

APPENDIX 11-1

Equipment and Reagents Required to Establish a Salt Iodine Laboratory

Many items on the following list of equipment and reagents can be procured through UNICEF Copenhagen Supply Division, or various scientific supply companies.

QUANTITY	UNICEF CODE	QUANTITY	UNICEF CODE
1		NOTE: If distilled water is to be used, the following equipment is required:	
Balance, Four-beam pan Sensitivity = 0.01g, Capacity = 410g (e.g., Fisher Scientific Cat. No. 02-020-411)**		1	Water Still 4L/day electric 220V 01 676 00
1		1	Hot plate 220V 20 004 02
Set of weights for above (e.g., Fisher Scientific Cat. No. 02-314)		1	Rod, stirring, flint glass assorted pkt 09 686 00
4		OR	
Flask, volumetric, 1000mL (e.g., Fisher Scientific Cat. No. 10-210G)		NOTE: If tap water treated with deionizing resin is to be used (see Appendix 11.2), the following equipment replaces the 3 previously listed items:	
2		2	Flask, Erlenmeyer, 4L (e.g., Fisher Scientific Cat. No. 10-040P)
Flask, volumetric, 100mL (e.g., Fisher Scientific Cat. No. 10-119-10D)		1	Whatman Filter Paper, 15cm diameter (e.g., Fisher Scientific Cat. No. 09-805G)
2		1	4L Polyethylene carboy for water storage (e.g., Fisher Scientific Cat. No. 02-963AA)
Measuring cylinder, 10mL (e.g., Fisher Scientific Cat. No. 08-552-4H)		1 kg	Mixed bed deionizing resin 1.5meq/mL, 300-1,180µm, mesh size 20-50 (e.g., Fisher Scientific Cat. No. 31038, 0.1 cubic feet - this should be enough to provide sufficient water for at least one year).
12	09 374 30	1	Hotplate/stirrer, 220V (e.g., Fisher Scientific Cat. No. 11-501-7SH)
12	09 160 00	3	Magnetic stirring bars (e.g., Fisher Scientific Cat. No. 14-511-70)
Beakers, Pyrex Flasks, Erlenmeyer (conical) with stopper, 250mL (e.g., Fisher Scientific Cat. No. 10-098E)		REAGENTS REQUIRED	
4	09 676 00	Sodium Thiosulfate Pentahydrate, ANALAR, 500g (e.g., Fisher Scientific Cat. No. S445-500) (Sufficient for 50,000 samples)	
4	09 679 05	Sulfuric Acid, concentrated, 2.5L (e.g., Fisher Scientific Cat. No. A298-212) (Sufficient for 40,000 samples)	
4	09 239 00	Potassium Iodide, 500g	
4	09 767 00	Sodium Chloride, 3kg (eg. Fisher Scientific Cat. No. S271-3) (Sufficient for 3,000 samples)	
2		Soluble starch, 500g (eg. Fisher Scientific Cat. No. S516-500) (Sufficient for 25,000 samples)	
Laboratory safety glasses (e.g., Fisher Scientific Cat. No. 17-286-1C)			
1			
Parafilm, for covering beakers (e.g., Fisher Scientific Cat. No. 13-374-12)			
12	09 194 50		
Glass bottles with stoppers, for reagents, 250mL			
4	09 450 00		
Funnel, lab, plain, diam. 65mm			
4	09 888 00		
Watch glass, 75mm diam.			
6	09 699 10		
Spatula Lab single blade 150mm SS length			
4	09 190 00		
Dropper bottle, glass 25-60mL			
1	09 374 60		
Desiccator plain Scheibler 150x150mm			

** Fisher Scientific, 50 Fadem Road, Springfield, NJ, 07081, USA Fax: 201-379-7415, ATTENTION: Jackie Dubeau