

## Technical Datasheet

Analysis Name:	Vitamin B12 by UPLC-UV
Method Number:	AOAC 2014.02
Scope Application:	Milk- and soy-based infant formula, infant cereals, breakfast cereals, beverages, clinical nutrition, raw materials (demineralized whey powder, skimmed milk and acid whey protein), vitamin premixes for human nutrition, and gummy-based vitamins. Not validated for pet foods.
Description:	The method consists of: Release of natural vitamin B12 forms associated with proteins and conversion into cyanocobalamin by heating the sample in presence of cyanide, at pH 4. Filtration and clean-up on a highly selective immuno-affinity cartridge. Elution with methanol. Evaporation under nitrogen. Dilution in water: acetonitrile: TFA mixture. Analysis by UHPLC with UV detection at 361 nm. Quantitation by comparison with external standards using a multi-level calibration curve.
Sample Weight Required:	50g
Analytical Platform:	UPLC

Analyte Reported	Common name	Unit	Typical unit of quantification	Reproducibility
Vitamin B12	Cobalamine	µg/100g	0.1	15%