

Ultra pure reagents for metallic traces analysis

PanReac AppliChem presents its ranges of ultra pure reagents for trace metal analysis at levels of ppb and ppt in order to satisfy the increasing demand of reagents for the traces analysis in the environmental, quality control and research laboratories. Two purity levels are provided to target a wide range of applications involving trace metal analysis by AAS, polarography, AAS-GF, ICP-OES and ICP-MS.

For trace metal analysis (ppb)

This range consists of acetic, hydrochloric, nitric, sulfuric, hydrofluoric and perchloric acids in 500 mL, 1000 mL and 2.5 L high density polyethylene (HDPE) bottles.

Main advantages

- A metal impurity content of less than 0.1 ppb ($\mu\text{g/L}$) for 60 different elements is guaranteed in most cases.

Comparing to glass bottles:

- Low level of metal impurities leaching from the polyethylene.
- Light weight bottles for easier handling and greater safety against breakage in the laboratory.



Description	Code	Package
Acetic Acid glacial	721008.0011	1000 ml
Hydrochloric Acid 35%	721019.0010	500 ml
	721019.0011	1000 ml
	721019.0012	2.5 L
Hydrofluoric Acid 48%	721028.0010	500 ml
Nitric Acid 69%	721037.0010	500 ml
	721037.0011	1000 ml
	721037.0012	2.5 L
Perchloric Acid 70%	722175.0010	500 ml
	722175.0011	1000 ml
Sulfuric Acid 93-98%	721058.0010	500 ml
	721058.0011	1000 ml

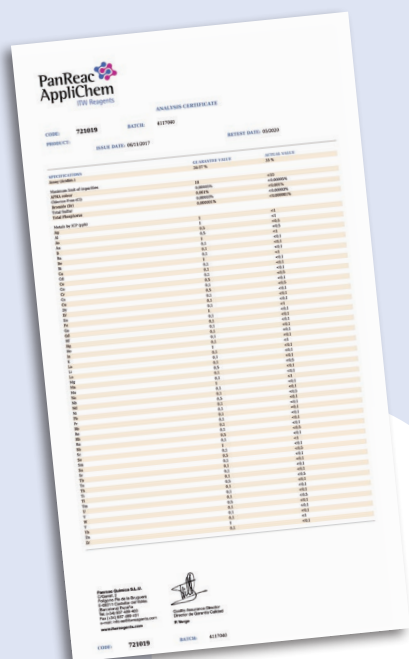


For trace metal analysis (ppt)

These reagents are specially purified by multiple distillation to achieve the lowest impurity levels, obtaining products that can be used as a baseline for the analysis of trace metals. The greatest challenge has always been to minimize the impurities of some elements like Fe, Zn, Ni and Cu with a special analytical importance and limit the presence of elements such as Ca, Na and Al which are ubiquitous in the environment as well as in the container materials. Thanks to this special care in the manufacturing, this range is able to offer reagents with concentrations of the previous elements below 100 ppt (ng/L) and most less than 10 ppt (ng/L). It represents the range of reagents with the lowest metal content intended to the metal traces analysis. Our reagents for trace metal analysis (ppt) are available in the following sizes in both Teflon PFA and FEP: 250 mL and 500 mL. Water is available in specially washed HDPE bottles.

Main advantages

- Our reagents for trace metal analysis (ppt) include the analysis of more than 60 metals at parts per trillion levels providing the best level of purity available in the market.
- Manufactured by sub-boiling distillation.
- The concentration level for the majority of metals is below 10 ppt, being all below 100 ppt.
- Homogeneity batch to batch for reproducibility results.
- Manufactured and packaged in a clean room, class 10, free of contaminants to guarantee highest levels of purity.
- Stored in specially selected teflon bottles. The material is controlled prior to the bottle manufacture. Every bottle is leached with hot acid during two weeks in order to eliminate any contamination material due to metallic traces.



Description	Code	Package
Hydrochloric Acid 35%	711019.0009	250 ml
	711019.0010	500 ml
Hydrofluoric Acid 48%	711028.0010	500 ml
Hydrogen Peroxide 30% w/w	716323.0010	500 ml
Nitric Acid 69%	711037.0009	250 ml
	711037.0010	500 ml
Water	711074.0011	1000 ml

