

Ken Knows Containers

The appropriate use of containers, and by association preservatives, has been a topic of debate amongst the testing industry for many years but the consensus amongst labs has always been that best practice is to take whatever steps you can to ensure that the samples taken are as close to their original condition as they can be when they hit the lab.

With the advent of the deviating sample guidance, building on existing guidance such as BS 5667-3 more emphasis is being put on maximizing that best practice wherever possible. We know that practical considerations need to be accounted for and each job is unique (potentially with its own complications and technical requirements) but wherever possible, to give us the best chance of providing you with the best quality data, we would encourage you to use the recommended containers along with the appropriate preservatives wherever possible.

As part of setting up your quote, courier and other practical requirements our team would be happy to discuss options of what we can provide and how to get the best fit solution for your project.

Below are typical containers we require for commonly requested tests to make sure samples do not deviate before testing:

SOIL

J - 500ml Plastic Tub
Ammonia
Anions (Br,Cl,F,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)
Boron (water soluble)
BS3882 - (2kg sample needed - 4x 500ml tubs)
Calorific value
Chromium (hexavalent)
Cyanide (free, complex, total)
Electrical conductivity
LOI HMRC LFT1 1 (1kg sample needed - 2 x 500ml tubs)
Loss On Ignition
Metals
Nitrogen (total)
pH
Phenols (total)
Redox Potential
Sulphur compounds (Sulphate, Sulphide, Sulphur)
Thiocyanate
Total Organic Carbon / Soil Organic Matter

L - 60ml Amber Glass VOC Jar
BTEX & MTBE
Volatile Organic Compounds
VPH (>C5-C10)



SOIL (cont...)

K - 250ml Amber Glass Jar
EPH (>C10-C44)
EPH Aliphatic & Aromatic (>C10-C44)
Organotins (Dibutyl tin, Tributyl tin, Triphenyl tin)
PAHs
PCBs
Pesticides & Herbicides
Phenols (speciated)
Semi-volatile Organic Compounds

WATER

M - 1l Plastic Bottle
Alkalinity (settled)
Anions (Br,Cl,F,NO ₂ ,PO ₄ ,SO ₄)
Biological Oxygen Demand
Dissolved Oxygen
Electrical conductivity
Metals
pH
Redox Potential
Sulphur compounds (Sulphate, Sulphur)
Suspended solids
Total dissolved solids
Total solids

N - 1l Amber glass Winchester
Chromium (hexavalent)
EPH (>C10-C44)
EPH/TPH CWG Aliphatic & Aromatic (>C10-C44)
Organotins (Dibutyl tin, Tributyl tin, Triphenyl tin)
PAHs
PCBs
Pesticides & Herbicides
Phenols (speciated)
Phenols (total)
Semi-volatile Organic Compounds

P - 40ml Clear glass vial
BTEX & MTBE
Volatile Organic Compounds
VPH (>C5-C10)
VPH/TPH CWG Aliphatic & Aromatic (>C5-C10)

Q - 40ml Amber glass vial
Dissolved Organic Carbon
Total Organic Carbon



FIXED WATER

G - 1l Plastic bottle HCl (pH<2)
Nitrate (NO ₃)
H - 1l Plastic bottle HNO₃ (pH <2)
Metals (fixed)
F - 250ml Amber glass bottle (NaOH/ZnAc)
Sulphide
B - 250ml Amber glass bottle (pH <2 H₂SO₄)
Ammonia (fixed)
Chemical Oxygen Demand (total)
Detergents
Nitrogen (total)
Oil & Grease
E - Plastic (dark) (pH >12 NaOH)
Cyanide (free, complex, total)
Thiocyanate
A- Plastic micro bottle (Na₂S₂O₃)
Microbiology (chlorinated)
A - Plastic micro bottle (Na₂S₂O₃ room temp)
Legionella

ALTERNATIVE OPTIONS & ANOMOLIES

Determinand	Container
Ammonia	Glass
Anions (Br,Cl,NO ₂ ,PO ₄ ,SO ₄)	Glass
Boron (water soluble)	Glass
Calorific value	Glass
Chromium (hexavalant)	1L plastic/glass (NH ₄ SO ₄ /OH)
Chromium (hexavalent)	Glass
Cyanide (free, complex, total)	Glass
Cyanide (free, total, complex)	Glass (dark) (pH >12 NaOH)
Dissolved Organic Carbon	Glass
Electrical conductivity	Glass
Loss On Ignition	Glass
Metals	Glass
Metals (filtered)	Small plastic, 0.45um filter, syringe, with/WO HNO ₃
Nitrogen (total)	Glass
pH	Glass
Phenols (total)	Glass
Redox Potential	Glass
Sulphate, Sulphide, Sulphur	Glass
Thiocyanate	Glass
Total Organic Carbon / Soil Organic Matter	Glass

