

Lugol's Solution

Equipment	Chemicals
Fume hood	100g KI
1L Erlenmeyer flask	50g I ₂
Balance	900mL Distilled (DDW) water
Weigh boats	100mL Glacial Acetic Acid
Hot plate with stirring action (see Moyes Lab)	
Cardboard box to cover balance	
1L amber Boston round jar (or 2x500mL)	
Glass funnel	

1. Place balance and hot plate in fume hood. Cover balance with cardboard box such that the screen is still visible. Level balance to ensure accuracy
2. Weigh out 100g KI and 50g of I₂. Cover the I₂ reagent with tinfoil as it is light sensitive and will evaporate
3. Combine 900 mL distilled H₂O and dry chemicals in Erlenmeyer flask
4. Add a magnetic stir bar and place on hot-plate with stirring action
5. Warm slightly while stirring to facilitate dissolution of the dry chemicals. DO NOT BOIL
6. In about an hour, once the solution is completely dissolved, add 100 mL glacial acetic acid to container and cap tightly. Continue stirring for 1 minute
7. Pour solution into a 1L amber Boston round jar using a glass funnel.