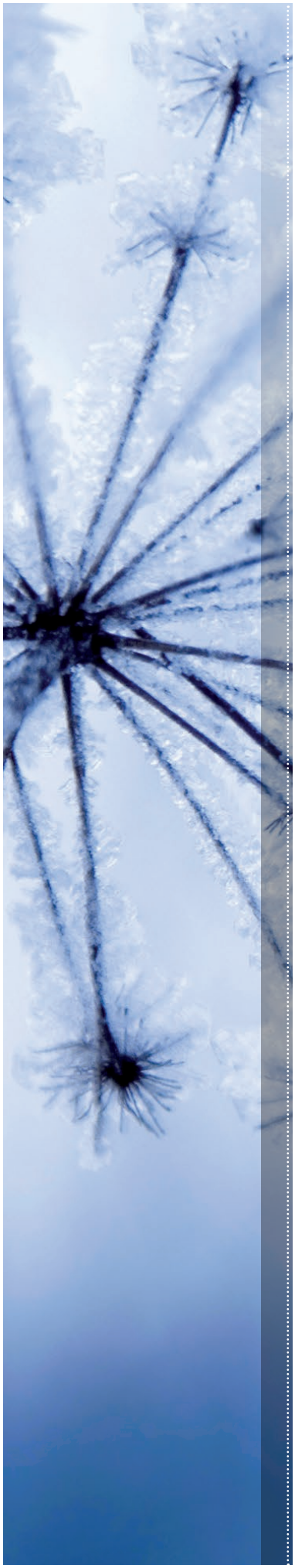
Ultra pure reagents for metallic traces analysis

PanReac AppliChem
ITW Reagents



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 ammonia 20% and acetic, hydrochloric, nitric, sulfuric, hydrofluoric and perchloric acids. For all of them, a metal impurity content of less than 0,1 ppb (µg/L) for 60 different elements is guaranteed in most cases. The range comes in new 500mL, 1000mL and 2.5 L high density polyethylene (HDPE) bottles. These bottles are a great improvement over the old PVC-coated or uncoated glass bottles.

Main advantages:

- Improved specifications due to the low level of metal impurities leaching from the polyethylene (a reduction of up to 80% compared to the glass bottles).
- Lightweight bottles for greater safety and easier handling in the laboratory (for example, the 2.5L bottle is 80% lighter than the glass bottle). No breakage during transport.
- Reduced exterior volume which allows better use of space (the 2.5L bottle, for example, takes up 78% less room than the glass bottle). Less cardboard is required for the outer box.
- Each individual bottle is supplied in a box, which allows for easier handling in the storeroom.
- The 2.5 L bottle has a handle for convenient handling in the laboratory.
- Both the bottle and the outer box are fully recyclable. It is no longer necessary to separate the PVC coating from the old glass bottle, thus saving time for laboratory staff.
- It is more environment-friendly: less energy is required for manufacture and as the bottle is so light, less fuel is used during transport.

Ordering Information

Description	Code	Package		
		500 ml	1000 ml	2.5 l
Acetic Acid Glacial	721008		P	
Ammonia 20% (as NH3)	721128	P		
Hydrochloric Acid 35%	721019	P	P	P
Hydrofluoric Acid 48%	721028	P		
Nitric Acid 69%	721037	P	P	P
Perchloric Acid 70%	722175	P	P	
Sulfuric Acid 93-98%	721058	P	P	P

Packaging symbols: P Polyethylene bottle

For trace metal analysis (ppt)

These reagents are specially purified by multiple distillation until products have the lowest impurity levels, obtaining products that can be used as a baseline for the analysis of trace metals.
In order to be able to reduce to the maximum the impurity levels, the process of manufacturing of reagents for trace metal analysis (ppt) has been optimised to the maximum. 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 below 100 ppt (ng/L) with the previous elements 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 and ammonia solution are 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 bellow 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.

Each bottle comes in a protective bag with a 100% recyclable expanded polypropylene fiber filling for absorbing any leaks. This bottle is then double-packed.

Ordering Information

Description	Code	Package		
		250 ml	500 ml	1000 ml
Ammonia 20% (as NH_3)	711128	P		
Hydrochloric Acid 35%	711019	F	F	
Hydrofluoric Acid 48%	711028		F	
Hydrogen Peroxide 30% w/w	716323		F	
Nitric Acid 69%	711037	F	F	
Sulfuric Acid 93-98%	711058		F	
Water	711074			P

Packaging symbols: P Polyethylene bottle F Fluorinated polymer bottle

A172,EN;201509

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