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CHEMISTRY

Equipment List, Specifications and Tendering Guidance (CHE)

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Standards, Specifications and Conditions

There are six lists for science equipment, i.e. LAB, RES, BIO, CHE, PHY and AGR.
The provision of science equipment for science laboratories is as follows:

i) One Basic Science List – LAB – for each science laboratory.
ii) One Science Resource List– RES – for each two science laboratories and stored in the Science preparatory room, which links every two laboratories.
iii) One Agricultural Science List – AGR – for each Agricultural Science provision (in addition to i) and ii) above).
iv) One Biology List – BIO – for each Biology provision (in addition to i) and ii) above)
v) One Chemistry List – CHE –for each Chemistry provision (in addition to i) and ii) above)
vi) One Physics List – PHY – for each Physics provision (in addition to i) and ii) above).
vii) Each laboratory is supplied with a LAB list plus one of the senior science lists (i.e. BIO/CHE/PHY/AGR).

Note: Where the symbol ♣ is placed after a substance, a supplier who supplies a greater quantity than requested may be held responsible for removal and disposal of the excess.

All equipment shall be durable and safe for school use.
Equipment wholly or partly funded from public funds is subject to inspection by officers from the Department of Education and Skills.

It is essential that tenders and tenderers for equipment for school use shall:

- Comply fully with the specifications and be durable and safe for school use.
- Comply fully with the standards as detailed and shall comply fully with European Standards (EN), both established and developing.
- Comply with European electrical standards and CE marking as appropriate.
- Fully comply with requirements in the Request for Tenders (RFT) document.
- Be accompanied by documentation of sufficient detail for full evaluation.
- Include the completed and signed certificate of compliance.

Award of a contract is conditional on the production of a current tax clearance certificate.

Failure to comply with the above may result in the tender being deemed null and void.

Section 1: Basic Equipment			
Code **Quantity**	**Descriptions and Specifications**		**Cost €:**
CHE/100 2	Aluminium metal sheets, 600 x 300 mm, c. 0.8 mm thick, pack 10		
	Manufacturer:	Catalogue No:	
CHE/101 2	Balance, electronic, digital display, top-loading, with serial interface: 0 – 300 g × 0.001 g (i.e. to 3 decimal places = 1 mg), two year warranty.		
	Manufacturer:	Catalogue No:	
CHE/102 2	Mounted bulb-holders, medium, Edison screw, pack 10		
	Manufacturer:	Catalogue No:	
CHE/103 10	Bulbs, medium, Edison screw, 3.0 V, 0.3 A, pack 10		
	Manufacturer:	Catalogue No:	
CHE/104 12	Burette clamp, single, to suit 50 cm^3 burettes, to suit 10 mm retort stand rods		
	Manufacturer:	Catalogue No:	
CHE/105 3	Burette storage racks, 10 slots		
	Manufacturer:	Catalogue No:	
CHE/106 6	Bunsen burner, with tap at side to control the flame (TELSU), semi micro, nickel-plated burner tube with adjustable air regulator on enamelled pressed steel base, tapered rifled gas inlet (mean OD 10 mm), burner tube 60 x 10 mm (height x diameter), base 80 mm diameter, suitable for LPG or natural gas, as required by school.		
	Manufacturer:	Catalogue No:	
CHE/107 6	Tripod stand, triangular top, low form, for use with semi micro Bunsen burners (above), length of side 125 mm, height 154 mm		
	Manufacturer:	Catalogue No:	
CHE/108 50	Carbon rods		
	Manufacturer:	Catalogue No:	
CHE/109 2	Colorimeter, general purpose laboratory, wavelength selection (range 400-710 nm) using 8 built-in filters, (typical band widths 40 nm), d.c. (12 V) and a.c. 230 V, 50 Hz, digital, LCD display, complete with cuvettes, two year warranty.		
	Manufacturer:	Catalogue No:	
CHE/110 2	Pipette Stand, 18 slots		
	Manufacturer:	Catalogue No:	
CHE/111 6	Comparator, Lovibond 2000 or equivalent, to determine chemical concentrations in water samples by visual colorimetry		
	Manufacturer:	Catalogue No:	
CHE/112 6	Lighting unit, standardised, mains operated, 230 V, suitable for use with Lovibond comparator, or equivalent, above		
	Manufacturer:	Catalogue No:	
CHE/113 6	Cell, 40 mm, rectangular moulded cell, calibrated at 20 cm^3 for use with comparator, above		
	Manufacturer:	Catalogue No:	
CHE/114 2	Cell, 13.5 mm, moulded glass, precision square, capacity 10 cm^3 for use with comparator above, pack of 5		
	Manufacturer:	Catalogue No:	

CHE/1156	Discs for comparator 2000 system above, or equivalent to determine Chlorine in water, 0.02 to 0.3 mg/litre		
	Manufacturer:	Catalogue No:	
LAB/11612	Indicator pH test paper and litmus paper reels; each reel contains a paper strip 5 m long x 6 mm wide, supply as: - reel x universal indicator test paper pH 1-14 - reel x Litmus blue - reel x Litmus red		
	Manufacturer:	Catalogue No:	
LAB/1176	Set of Narrow range Universal Indicator pH test paper reels		
	Manufacturer:	Catalogue No:	
CHE/11812	Pocket pH meter complete with electrode (range 0-14, accuracy 0.2, replaceable electrode) One year warranty		
	Manufacturer:	Catalogue No:	
CHE/1191	Chromatography paper, Whatman grade 1, or equivalent, 30 mm wide, reel 100 m		
	Manufacturer:	Catalogue No:	
CHE/1201	Chromatography paper, Grade 1, sheets, 250 x 250 mm, pack 100		
	Manufacturer:	Catalogue No:	
CHE/1214	Chromatography tank, thin-layer, to hold at least three plates, 10 cm x 20 cm with a heavy glass lid		
	Manufacturer:	Catalogue No:	
CHE/1224	Stainless steel insert for TLC plates, to suit chromatography tank above		
	Manufacturer:	Catalogue No:	
CHE/1233	Chromatography thin layer plates, flexible, 20 x 20 cm^2, pack 25, to suit above tank		
	Manufacturer:	Catalogue No:	
CHE/1241	Chart: Size approximately 100 x 75 mm^2 coloured to illustrate the following: Organic chemistry chart - To give an overall view of organic chemistry and some of its many areas of achievement.		
	Manufacturer:	Catalogue No:	
CHE/1258	Carbon electrodes (pair), with stoppers and terminals.		
	Manufacturer:	Catalogue No:	
CHE/1268	Copper plate electrodes, supplied as pair, with stoppers and terminals		
	Manufacturer:	Catalogue No:	
CHE/1272	Desiccator, glass, lid with knob, 200 mm, complete with discs		
	Manufacturer:	Catalogue No:	
CHE/1285	Desiccator discs, for 200 mm desiccator		
	Manufacturer:	Catalogue No:	
CHE/12912	Diffraction gratings, 100 lines/cm		
	Manufacturer:	Catalogue No:	
CHE/1301	Discharge tube, good quality, mercury, Teltron or equivalent.		
	Manufacturer:	Catalogue No:	

CHE/131 1	Universal stand, to suit above.		
	Manufacturer:	Catalogue No:	
CHE/132 10	Filter paper, grade 1, qualitative general purpose, 15 cm, pack 100		
	Manufacturer:	Catalogue No:	
CHE/133 2	Filter paper, grade 1, qualitative general purpose, 18 cm, pack 100		
	Manufacturer:	Catalogue No:	
CHE/134 2	Filter paper, grade 1, qualitative general purpose, 24 cm, pack 100		
	Manufacturer:	Catalogue No:	
CHE/135 8	Gas syringe kit; complete with 3-way stopcock(1), gas syringe, glass 100 cm^3(2), silica tube with plugs(2), bent tube(1), 'T' tube(1), test tube(1), pinhole tube(1), rubber connectors(8) and gas syringe holders.		
	Manufacturer:	Catalogue No:	
CHE/136 8	Gas syringe, precision ground glass, gas tight and heat resisting, outlet tube external diameter 7 mm, capacity 100 cm^3 x 1 cm^3.		
	Manufacturer:	Catalogue No:	
CHE/137 2	Rubber caps, self-sealing (vacuum), packet 12, for use with gas syringe above		
	Manufacturer:	Catalogue No:	
CHE/138 2	Hypodermic needles, 19G x 50 mm, pack 10, for gas syringe above.		
	Manufacturer:	Catalogue No:	
CHE/139 12	Hirsch funnels, porcelain with perforated support plates, top diameter 50 mm, plate diameter 18 mm, complete with filter paper to match		
	Manufacturer:	Catalogue No:	
CHE/140 1	Molecular model set, atomic models (skeletal) containing 24 large spheres, 84 small spheres with flexible bonds.		
	Manufacturer:	Catalogue No:	
CHE/141 12	Molecular model set, elementary organic chemistry, Molymod or equivalent.		
	Manufacturer:	Catalogue No:	
CHE/142 6	Molecular model set, organic (teachers) set, Molymod or equivalent		
	Manufacturer:	Catalogue No:	
CHE/143 3	Molecular model set, inorganic/organic set, Molymod or equivalent.		
	Manufacturer:	Catalogue No:	
CHE/144 2	Model orbital molecular lattice set, with seven (7) crystal systems, number of atoms 240, number of bonds 250, Molymod or equivalent.		
	Manufacturer:	Catalogue No:	
CHE/145 1	Model set, s, p and d orbitals, Darling model kit, or equivalent, approx. 103 pieces, flexible.		
	Manufacturer:	Catalogue No:	

CHE/146 1	Molecular model set, diamond, pre-assembled, Molymod or equivalent,.		
	Manufacturer:	Catalogue No:	
CHE/147 1	Molecular model set, graphite, pre-assembled, Molymod or equivalent		
	Manufacturer:	Catalogue No:	
CHE/148 1	Molecular model, sodium chloride lattice, Molymod or equivalent,		
	Manufacturer:	Catalogue No:	
CHE/149 1	Molecular model, ice, Molymod or equivalent.		
	Manufacturer:	Catalogue No:	
CHE/150 1	Melting point apparatus, digital selection and display of temperature, built in illumination, to take up to two samples for simultaneous viewing, complete with 100 melting point tubes, open one end.-not melting point blocks		
	Manufacturer:	Catalogue No:	
CHE/151 2	Melting point tubes, open at both ends, pack 100, to suit above		
	Manufacturer:	Catalogue No:	
CHE/152 20	Pipette fillers, acid resistant plastic, for precision filling and dispensing from all standard pipettes, red 25 cm^3, complete with release valve for rapid pipetting.		
	Manufacturer:	Catalogue No:	
CHE/153 1	Pipette washer-rinser, polyethylene, operates with water input up to 12 litres per minute		
	Manufacturer:	Catalogue No:	
CHE/154 1	Platinum wire, 28 SWG (0.32 mm), fused into glass handle, overall length approx 110 mm		
	Manufacturer:	Catalogue No:	
CHE/155 1	Smoke cell, Whitley Bay type, 4 mm connection sockets, integral illuminator, fixed focussing lens		
	Manufacturer:	Catalogue No:	
CHE/156 1	Spectrometer, with digital readout, suitable for student use, graduated in 30 minute increments, two Verniers, 180 degrees apart, Collimeter, with 178 mm rack and pinion focusing aperture, 25 mm diameter, variable slit, levelling screws. Prism table, diameter 86 mm (height adjustable and lockable). Telescope, with 178 mm rack and pinion focusing aperture, diameter 25 mm, Ramsden eyepiece. Flint prism, prism clamp, diffraction grating holder, cross line graticule, Vernier magnifier. Complete unit in packing case, two year warranty.		
	Manufacturer:	Catalogue No:	
CHE/157 1	Spectral lamp, sodium, to suit above, two year warranty.		
	Manufacturer:	Catalogue No:	
CHE/158 1	Spectral transformer and lamp house, to suit above, two year warranty.		
	Manufacturer:	Catalogue No:	
CHE/159 2	Spectroscope, good quality, direct vision, fixed slit, high quality blazed diffraction grating, viewed via a fixed focus x2 magnifying eyepiece, complete with sample tubes, operating notes and student investigations. Two year warranty.		
	Manufacturer:	Catalogue No:	

CHE/160 12	Steam generator, capacity 300 cm^3 approx., steam exit pipe diameter 8 mm, AC 230 V, rating 500 W, dimensions 12.5 x 12.5 x 14 cm approx. Copper kettles, corks and safety tubes to match.		
	Manufacturer:	Catalogue No:	
CHE/161 1	Tube, cathode ray, demonstration model in storage case, Teltron or equivalent, supplied with EHT supply.		
	Manufacturer:	Catalogue No:	
CHE/162 20	Thermometer, digital, range -50 °C to 200 °C (approximately), hand held.		
	Manufacturer:	Catalogue No:	
CHE/163 1	Wire, nichrome, bare, 22 SWG (0.64 mm), 125 g reel		
	Manufacturer:	Catalogue No:	
CHE/164 1	Wire strippers, insulated handles, spring loaded		
	Manufacturer:	Catalogue No:	
CHE/165 12	pH sensor, wireless, range 0-14 pH, accuracy ±0.1 pH with calibration, temperature range 5°C - 60°C, logging, Bluetooth, including probe storage bottle and storage solution		
	Manufacturer:	Catalogue No:	
CHE/166 1	pH sensor storage solution, to suit pH sensor above, 500 cm^3		
	Manufacturer:	Catalogue No:	
CHE/167 12	Temperature sensor, wireless, stainless steel probe, range -40°C to 125°C, accuracy 0.5°C, Bluetooth, stored data points memory (logging)		
	Manufacturer:	Catalogue No:	
CHE/168 6	Wireless Optical Dissolved Oxygen (ODO) Sensor complete with USB cable and protective cover. Dissolved Oxygen range 0 to 20 mg/L, 0 to 300% saturation		
	Manufacturer:	Catalogue No:	
CHE/169 6	Replacement cap for the wireless optical dissolved oxygen sensor		
	Manufacturer:		
CHE/170 12	Colorimeter, 3 RGB wavelengths, e.g. 470 nm, 565 nm, 635 nm		
	Manufacturer:	Catalogue No:	
CHE/171 1	Pack of 100 cuvettes for colorimeter,		
	Manufacturer:	Catalogue No:	
CHE/172 1	Manual for Chemistry experiments		
	Manufacturer:	Catalogue No:	
CHE/173 1	Radiation monitor sensor, to measure alpha, beta and gamma radiation, suitable for use with data logging equipment. ONE ITEM ONLY PER SCHOOL – See Physics List (PHY/800)		
	Manufacturer:	Catalogue No:	

Section 2: Glassware			
CHE/20012	Jointed Glass, organic chemistry sets, one joint size 14/23; comprised of the following: 1 pear shaped flask, 50 cm^3 capacity 1 still head 1 Liebig condenser 1 screw cap adapter 1 air leak/steam inlet tube 1 dropping funnel, 50 cm^3 with GP Rotaflo tap or equal 1 stopper 1 thermometer To include plastic joint clips for each set		
	Manufacturer:	Catalogue No:	
CHE/2014	Pipette, graduated, type I, class B, calibrated for delivery from zero mark at top to graduation mark, face marked, 25 cm^3 capacity x 0.2 cm^3 divisions, pack 5		
	Manufacturer:	Catalogue No:	
CHE/2022	Pipette, graduated, calibrated for delivery from zero mark at top to graduation mark, face marked, 10 cm^3 capacity x 0.1 cm^3 divisions, pack of 5		
	Manufacturer:	Catalogue No:	
CHE/20320	Pipette, glass, one mark, class AS, 25 cm^3		
	Manufacturer:	Catalogue No:	
CHE/2046	Flask, round bottom, jointed glass, three necks (14/23 each), 50 cm^3		
	Manufacturer:	Catalogue No:	
CHE/2056	Flask, pear shaped distillation, (socket and cone size 14/23), jointed glass, 100 cm^3		
	Manufacturer:	Catalogue No:	
CHE/2066	Flask, volumetric, glass, stoppered (polypropylene), class B, 500 cm^3		
	Manufacturer:	Catalogue No:	
CHE/2072	Flask, volumetric, glass, stoppered (polypropylene), class B, 1000 cm^3		
	Manufacturer:	Catalogue No:	
CHE/20824	Flask, volumetric, glass, stoppered (polypropylene), class B, 250 cm^3		
	Manufacturer:	Catalogue No:	
CHE/2096	Flask, volumetric, glass, stoppered (polypropylene), class B, 100 cm^3		
	Manufacturer:	Catalogue No:	
CHE/2108	Jointed glass, Buchner filter funnel, cone size 29/32, disc diameter 65 mm, funnel diameter 75 mm, sintered disc porosity 3.		
	Manufacturer:	Catalogue No:	
CHE/2118	Jointed glass, Buchner filter flask, push-in type connector to suit 9 mm vacuum tubing, capacity 250 cm^3, socket size 29/32, approx. height 145 mm, approx. diameter 85 mm.		
	Manufacturer:	Catalogue No:	
CHE/21230	Gas jars, heavy glass, ground flange, 150 mm high x 50 mm internal diameter supplied with beehive shelves.		
	Manufacturer:	Catalogue No:	
CHE/21350	Gas jar covers, circular sheet glass, for 50 mm int. diameter jars, pack 10		
	Manufacturer:	Catalogue No:	

CHE/214 24	Burette, soda glass, 50 cm^3 x 0.1, one way PTFE key stopcock		
	Manufacturer:	Catalogue No:	
CHE/215 12	Dreschel gas washing bottles, 125 cm^3 capacity, socket size 24/29		
	Manufacturer:	Catalogue No:	
CHE/216 12	Dreschel bottle heads, plain, cone size 24/29		
	Manufacturer:	Catalogue No:	
CHE/217 12	Steam jacket and syringe. Syringe graduated 0-100 cm^3 x 0.1 cm^3, surrounded by borosilicate glass jacket supported in place by two rubber bungs also carrying inlet and outlet tube for steam and hole for thermometer. Overall length (215 mm) x diameter (60 mm).		
	Manufacturer:	Catalogue No:	
CHE/218 15	Test tube, side arm, borosilicate, 150 x 24 mm		
	Manufacturer:	Catalogue No:	
CHE/219 2	Tubing, soda glass, 70/170 mm, outside diameter 6mm, pack 5		
	Manufacturer:	Catalogue No:	
CHE/220 15	U-tube, side arm, 125 x 15 mm		
	Manufacturer:	Catalogue No:	
CHE/221 30	Watch glasses, borosilicate glass, clear, with ground edges, 75 mm diameter		
	Manufacturer:	Catalogue No:	
CHE/222 12	Watch glasses, polythene, 100 mm diameter		
	Manufacturer:	Catalogue No:	
CHE/223 12	Watch glasses, polythene, 80 mm diameter		
	Manufacturer:	Catalogue No:	

Section 3: Chemicals and Reagents			
CHE/300 1	Aluminium oxide, 500 g		
	Manufacturer:	Catalogue No:	
CHE/301 1	Aluminium powder, 100 g		
	Manufacturer:	Catalogue No:	
CHE/302 1	Ammonium chloride, 100 g		
	Manufacturer:	Catalogue No:	
CHE/303 1	Ammonium iron(II) sulfate, 250 g		
	Manufacturer:	Catalogue No:	
CHE/304 1	Ammonium metavanadate, 500 g		
	Manufacturer:	Catalogue No:	
CHE/305 1	Ammonium sulphate, 500 g		
	Manufacturer:	Catalogue No:	
CHE/306 1	Barium chloride, 100 g		
	Manufacturer:	Catalogue No:	
CHE/307 1♣	♣Benzaldehyde, 250 cm^3		
	Manufacturer:	Catalogue No:	
CHE/308 1	Benzoic acid, 250 g		
	Manufacturer:	Catalogue No:	
CHE/309 1	Bismuth trichloride, 100 g		
	Manufacturer:	Catalogue No:	
CHE/310 10♣	♣Bromine water prepared		
	Manufacturer:	Catalogue No:	
CHE/311 1♣	♣Butan-1-ol, 250 cm^3		
	Manufacturer:	Catalogue No:	
CHE/312 1	Buffer capsules, pH 4, pack, 5 x 10 capsules		
	Manufacturer:	Catalogue No:	
CHE/313 1	Buffer capsules, pH 7, pack, 5 x 10 capsules		
	Manufacturer:	Catalogue No:	
CHE/314 1	Buffer capsules, pH 10, pack, 5 x 10 capsules		
	Manufacturer:	Catalogue No:	
CHE/315 1♣	♣Butanal (butyraldehyde), 250 cm^3		
	Manufacturer:	Catalogue No:	
CHE/316 1♣	♣Butanoic acid (n-butyric acid), 500 cm^3		
	Manufacturer:	Catalogue No:	
CHE/317 1♣	♣Butanone (methyl ethyl ketone), 500 cm^3		
	Manufacturer:	Catalogue No:	
CHE/318 1	♣Calcium carbide, 100 g		
	Manufacturer:	Catalogue No:	
CHE/319 1	Citric acid, *crystals*, 500 g		
	Manufacturer:	Catalogue No:	
CHE/320 1	Copper(II) chloride, 100 g		
	Manufacturer:	Catalogue No:	

CHE/321 1	Copper(II) oxide (cupric oxide), 250 g		
	Manufacturer:	Catalogue No:	
CHE/322 1	Copper(II) carbonate hydroxide *1- hydrate* (cupric carbonate), 250 g		
	Manufacturer:	Catalogue No:	
CHE/323 1♣	♣Cyclohexane, 250 cm^3		
	Manufacturer:	Catalogue No:	
CHE/324 5	Decon 90, or equivalent, 1 litre,		
	Manufacturer:	Catalogue No:	
CHE/325 1	DPD No. 1 tablet to test for free and total chlorine (comparator), 100 tablet per pack		
	Manufacturer:	Catalogue No:	
CHE/326 1	DPD No 3 tablet to test for free and total chlorine (comparator), 100 tablets per pack		
	Manufacturer:	Catalogue No:	
CHE/327 1♣	♣Ethanal (*acetaldehyde*), 500 cm^3		
	Manufacturer:	Catalogue No:	
CHE/328 1	Ethanoic (*acetic*) acid, 500 cm^3		
	Manufacturer:	Catalogue No:	
CHE/329 1♣	♣Ethyl benzoate, 250 cm^3		
	Manufacturer:	Catalogue No:	
CHE/330 1	EDTA, disodium salt, 250 g		
	Manufacturer:	Catalogue No:	
CHE/331 1♣	♣Ethyl ethanoate (ethyl acetate), 250 cm^3		
	Manufacturer:	Catalogue No:	
CHE/332 1♣	♣Ethanedioic acid (oxalic acid), 250 g		
	Manufacturer:	Catalogue No:	
CHE/333 1	Glycerol, 500 cm^3		
	Manufacturer:	Catalogue No:	
CHE/334 1♣	♣n-Heptane, 500 cm^3		
	Manufacturer:	Catalogue No:	
CHE/335 3	Hydrochloric acid, ampoules, 1 mol L^{-1}, carton 6 ampoules		
	Manufacturer:	Catalogue No:	
CHE/336 1	Iron tablets, (200 mg $FeSO_4$ per tablet) Packet 50		
	Manufacturer:	Catalogue No:	
CHE/337 1	Iron(III) chloride, 250 g		
	Manufacturer:	Catalogue No:	
CHE/338 1	Liquid paraffin, 250 cm^3		
	Manufacturer:	Catalogue No:	
CHE/339 1	Lithium chloride, 250 g		
	Manufacturer:	Catalogue No:	
CHE/340 1	Lycopodium powder, 250 g		
	Manufacturer:	Catalogue No:	
CHE/341 1	Magnesium carbonate, 500 g		
	Manufacturer:	Catalogue No:	

CHE/342 1	Magnesium sulfate, 250 g		
	Manufacturer:	Catalogue No:	
CHE/343 1	Manganese sulfate dihydrate, 250 g		
	Manufacturer:	Catalogue No:	
CHE/344 1♣	♣Methanol, 500 cm^3		
	Manufacturer:	Catalogue No:	
CHE/345 1	Methyl orange powder, 25 g		
	Manufacturer:	Catalogue No:	
CHE/346 1♣	♣Methylbenzene (toluene), 100 cm^3		
	Manufacturer:	Catalogue No:	
CHE/347 1♣	♣Nitric acid, concentrated, 1 litre		
	Manufacturer:	Catalogue No:	
CHE/348 1♣	♣n-Octane, 500 cm^3		
	Manufacturer:	Catalogue No:	
CHE/349 1♣	♣Pentane, 500 cm^3		
	Manufacturer:	Catalogue No:	
CHE/350 1♣	♣Petroleum ether (40 to 65 °C), 1 litre		
	Manufacturer:	Catalogue No:	
CHE/351 3	Potassium manganate(VII), ampoules, 0.02 mol L^{-1} carton, 6 ampoules		
	Manufacturer:	Catalogue No:	
CHE/352 1	Potassium bromide, 50 g		
	Manufacturer:	Catalogue No:	
CHE/353 1	Potassium chloride, 250 g		
	Manufacturer:	Catalogue No:	
CHE/354 1♣	♣Potassium hydroxide pellets, 250 g		
	Manufacturer:	Catalogue No:	
CHE/355 1	Potassium iodate, 100 g		
	Manufacturer:	Catalogue No:	
CHE/356 1	Potassium thiocyanate, 250 g		
	Manufacturer:	Catalogue No:	
CHE/357 1	Propanal (propionaldehyde), 250 cm^3		
	Manufacturer:	Catalogue No:	
CHE/358 5	Propanone (acetone), 500 cm^3		
	Manufacturer:	Catalogue No:	
CHE/359 1	Propan-1-ol, 250 cm^3		
	Manufacturer:	Catalogue No:	
CHE/360 1	Propan-2-ol (iso-propyl alcohol), 250 cm^3		
	Manufacturer:	Catalogue No:	
CHE/361 1	Silver nitrate, 10 g		
	Manufacturer:	Catalogue No:	
CHE/362 1	Sodium hypochlorite solution, 500 cm^3		
	Manufacturer:	Catalogue No:	

CHE/3631	Sodium sulfate, 250 g		
	Manufacturer:	Catalogue No:	
CHE/3641	Sodium sulfite, 500 g		
	Manufacturer:	Catalogue No:	
CHE/3651	Sodium thiosulfate, 500 g		
	Manufacturer:	Catalogue No:	
CHE/3661	Solochrome black T, 25 g		
	Manufacturer:	Catalogue No:	
CHE/3671	Strontium chloride, 250 g		
	Manufacturer:	Catalogue No:	
CHE/3683	Sodium hydroxide, ampoules, 0.5 mol L^{-1}, carton, 6 ampoules		
	Manufacturer:	Catalogue No:	
CHE/3691	Sulfuric acid, ampoules, 0.5 mol L^{-1}, carton, 6 ampoules		
	Manufacturer:	Catalogue No:	
CHE/3701	Sunflower oil, 250 cm^3		
	Manufacturer:	Catalogue No:	
CHE/3711♣	♣Styrene (phenylethene), 1 L		
	Manufacturer:	Catalogue No:	
CHE/3721	Tin foil, 0.10 mm, 100 g		
	Manufacturer:	Catalogue No:	
CHE/3731♣	♣2,2,4-trimethylpentane (*iso-octane*), 1 L		
	Manufacturer:	Catalogue No:	
CHE/3741	Urea, 500 g		
	Manufacturer:	Catalogue No:	
CHE/3751	Phenyl methanol (benzyl alcohol), 500 cm^3		
	Manufacturer:	Catalogue No:	
CHE/3761	Iron (II) chloride, 250g		
	Manufacturer:	Catalogue No:	
CHE/3772	Vinegar, 500 cm^3		
	Manufacturer:	Catalogue No:	
CHE/3781	Washing crystals, 500g		
	Manufacturer:	Catalogue No:	
CHE/3791	Salic acid, 100g		
	Manufacturer:	Catalogue No:	
CHE/3801	Pentan-1-ol, 250 cm^3		
	Manufacturer:	Catalogue No:	

Section 4: Radiochemistry

One set only to be provided *per school* see PHY/500-504			
CHE/400 **1**	Geiger-Muller tube, suitable for classroom use		
	Manufacturer:	Catalogue No:	
CHE/401 **1**	Holder and stand, suitable for use with Geiger-Muller tube CHE/400 above		
	Manufacturer:	Catalogue No:	
CHE/402 **1**	Scaler/ratemeter/timer for Geiger-Muller tube CHE/400 above.		
	Manufacturer:	Catalogue No:	
CHE/403 **1**	Radioactive source kit, set of 3 source types- e.g. alpha (Po-210), beta (Sr-90) and gamma (Co-60) - embedded in colour coded epoxy material, safe for use in classroom. No source to exceed 1.2 µCi. To include holder for sources and a range of items needed for demonstration of the differing absorption/ penetration powers and the effect of magnetic field on the three types of radiation. Suitable for use with equipment PHY/500-502 above.		
	Manufacturer:	Catalogue No:	
CHE/404 **1**	"Radioactive" source, electronic, simulated, allows determination of "half-life", random numbers and Poisson distribution curve, powered 12 V a.c./d.c.		
	Manufacturer:	Catalogue No:	

Equipment for Chemistry

Section	Code	Total Costs €:
Section 1	Basic Equipment	
Section 2	Glassware	
Section 3	Chemicals and Reagents	
Section 4	Radiochemistry	

Total (€)	
Add for VAT (€)	
Total amount for CHE List (€)	

Standards, Specifications and Conditions

All Equipment shall be Durable and Safe for School Use. Equipment wholly or partly funded from public funds is subject to Inspection by Officers from the Department of Education.

It is essential that tenders for equipment for School Use shall:

i) Comply fully with the specifications and be durable and safe for School Use.
ii) Comply fully with the standards as detailed and shall comply fully with European (EN) standards, both established and developing.
iii) Comply with European electrical standards and CE marking as appropriate.
iv) Fully comply with requirements in the Request for Tenders (RFT) document.
v) Be accompanied by documentation of sufficient detail for full evaluation.
vi) Include the completed and signed certificate of compliance.

Award of a contract is conditional on the production of a current tax clearance certificate.

Failure to comply with the above may result in the tender being deemed null and void.

Certificate of Compliance with Standards, Specifications & Conditions:

I/We certify that the equipment tendered complies in all respects with the Standards, Specifications and other requirements/conditions specified in this tender document and in the Request for Tenders (RFT).
I/We hold a current tax clearance certificate.

Company: _____

Signed: _____ Date: _____

Position: _____