GMP/WHOPES Project on LN Fabric Strength

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WHO recommended long-lasting insecticidal mosquito nets

Product name	*Product type*	*Status of WHO recommendation*	*Status of publication of WHO specification*
DawaPlus® 2.0	Deltamethrin coated on polyester	Interim	Published
Duranet®	Alpha-cypermethrin incorporated into polyethylene	Interim	Published
Interceptor®	Alpha-cypermethrin coated on polyester	Full	Published
LifeNet®	Deltamethrin incorporated into polypropylene	Interim	Published
MAGNet™	Alpha-cypermethrin incorporated into polyethylene	Interim	Published
Netprotect®	Deltamethrin incorporated into polyethylene	Interim	Published
Olyset®	Permethrin incorporated into polyethylene	Full	Published
Olyset® Plus	Permethrin and PBO incorporated into polyethylene	Interim	Pending
PermaNet® 2.0	Deltamethrin coated on polyester	Full	Published
PermaNet® 2.5	Deltamethrin coated on polyester with strengthened border	Interim	Published
PermaNet® 3.0	Combination of deltamethrin coated on polyester with strengthened border (side panels) and deltamethrin and PBO incorporated into polyethylene (roof)	Interim	Published
Royal Sentry®	Alpha-cypermethrin incorporated into polyethylene	Interim	Published
Yorkool® LN	Deltamethrin coated on polyester	Full	Published

WHO recommended long-lasting insecticidal mosquito nets

- concept of value-for-money and improving the quality of LNs
  - WHO Guidelines for monitoring the durability of long-lasting insecticidal nets under operational conditions
  - WHO Guidelines for procuring public health pesticides

WHO recommended long-lasting insecticidal mosquito nets

- Lack of sufficient comparative data on durability of LNs in different settings to support procurement decisions
  - –GMP/WHOPES project on LN fabric strength - a medium term solution
  - –Study common causes of wear and tear of LNs in operational use and develop criteria and laboratory studies that can simulate field use conditions
  - –Field data should be linked to the detailed specifications of the LN
- Improve WHO guideline specifications and quality standards for LNs

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- All manufacturers of WHOPES recommended LNs are invited to participate
  - Submit three intact nets (each from a separate production batch) in their original packaging
  - Advanced list of LNs to be submitted with their full description (standard form)

- All nets will be subject to:
  - Fabric weight or mass per unit area (EN ISO 12127);
  - Tear strength (EN ISO 13937-1);
  - Bursting strength (EN ISO 13938-2); and
  - Tensile strength (ISO 13934-2; with and without hooks).
  - Flammability

- WHO consultation with LN industry and textile research institutions to review the outcome of the study

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- **Standard form**
  - **Notes:**
    - A separate form to be completed and submitted for each product, including where there are LNs of different fabric strength (e.g. 75 and 100 denier nets).
    - Three intact nets of each type of LN (one each from different production batch) are required where such products exist.
    - A copy of the same completed form has to accompany the batch of three samples and sent to the textile institution for testing.
  - **Name of the manufacturer**
  - **Address of the manufacturer**
  - **LN Brand name**
  - **Production batch numbers and dates**
  - **Fabric and net technology**
    - Polymer type
    - Number of filaments (where multi-filament, specify number of filaments in a yarn):
    - Weaving pattern – net construction
    - Mesh size (number of complete holes in cm^2)
    - Mass (g) per m^2
    - Denier:
  - **Any other relevant information**
  - **Date and signature**