	<p><b>PRODUCT SPECIFICATION SHEET</b>  <b>(for local and regional procurement)</b></p> <p><b>Child MUAC Tape</b></p>	<p>Version no: 4                  Material no: S0145620                  Author: AK, AF                  Date: 12.05.2020</p>
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**General Description:**

Children's Mid Upper Arm Circumference (MUAC) measuring tape with cut-off point at 11.5 cm, pack of 50 tapes with text and pictorial instructions for use.

**Technical Specifications:**

MUAC measuring tape is suitable for measuring child's Middle Upper Arm Circumference (MUAC) with range up to 26.5 cm.  
 Graduated with 1 mm precision with thicker line at 21.0 cm.  
 Accuracy: ± 1 mm of the maximum measurement (26.5 cm)

**Front side:**

Colour-coded as follows:

Red (Pantone code 1795 C): from 0 to 11.5 cm,

Yellow (Pantone code 107 C) from 11.5 to 12.5 cm,

Green (Pantone code 369 C) from 12.5 to 26.5 cm.

Optionally includes UNICEF logo in pantone Cyan Process R56 /G142 / B199 (at UNICEF's request)

**Reverse side:**

Includes instructions and diagrammatic drawings. The written instructions may be requested to be in Arabic, Spanish, French or English. The drawings represent 5 steps in taking the MUAC measurement either the 'string' method of measuring the mid-point, or the 'tape' method.

**String method for finding the mid-point of the arm:**

*Drawing 3: Bend the arm so it is at a right angle, and place the string on the tip of the shoulder, to the elbow.*

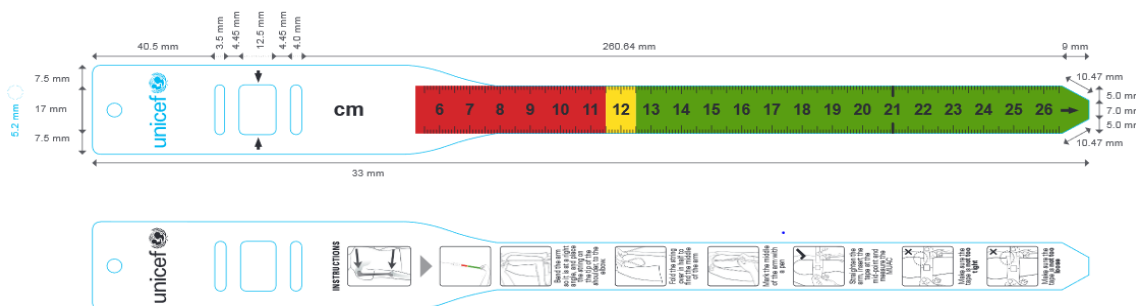
*Drawing 4: Fold the string over in half to find the middle of the arm*

*Drawing 5: Mark the middle of the arm with a pen*

*Drawing 6: Straighten the arm, insert the tape at the mid-point and measure the MUAC*

*Drawing 7: Make sure the tape is not too tight*

*Drawing 8: Make sure the tape is not too loose*



**Tape Method of finding Mid-point of the arm:**

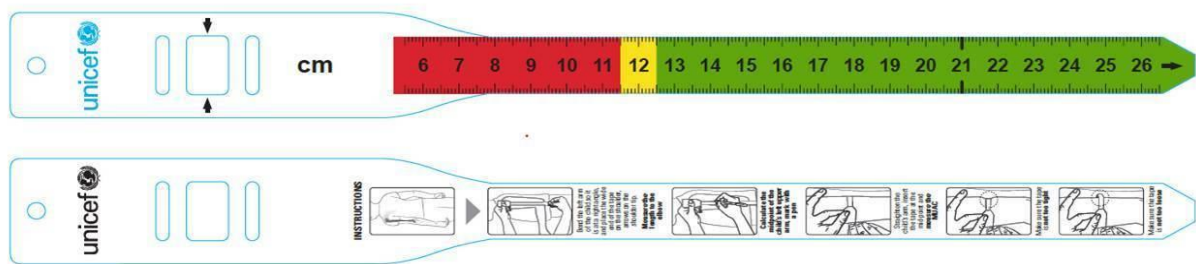
*Drawing 2: Bend the left arm to a right angle, put wide end of the tape to shoulder, measure the length to the elbow*

*Drawing 3: Calculate the midpoint of the child's left upper arm, mark with a pen*

*Drawing 4: Straighten the child's arm, insert the tape at the mid-point and measure the MUAC (include a cross mark X)*

*Drawing 5: Make sure the tape is not too tight (include a tick mark ✓)*

*Drawing 6: Make sure the tape is not too loose (include a cross mark X)*



**NB :** Printing design files are available on the UNICEF website :

<https://www.unicef.org/supply/technical-resources-suppliers-nutrition-products>

**Material:**

Non-tear stretch-resistant material eg plasticized / synthetic paper using polypropylene, or polyethylene. (supplier must specify which of these materials is offered).

Minimum thickness 0.3mm.

Print: Permanent, resistant to solvents, such as alcohol-based hand sanitiser; easily readable in low light working situations.

Working temperature range 0 - 50 °C.

Supplied with a leaflet: the leaflet includes text and pictorial user instructions as specified by UNICEF in English, French, Spanish and Arabic and may optionally be requested to be produced in a local language.

**Storage conditions:**

Minimum acceptable range 0 – 50 °C

**Component of a kit:**

S9906626 - IEHK2006, kit, suppl.2-equipment.

**Emergency scenarios:**

Nutrition emergencies

**Context in which item is mainly used:**

Recommended for the screening of malnourished children and for their admission into therapeutic feeding centres. Good for nutrition emergencies when illiterate field workers or carers are used for screening. Not recommended for nutrition surveys.

**Target population:**

Malnourished children or those at risk, aged 6-59 months. Not suitable for infants under 6 months.

**Emergency scenarios where the item should not be used:**

Not recommended for nutrition surveys.

**Useful link:** <http://www.youtube.com/watch?v=3pQUtOsjjSY>

### **Quality Checking locally and regionally sourced MUAC tapes**

This is guidance note for UNICEF country and regional offices procuring MUAC tapes that are printed locally. The steps below can be used as a guide to select a printer and check samples. Its recommended that team members from supply, program and communications team work together to facilitate the quality checks on samples before a big print run is ordered.

#### **Printing: Things to keep in mind**

- Select a printer that can print high quality synthetic paper with excellent precision.
- The printer will need to purchase the plate, cutting knives and paper to the UNICEF MUAC specifications.
- LTA holders should be able to reduce their prices offered once they have produced the tapes in large enough quantities to recover the cost of the plate, cutting knives and are able get discounts on the synthetic paper used for the MUAC due to higher volumes.
- Cost efficiencies are gained with large printers using efficient machines with very high precision.
- Check a soft proof and a physical proof sample first before committing to a big print run.

#### **Checking the MUAC sample:**

- The MUAC tape should be made from synthetic paper/ paper coated in plastic (see UNICEF spec) that is resistant to tearing, stretching and cleaning with alcohol-based hand sanitizer.
- Check measurements with a calibrated ruler, starting at the arrows and continuing to the end of the tape. All the mm and cm markings must be precise, accurate and clearly legible.
- The tape must not be able to be stretched, this is tested by pulling the tape firmly and seeing if the tape matches the ruler used to check the mm and cm after you have attempted to stretch it.
- The tape must not tear or rip. This is tested by attempting to tear the tape with your hands.
- To test that the ink does not rub off with cleaning, use hand sanitizer on the tape to check if there are any changes to the print.

For queries and support for evaluation of MUAC tapes, please email our Quality assurance inspection unit here: [sturner@unicef.org](mailto:sturner@unicef.org)