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All Communications should be addressed to:
The Secretary for Health

In reply please quote No. .....
MINISTRY OF HEALTH,
P.O. BOX 30377,
LILONGWE 3,
MALAWI.

Ref. No. Med 2/18 25th March, 2013.

The Director,
Centre for Excellence in Water and Sanitation and SMART Centre,
Mzuzu University,
Private Bag 201,
Mzuzu 2,
Malawi.

Cc : The Secretary for Water Development and Irrigation,
Tikwere House,
Private Bag 390,
Lilongwe 3,
Malawi.

Dear Sir/Madam,

REQUEST TO TEST POINT OF USE WATER PURIFICATION PRODUCTS

Reference is being made to your request in a letter, dated 10th September, 2012, that the following household water purification products be tested:

I. Tulip Syphone filter

II. Tulip Syphone Table Top filter

III. Silverdine

IV. Aquaprove Solution

V. Acquaprove Sachet

The Ministry is pleased to let you know that the products have satisfactory efficacy on removal of bacteria and turbidity which are the basic requirements for drinking water. Please refer to the attached results from the Ministry of Water Development and Irrigation who carried out the tests at the central water laboratory.

You are therefore being advised to proceed with the promotion of the products for household water treatment. However the Ministry will continue to conduct periodic quality checks to monitor the sustainability of the quality of these products.

Yours faithfully,

Dr. S. Kabuluzi

For: SECRETARY FOR HEALTH

Table 1 Performance on removal of harmful bacteria and Turbidity for the Tulip Siphon Filter Product

PARAMETERS TESTED	HOUSEHOLD WATER TREATMENT AND SAFE STORAGE PRODUCT		REMARK(S)
	THE TULIP SIPHON FILTER ONE	THE TULIP SIPHON FILTER TWO	
Turbidity Quality of Raw Water, NTU	34	34	Average Turbidity reduction of 89.4%
Turbidity Quality after Filtration, NTU	3.4	3.8	
Faecal coliform Levels on Raw Water, Count/100ml	1,721	2,443	Bacteria removal of 100%
Faecal coliform Levels on Filtered Water, Count/100ml	0	0	
Faecal streptococci Levels on Raw Water, Count/100ml	710	950	Bacteria removal of 100%
Faecal streptococci Levels on Filtered Water, Count/100ml	0	0	

Analysis conducted by Central Water Laboratory of the Ministry of Water Development and Irrigation

Table 2 Performance on removal of harmful bacteria and Turbidity for the Tulip Table Top Filter Product

PARAMETERS TESTED	HOUSEHOLD WATER TREATMENT AND SAFE STORAGE PRODUCT		REMARK(S)
	TABLE TOP ONE	TABLE TOP TWO	
Sample Volume	6 Litres	6 Litres	Filtration rate of approx. 0.49ml/sec
Volume of sample filtered after 2 hours	3.5 Litres	3.5 Litres	
Turbidity Quality of Raw Water, NTU	36	36	Average Turbidity reduction of 89.7%
Turbidity Quality after Filtration, NTU	3.6	3.7	
Faecal coliform Levels on Raw Water, Count/100ml	1,721	2,443	Bacteria removal of 100%
Faecal coliform Levels on Filtered Water, Count/100ml	0	0	
Faecal streptococci Levels on Raw Water, Count/100ml	710	950	Bacteria removal of 100%
Faecal streptococci Levels on Treated Water, Count/100ml	0	0	

Analysis conducted by Central Water Laboratory of the Ministry of Water Development and Irrigation

Table 3. Performance on removal of harmful bacteria for Silverdyne, Aquaprove solution and Aquaprove Sachet Products

HOUSEHOLD WATER TREATMENT AND SAFE STORAGE PRODUCT	PARAMETERS TESTED AND LEVELS REGISTERED				REMARK(S)
	TURBIDITY QUALITY, NTU	BACTERIA LEVEL OF RAW WATER **	BACTERIA LEVEL OF TREATED WATER **	FREE CHLORINE RESIDUAL, mg/l	
Silverdyne (1 drop added to 2L and waiting for 30 minutes)	36	2,082/100ml	98	No trace	Bacteria removal of 95.29%
	1.6	1,040/100ml	2	No trace	Bacteria removal of 99.81%
Aquaprove (4 drops added to 1L of water and waiting for 5 minutes	36	2,082/100ml	2	0.30	Bacteria removal of 99.90%
	1.6	1,040/100ml	0	0.50	Bacteria removal of 100%
Aquaprove 0.1g Sachet (Dissolved in 10L and waiting for 10 minutes	36	2,082/100ml	1	0.40	Bacteria removal of 99.95%
	3.6	960/100ml	0	0.60	Bacteria removal of 100%

Analysis conducted by Central Water Laboratory of the Ministry of Water Development and Irrigation

** Bacteria type enumerated: *Faecal coliform*

Note: Silverdyne is not more effective in highly turbid (36NTU) water compared to less turbid water (1.6 NTU)