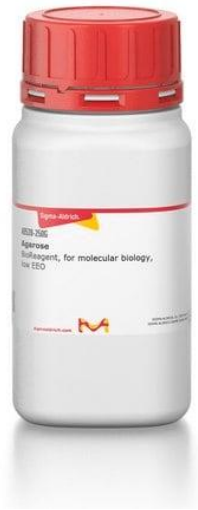
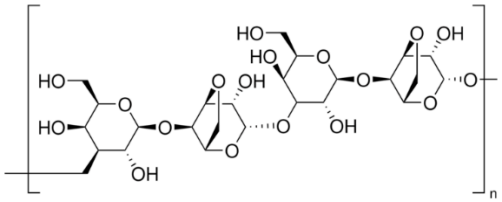
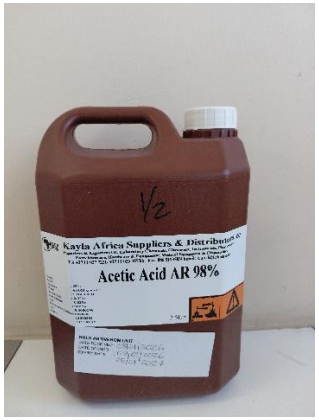
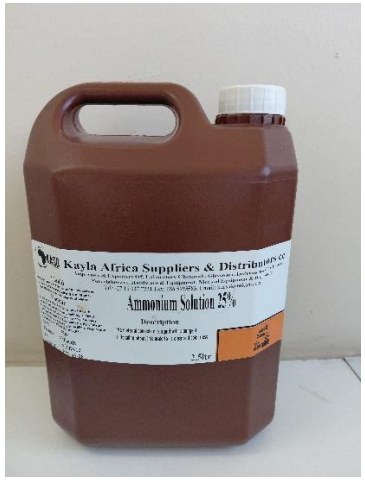
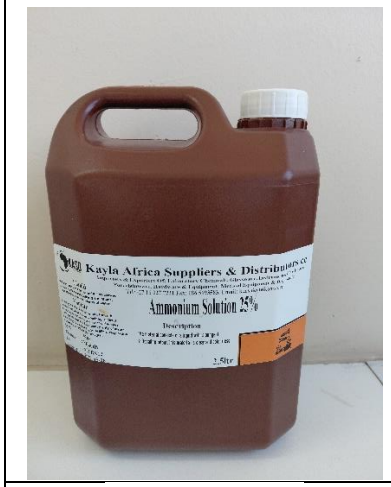
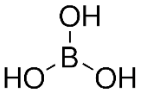
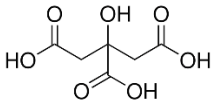
Specifications for Chemistry Lab reagents

Item	Specifications	Quantity
	1. <u>Agarose</u>  • Molecular formular: • Linear formular: $(C_{24}H_{38}O_{19})_n$ • Molecular weight: 154.17 • Size: 25 g • Form: Powder • Shelf Life: ≥ 2 years from the date of manufacture • COA	3
	2. <u>Acetic acid AR 98 %</u> • Molecular Weight: 60.052 • Linear Formula: CH_3COOH • Assay: 98 % • Size: 2.5 L • Form: Liquid • Shelf Life: ≥ 2 years from the date of manufacture • COA	3

Item	Specifications	Quantity
	3. <u>Acetic acid AR 99 %</u> • Molecular Weight: 60.052 • Linear Formula: CH_3COOH • Assay: 99 % • Size: 2.5 L • Form: Liquid • Shelf Life: ≥ 2 years from the date of manufacture • COA	3
	4. <u>Ammonia Solution 25 %</u> • Molecular formular: NH_4OH • Molecular Weight: 35.05 • Size: 2.5 L • Form: Liquid • Shelf Life: ≥ 2 years from the date of manufacture • COA	3

Item	Specifications	Quantity
	5. <u>Ammonia Solution 32 %</u> • Molecular formular: NH_4OH • Molecular Weight: 35.05 • Size: 2.5 L • Form: Liquid • Shelf Life: ≥ 2 years from the date of manufacture • COA	3
	6. <u>Ammonium sulfate AR</u> • Linear formular: $(NH_4)_2SO_4$ • Molecular Weight: 132.14 • Size: 500 g • Form: Powder or Crystals • Shelf Life: ≥ 2 years from the date of manufacture • COA	3

Item	Specifications	Quantity
	7. <u>Aluminium chloride</u> • Linear Formula: $AlCl_3$ • Molecular Weight: 133.34 • Size: 500 g • Form: Powder • Shelf Life: ≥ 2 years from the date of manufacture • COA	3
	**8.** <u>Aluminium potassium sulfate dodecahydrate</u> • Linear Formula: $AlK(SO_4)_2 \cdot 12H_2O$ • Molecular Weight: 474.39 • Size: 500 g • Form: Powder • Shelf Life: ≥ 2 years from the date of manufacture • COA	3

Item	Specifications	Quantity
	9. <u>Boric acid</u> • Molecular formular:  • Linear Formula: H_3BO_3 • Molecular Weight: 61.83 • Size: 500 g • Form: Powder • Shelf Life: ≥ 2 years from the date of manufacture • COA	3
	10. <u>Citric acid</u> • Molecular formular:  • Linear Formula: $HOC(COOH)(CH_2COOH)_2$ • Molecular Weight: 192.12 • Size: 500 g • Form: Crystals or Powder • Shelf Life: ≥ 2 years from the date of manufacture • COA	3

Item	Specifications	Quantity
	11. <u>Ferric chloride hexahydrate</u> • Linear formular: $FeCl_3 \cdot 6H_2O$ • Molecular Weight: 270.30 • Size: 500 g • Form: Solid or Powder • Shelf Life: ≥ 2 years from the date of manufacture • COA	3
	12. <u>Methoxyphenylacetic acid</u> • Empirical Formula (Hill Notation): $C_9H_{10}O_3$ • Molecular Weight: 166.17 • Size: 500 g • Form: Solid • Shelf Life: ≥ 2 years from the date of manufacture • COA	3

Item	Specifications	Quantity
	13. <u>Nitric acid 70% AR</u> • Linear Formula: HNO_3 • Molecular Weight: 63.01 g/mol • Size: 2.5 L • Form: Liquid • Shelf Life: ≥ 2 years from the date of manufacture • COA	3
	14. <u>Sodium hypochlorite solution 15 %</u> • Linear Formula: NaClO • Molecular Weight: 74.44 g/mol • Size: 500 mL • Form: Liquid • Shelf Life: ≥ 2 years from the date of manufacture • COA	3

Item	Specifications	Quantity
	15. <u>Phenolphthalein Solution</u> • Linear formula: $C_{20}H_{14}O_4$ • Molecular Weight: 318.3 g/mol • Size: 500 mL • Form: Liquid • Shelf Life: ≥ 2 years from the date of manufacture • COA	3
	16. <u>Potassium permanganate</u> • Linear formular: $KMnO_4$ • Molecular Weight: 158,03 g/mol • Size: 500 g • Form: Pellets, Crystals or Powder • Shelf Life: ≥ 2 years from the date of manufacture • COA	3

Item	Specifications	Quantity
	17. <u>Sodium chloride</u> • Linear Formula: NaCl • Molecular Weight: 58,44 g/mol • Size: 500 g • Form: Crystals, Powder or Solid • Shelf Life: ≥ 2 years from the date of manufacture • COA	3
	18. <u>Sodium dodecyl sulfate</u> • Linear formula: $CH_3(CH_2)_{11}OSO_3Na$ • Molecular Weight: 288.38 • Size: 500 g • Form: Solid, Crystals or Powder • Shelf Life: ≥ 2 years from the date of manufacture • COA	3

Item	Specifications	Quantity
	19. <u>Sulfuric acid 98 %</u> • Linear Formula: H_2SO_4 • Molecular Weight: 98.08 • Size: 2.5 L • Form: Liquid • Shelf Life: ≥ 2 years from the date of manufacture • COA	3
	20. <u>Silver Nitrate 0.1 N (0,10 M)</u> • Linear Formula: $AgNO_3$ • Molecular Weight: 169.87 • Size: 2.5 L • Form: Liquid • Shelf Life: ≥ 2 years from the date of manufacture • COA	6

Item	Specifications	Quantity
	21. <u>Methanol</u> • Linear Formula: CH_3OH • Molecular Weight: 32.04 • Size: 2.5 L • Form: Liquid • Shelf Life: ≥ 2 years from the date of manufacture • COA	3
	22. <u>Ethanol 96%</u> • Linear Formula: CH_3CH_2OH • Molecular Weight: 46.07 • Size: 2.5 L • Form: Liquid • Shelf Life: ≥ 2 years from the date of manufacture • COA	3

Item	Specifications	Quantity
	23. <u>Acetone</u> • Linear Formula: CH_3COCH_3 • Molecular Weight: 58.08 • Size: 2.5 L • Form: Liquid • Shelf Life: ≥ 2 years from the date of manufacture • COA	**3**
	24. <u>Pyridine</u> • Linear Formula: C_5H_5N • Molecular Weight: 79.10 • Size: 500 mL • Form: Liquid • Shelf Life: ≥ 2 years from the date of manufacture • COA	3

Item	Specifications	Quantity
	25. <u>Dichloromethane</u> • Linear Formula: CH_2Cl_2 • Molecular Weight: 84.93 • Size: 1 L • Form: Liquid • Shelf Life: ≥ 2 years from the date of manufacture • COA	**3**
	26. <u>Sodium hexanitrocobaltate (III)</u> • Linear Formula: $Na_3[Co(NO_2)_6]$ • Molecular Weight: 403.94 • Size: 25 g • Form: Powder • Shelf Life: ≥ 2 years from the date of manufacture • COA	3

Item	Specifications	Quantity
	27. <u>Whatman® qualitative filter paper, Grade 4</u> • Shape: Circles • Diameter: 110 mm • Pack size: Pack of 100 • Material: Cellulose filters, circles • Pore size: 20 - 25 µm (Particle retention) • Shelf Life: ≥ 2 years from the date of manufacture • COA	**4**
	28. <u>Fibrin from human plasma</u> • Form: Powder • Biological source: Human plasma • Size: 1 g • Form: Powder • Shelf Life: ≥ 2 years from the date of manufacture • COA	3

Item	Specifications	Quantity
	29. <u>Indigo carmine (certified by the BSC, Dye content 85 %)</u> • Empirical Formula (Hill Notation): $C_{16}H_8N_2Na_2O_8S_2$ • Molecular Weight: 466.35 • Form: Powder • Size: 25 g • Form: Powder • Shelf Life: ≥ 2 years from the date of manufacture • COA	3
	30. <u>Eppendorf microcentrifuge tubes</u> • Size: 1.5 mL • Pack size: 500 per pack • Pyrogen-free • Sterilized • Shelf Life: ≥ 2 years from the date of manufacture • COA	3

Item	Specifications	Quantity
	• Eppendorf® Tube Rack for 1.5 mL tubes • Size: Tube rack for 1.5 mL tubes • Pack size: 2 per pack • Shelf Life: ≥ 2 years from the date of manufacture • COA	3
Mandataries	1. COA / COC / COQ 2. Product specification or product brochure 3. Expiration date: ≥ 2 years from the date of manufacture	
Requisition numbers	1921324, 1921325 and 1921326	
Compiled by QCA: Kwanele Gqunta	Date: 15/07/2026	