

Iodine method (**safety glasses + fume hood!**)

1. Wash BC membrane with distilled water and treat with 1% NaOH at 80 °C for 1 h
2. Rinse with distilled water
3. Dry BC membrane at 80 °C for 2 h (about 400 mg dry weight per sample)
4. Place sample in 50 mL three-necked flask fitted with mechanical stirrer
5. Add 20 mL of acetic anhydride and 0.63 mg of iodine
6. Heat mixture to 80 °C for 1 h (with stirring)
7. Let flask cool to room temperature
8. Add saturated sodium thiosulfate solution and stir until colourless
9. Wash BC sample thoroughly using 75% (v/v) ethanol and then using distilled water
10. Dry sample in vacuum oven at 60 °C for 12 h

Perchloric acid method (**safety glasses + fume hood!**)

1. Wash wet BC sample (1 cm thick) with distilled water and treat with 1% NaOH at 80 °C for 1 h
2. Rinse with distilled water
3. Cut BC sample in piece of 10 cm × 10 cm (× 1 cm) (= 150 mg dry weight?) and squeeze by hand (**gloves!**)
4. Soak sample in anhydrous acetic acid
5. Repeat squeezing and soaking with acetic acid three times
6. Place sample in stoppered glass bottle containing 20 mL of acetic acid, 25 mL of toluene, and 85.7 µL of 70% perchloric acid
7. Shake mixture vigorously for about 1 min.
8. Add 10 mL of acetic anhydride
9. Shake mixture vigorously for about 1 min.
10. Let mixture stand at room temperature for 1 h
11. Squeeze sample (**gloves!**) and wash thoroughly with methanol, then with distilled water