



# Water

## Reference standards for emerging pollutants

reference standards • reference materials • proficiency testing • reference standards • reference materials • proficiency testing • reference standards • reference materials • proficiency testing





Clean and safe water is essential to life. Public health and environmental protection, as well as industry and agriculture, depend upon a reliable water supply. Water pollution has been ranked as one of Europe's main environmental concerns.

Governments implement policies defining the strategy to reduce pollution and control the level of contamination from both natural and man-made sources. In Europe, the Water Framework Directive (WFD) is the tool used to protect the water supply for the future.

LGC is pleased to offer a comprehensive range of standards for these regulated substances as well as an extensive list of emerging contaminants.

Directive 2013/39/EU defines an updated list of priority substances, including those that may pose a significant risk to the aquatic environment.

LGC is in the unique position to be both a producer of reference materials and a practitioner of accurate chemical measurement. With its role as the UK's National Measurement Institute for Chemical and Biological Metrology, LGC has recently developed a reference method using gas chromatography-inductively coupled plasma-mass spectrometry (GC-ICP-MS) to quantify six target PBDE congeners (28, 47, 100, 99, 154 and 153), helping field laboratories validate their water quality monitoring methods.

## Our quality

LGC's manufacturing facilities are accredited under ISO/IEC 17025 and ISO Guide 34, guaranteeing reference standards produced to a high quality.



## Pesticides

Dr. Ehrenstorfer reference standards, produced in the LGC facility in Germany, allow us to offer the most comprehensive portfolio available on the market, for analysis of insecticide, herbicide and fungicide residues.

Our extensive range of chemical pesticides and metabolites include:

- Organochlorines
- Organophosphates
- Carbamates
- Pyrethroids
- Neonicotinoids
- Sulfonylurea herbicides

## Flame retardants

Flame retardants, such as Polybrominated Diphenyl Ethers (PBDEs) are persistent and highly lipophilic substances, similar to well known environmental contaminants such as polychlorinated biphenyls (PCBs). Furthermore, studies prove PBDEs interfere with the body's endocrine system.

Our partnership with Cambridge Isotope Laboratories, enables us to offer a comprehensive range of standards, including:

- Polybrominated Diphenyl Ethers (PBDE)
- Polybrominated biphenyls (PBBs)
- Alkyl phosphates
- Triazoles



Many of our standards are available as single and multi-component solutions.

A wide range of stable isotope labelled products are also available.

## Pharmaceuticals and personal care products

The analysis of pharmaceuticals and personal care products in the environment has grown significantly in recent years. LGC is your comprehensive source for both native and isotopically labelled standards in this field, including:

- Prescription drugs, drugs of abuse, and their metabolites
- Human and veterinary antibiotics
- Personal care products – parabens, triclosan, musks, UV filters

## Steroids and hormones

Steroids and hormones are in the “watch” list of emerging contaminants due to the risk to human health and the environment associated with their presence. Their frequency of occurrence or source is often not known. LoGiCal and other product ranges provide an extensive list of substances, including:

- Estranes
- Androstanes
- Pregnanes
- Cholanes
- Cholastanes

## Industrial additives, surfactants and other pollutants

Surfactants and industrial additives are ubiquitous in the modern world with industrial processes such as incineration also being a source of pollution. Our extensive range of products, including stable isotope materials, enable accurate measurement of trace levels of pollutants including:

- Dioxins and Furans
- Bisphenols
- Alkyl ethoxylates
- Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA)
- Polycyclic aromatic hydrocarbons (PAHs)
- Polychlorinated biphenyl (PCBs) and polychlorinated terphenyls (PCTs)
- Chlorinated benzenes and phenols

LGC can satisfy all your laboratories quality needs; from reference standards and certified reference materials to matrix materials, from proficiency testing to analytical services.

For further information or to download our latest catalogues, visit: [www.lgcstandards.com](http://www.lgcstandards.com), or contact one of our local sales offices.

Don't miss our endocrine disruptors and emerging contaminants catalogue!

#### Certified matrix materials include:

- Drinking waters, environmental waters, sediments, sludges and biota.

#### Proficiency testing schemes for water analyses include:

- AQUACHECK – Chemical analysis of clean waters, waste waters, sludges, sediments and soils
- QWAS – Microbiological assessment of waters, effluent and sludges

**LoGiCal**<sup>®</sup>  
produced by LGC

Dr. Ehrenstorfer



**For further information, or if you require substances or materials not currently listed please contact one of our local sales offices.**

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