and target vector characteristics

A1. Active ingredients (including synergists) and mode of action

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Active ingredient | Concentration | Entomological mode of action | Intended effect on target vector populations | Target vector characteristics |
| [AI name] | [#] mg/m2 | [Mode of action] | [Intended effect against target vector population, e.g. active against pyrethroid-resistant *Anopheles spp*] | [List the species/strain traits targeted by the product’s intended effect, e.g. metabolic pyrethroid resistance] |
| [AI name] | [#] mg/m2 | [Mode of action] | [Intended effect against target vector population, e.g. active against pyrethroid-resistant *Anopheles spp*] | [List the species/strain traits targeted by the product’s intended effect, e.g. metabolic pyrethroid resistance] |
| [AI name] | [#] mg/m2 | [Mode of action] | [Intended effect against target vector population, e.g. active against pyrethroid-resistant *Anopheles spp*] | [List the species/strain traits targeted by the product’s intended effect, e.g. metabolic pyrethroid resistance] |

# Section B. Definition of strains used in laboratory testing and semi-field supplemental bioassays

B1. Definition of strains\*

|  |  |  |
| --- | --- | --- |
| Mosquito species | Strain | Vector characteristic(s) targeted by the product intended effect |
| [Mosquito species] | [Strain name] | [Strain characteristics] |
| [Mosquito species] | [Strain name] | [Strain characteristics] |
| [Mosquito species] | [Strain name] | [Strain characteristics] |

Add rows to the table if required.

\*Include all mosquito species/strains used in laboratory testing and supplemental bioassays, including adults reared from larval collections at semi-field breeding sites/F1 mosquitoes from semi-field sites.

Results from any genotypic characterisations conducted should be appended to this form.

B2. Strain characterisation – phenotypic insecticide resistance status

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Mosquito species/ strain | Test date | [Method\*]  [Insecticide]  [Dose]  [Endpoint\*] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] |
| [Mosquito species/ strain] | [Test date] |  |  |  |  |  |  |  |  |  |
| [Mosquito species/ strain] | [Test date] |  |  |  |  |  |  |  |  |  |

Add rows/columns to the table if required.

\* Method = e.g. WHO cylinder/bottle bioassay, Endpoint = e.g. M24 (%)

Results from any genotypic characterisations conducted should be appended to this form.

B3. Strain characterisation – insecticide resistance intensity

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Mosquito species/ strain | Test date | [Method\*]  [Insecticide]  [Dose]  [Endpoint\*] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] |
| [Mosquito species/ strain] | [Test date] |  |  |  |  |  |  |  |  |  |
| [Mosquito species/ strain] | [Test date] |  |  |  |  |  |  |  |  |  |

Add rows/columns to the table if required.

\* Method = e.g. WHO cylinder/bottle bioassay, Endpoint = e.g. M24(%)

# Section C. Definition of local vector species at semi-field sites

C1. Local vector population species at semi-field sites\*

|  |  |  |  |
| --- | --- | --- | --- |
| Semi-field site | Mosquito species | Vector characteristic(s) | Proportional presence in local vector population |
| [Site name, location] | [Mosquito species] | [Vector characteristics] | [Primary/Secondary] |
| [Site name, location] | [Mosquito species] | [Vector characteristics] | [Primary/Secondary] |
| [Site name, location] | [Mosquito species] | [Vector characteristics] | [Primary/Secondary] |

Add rows to the table if required.

\*If the composition of the vector population at the semi-field comprises multiple vector species, e.g., *An. gambiae s.l.* and *An. funestus*, and the intention is to analyse the results from both species in the semi-field data analysis, complete one row per species.

Results from any genotypic characterisations conducted should be appended to this form.

C2. Species characterisation – phenotypic insecticide resistance status

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Mosquito species/ strain | Test date | [Method\*]  [Insecticide]  [Dose]  [Endpoint\*] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] |
| [Mosquito species/ strain] | [Test date] |  |  |  |  |  |  |  |  |  |
| [Mosquito species/ strain] | [Test date] |  |  |  |  |  |  |  |  |  |

Add rows/columns to the table if required.

\* Method = e.g. WHO cylinder/bottle bioassay, Endpoint = e.g. M24 (%)

Results from any genotypic characterisations conducted should be appended to this form.

C3. Species characterisation – insecticide resistance intensity

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Mosquito species/ strain | Test date | [Method\*]  [Insecticide]  [Dose]  [Endpoint\*] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] | [Method]  [Insecticide]  [Dose]  [Endpoint] |
| [Mosquito species/ strain] | [Test date] |  |  |  |  |  |  |  |  |  |
| [Mosquito species/ strain] | [Test date] |  |  |  |  |  |  |  |  |  |

Add rows/columns to the table if required.

\* Method = e.g. WHO cylinder/bottle bioassay, Endpoint = e.g. M24 (%)

C4. Species characterisation – LC50 and LC90\*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Species | Insecticide | Endpoint | Slope | LC50 | 95% CI | LC90 | 95%CI |
| [Mosquito species/strain] |  |  |  |  |  |  |  |
| [Mosquito species/strain] |  |  |  |  |  |  |  |
| [Mosquito species/strain] |  |  |  |  |  |  |  |

Add rows to the table if required.

\*LC90 can be replaced by LC95 or LC99 as appropriate.