

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 hydrochloric and nitric acids in 500 mL, 1 L 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.

Product code	Product name	CAS number	Pack sizes
721019	Hydrochloric Acid 35% for trace metal analysis (ppb)	7647-01-0	500 mL, 1 L, 2.5 L
721037	Nitric Acid 69% for trace metal analysis (ppb)	7697-37-2	500 mL, 1 L, 2.5 L

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 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 nitric acid and water for trace metal analysis (ppt) are available in fluorinated ethylene propylene (FEP) 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 FEP bottles.



Product code	Product name	CAS number	Pack sizes
711037	Nitric Acid 69% for trace metal analysis (ppt)	7697-37-2	500 mL
711074	Water for trace metal analysis (ppt)	7732-18-5	1 L

