# *ANNEX II + III:* TECHNICAL SPECIFICATIONS + TECHNICAL OFFER

**Contract title: Supply of consumables for the purposes of the scientific laboratories of the BLUE GROWTH Research Centre at “Prof. D-r Asen Zlatarov” University of Burgas  
Lot 4 Supply of glassware for the analysis of the Water Pollution Monitoring Lab, Aquatic Ecosystems Analysis Lab and Aquaculture and Biotechnology Lab p 1 /…**

**Publication reference:** CB005.3.12.001 - LP - Supply 13

**Columns 1-2 should be completed by the contracting authority**

**Columns 3-4 should be completed by the tenderer**

**Column 5 is reserved for the evaluation committee**

Annex III - the contractor's technical offer

The tenderers are requested to complete the template on the next pages:

* Column 2 is completed by the contracting authority shows the required specifications (not to be modified by the tenderer),
* Column 3 is to be filled in by the tenderer and must detail what is offered (for example the words ‘compliant’ or ‘yes’ are not sufficient)
* Column 4 allows the tenderer to make comments on its proposed supply and to make eventual references to the documentation

The eventual documentation supplied should clearly indicate (highlight, mark) the models offered and the options included, if any, so that the evaluators can see the exact configuration. Offers that do not permit to identify precisely the models and the specifications may be rejected by the evaluation committee.

The offer must be clear enough to allow the evaluators to make an easy comparison between the requested specifications and the offeredspecifications.

| **1.**  **Item number** | **2.**  **Specifications required** | **3.**  **Specifications offered** | **4.**  **Notes, remarks,  ref to documentation** | **5.**  **Evaluation committee’s notes** |
| --- | --- | --- | --- | --- |
| **Reagents Water Pollution Monitoring Lab** | | | | |
| **1** | **Sodium Chloride, clean for analysis – 10 kg.** |  |  |  |
| **2** | **Zinc Chloride, clean for analysis – 10 kg.** |  |  |  |
| **3** | **Ethyl alcochol absolute, clean for analysis (l.) – 20 l.** |  |  |  |
| **4** | **Ethyl alcochol 96 % clean for analysis – 10 l.** |  |  |  |
| **5** | **Methyl alcochol, clean for analysis – 4 l.** |  |  |  |
| **6** | **Acetone – 15 l.** |  |  |  |
| **7** | **Potassium chloride, clean for analysis – 10 kg.** |  |  |  |
| **8** | **CaCl2, clean for analysis, anhydrous – 10 kg.** |  |  |  |
| **9** | **MgCl2 6H2O, clean for analysis – 5 kg.** |  |  |  |
| **10** | **MgSO4 7H2O clean for analysis – 5 kg.** |  |  |  |
| **11** | **Boric acid – 4 kg.** |  |  |  |
| **12** | **Sodium base flakes, clean for analysis – 2 kg.** |  |  |  |
| **13** | **Hydrochloric acid 36%, clean for analysis – 8 l.** |  |  |  |
| **14** | **H2O2 30% - 10 l.** |  |  |  |
| **15** | **Sulfuric acid, clean for analysis – 8 l.** |  |  |  |
| **16** | **HNO3 65 %, clean for analysis – 10 l.** |  |  |  |
| **17** | **Isopropanol, clean for analysis – 8 l.** |  |  |  |
| **18** | **Silver nitrate, clean for analysis – 100 gr.** |  |  |  |
| **19** | **N,N-Dimethylformamide /DMF/, р.а. analytical reagent – 2.5 l.** |  |  |  |
| **20** | **Certified standard buffer solution, pH 4,005 – 500 ml** |  |  |  |
| **21** | **Certified standard buffer solution, pH 10,012 – 500 ml.** |  |  |  |
| **22** | **Certified standard buffer solution, pH 7,000 – 500 ml.** |  |  |  |
| **23** | **Conductivity standards 1440053 – 1l.** |  |  |  |
| **24** | **Glycerin – 1 l.** |  |  |  |
| **25** | **Silica gel indicated on granules 4-8 mm – 10 kg.** |  |  |  |
| **26** | **Immersion oil, for microscopes – 5 ml.** |  |  |  |
| **27** | **Toluene, clean for analysis – 6 l.** |  |  |  |
| **28** | **Hexane, clean for analysis – 2 l.** |  |  |  |
| **29** | **рН-Tape Indicator paper 6.0 - 8.1 (200 pcs) – 2 sets** |  |  |  |
| **30** | **рН-Tape Indicator paper 0-14 (100 pcs) – 3 sets** |  |  |  |
| **31** | **Nitrogen determination tablets by the Keldahl method (1000 pcs) – 2 sets**  **Ingredients:**  **3,5г К2SО4**  **3,5mg Se** |  |  |  |
| **Reagents Aquaculture and Biotechnology Lab** | | | | |
| **32** | **Copper target, 99.95% - 2 units**  diam. × thickness 2.00 in. × 0.25 in. |  |  |  |
| **33** | **Titanium target, 99,995% - 1 unit**  diam. × thickness 2.00 in. × 0.25 in. |  |  |  |
| **34** | **Sodium Metasilicate – 3 kg.** |  |  |  |
| **35** | **1-Methylimidazole – 500 g** |  |  |  |
| **36** | **1-Butyl-3-methylimidazolium hydroxide – 25 g.** |  |  |  |
| **37** | **1-Butyl-3-methylimidazolium tetrafluoroborate – 100 g.** |  |  |  |
| **38** | **Chloroform-D, 99.9%, 0.75 ml. – 20 units** |  |  |  |
| **39** | **Chloroform-D, 99.9%, 10 ml. – 4 units** |  |  |  |
| **40** | **Chloroform-D, 99.9%, 25 ml. – 1 unit** |  |  |  |
| **41** | **Dimethylsulfoxide-D6, 99.8%, 0.75 ml. – 20 units** |  |  |  |
| **42** | **Dimethylsulfoxide-D6, 99.8%, 10 ml. – 4 units** |  |  |  |
| **43** | **Dimethylsulfoxide-D6, 99.8%, 25 ml. – 1 unit** |  |  |  |
| **44** | **Deuterium oxide, 99.95 %, 0.75 – 20 units** |  |  |  |
| **45** | **Deuterium oxide, 99.95 %, 10 ml. – 4 units** |  |  |  |
| **46** | **Deuterium oxide, 99.95 %, 25 ml. – 1 unit** |  |  |  |
| **47** | **Tetramethylsilane 99,9% GC, 10 ml. – 2 units** |  |  |  |
| **48** | **3-(Trimethylsilyl)-1propanesulfonic acid sodium salt (DSS) – 1.0 g.** |  |  |  |
| **49** | **Trifluoracetic acid-D, 99,5 % - 10 ml.** |  |  |  |
| **50** | **Deuteriumchloride 38% in D₂O, 10 ml. – 2 units** |  |  |  |
| **51** | **Methyl heptadecanoate (analytical standart) – 5 g.** |  |  |  |
| **52** | **2-Phenylimidazone – 25 g.** |  |  |  |
| **53** | **Benzimidazole – 100 g.** |  |  |  |
| **54** | **1-Butyl-3-methylimidazolium hexafluorophosphate - g.** |  |  |  |
| **55** | **1,8 -Diazabicyclo[5.4.0]undec-7-ene – 100 g.** |  |  |  |
| **56** | **N,N-Diisopropylethylamine, 4x100 ml. – 1 unit** |  |  |  |
| **57** | **Pluronic F-127 – 250 g.** |  |  |  |
| **58** | **Poly(ethylene glycol)-block-poly(propylene glycol)-block-poly(ethylene glycol) – 1l.** |  |  |  |
| **59** | Tetraethyl orthosilicate – 2 l. |  |  |  |
| **60** | **Hexadecyltrimethylammonium bromide (CTAB) – 500 g.** |  |  |  |
| **61** | **Methanol – 2.5 l.** |  |  |  |
| **62** | **Heptane – 1 l.** |  |  |  |
| **Consumables for analysis of heavy metals in soil, water and biota; radioactivity - ICP apparatus** | | | | |
| **63** | **Argon 5.0 -refilling of bottles – 4 units**  Argon 5.0 F50 P200 RPV |  |  |  |
| **64** | **Pressure regulator – 1 unit**  Cylinder pressure regulator FM53 |  |  |  |
| **65** | **Certified materials for ICP – 1 unit**  DORM 4-fish protein, 20 g |  |  |  |
| **66** | **Acids for dissolving fish protein and determination of heavy metals – 3 units**  Hydrochloric acid >=30% |  |  |  |
| **67** | **Acids for dissolving fish protein and determination of heavy metals – 4 units**  NITRIC ACID >69.5%, FOR TRACE  ANALYSIS TraceSELECT(R), for trace  analysis, >=69.0% (T) |  |  |  |
| **68** | **Calibration standard – 2 units**  109498.L1, ICP-MS Calibration  Standard (XXI) - 29 components (with U);  10mg/l each in HNO3 5% , 100 ml |  |  |  |
| **Certified materials Aquatic Ecosystem Analysis Lab** | | | | |
| **69** | **PCB 209 - 1 unit**  10±0.5 μg/mL in isooctane, 5ml; certified reference material |  |  |  |
| **70** | **PCB No 28, 52, 101, 138, 153, 180 solution – 1 unit**  10 μg/mL each component in isooctane, 10 ml; certified reference material |  |  |  |
| **71** | **EPA CLP Organochlorine Pesticide Mix – 2 units**  2000 μg/mL each component, 1 ml (hexane:toluene); certified reference material |  |  |  |
| **72** | **Hexachlorobenzene solution – 2 units**  certified reference material, 1000 μg/mL in acetone, 1 ml |  |  |  |
| **73** | **4,4′-DDT-d8 – 1 unit**  10 mg; certified reference material |  |  |  |
| **74** | **Alachlor solution – 1 unit**  certified reference material, 1000 μg/mL in methanol, 1ml |  |  |  |
| **75** | **α-HCH-d6 – 1 unit**  CAS Number: 86194-41-4, certified reference material, 5MG |  |  |  |
| **76** | **Hexachlorobenzene-13C6 – 1 unit**  CAS Number: 93952-14-8, certified reference material, 10MG |  |  |  |
| **77** | **Dodecane-d26 – 1 unit**  CAS Number: 16416-30-1; certified reference material |  |  |  |
| **78** | **Naphthalene-d8 – 1 unit**  CAS Number: 1146-65-2; certified reference material |  |  |  |
| **Gas bottles for Gas Chromatograph** | | | | |
| **79** | **He 5.0, 200 atm – 1 unit** |  |  |  |
| **80** | **Ar 5.0, 200 atm – 1 unit** |  |  |  |
| **81** | **N2 5.0, 200 atm – 1 unit** |  |  |  |
| **Reagents** | | | | |
| **82** | **Acetone 2.5 l, >=99.5% (GC) – 2 units** |  |  |  |
| **83** | **Ethylacetate 2.5 l, >=99.5% (GC) – 2 units** |  |  |  |
| **84** | **iso-Octane 2.5 l, >=99.5% (GC) – 2 units** |  |  |  |
| **85** | **Toluene 2.5 l, >=99.7% (GC) – 2 units** |  |  |  |
| **86** | **Glass fiber - 1 kg.** |  |  |  |
| **87** | **Silica gel 1 kg.**  particle size 63µm to 200µm |  |  |  |
| **88** | **Sodium sulfate - 1 kg.**  anhydrous, >=99.0% |  |  |  |