

Technical Datasheet

Analysis Name: Water-Soluble Vitamins in Vitamin Premixes by HPLC

Method Number: LI-03.703

Scope of Application: Polyvitamin premixes, supplements in a pill form and water samples.

Description: Dissolution of the water-soluble vitamins at room temperature by ultrasonication. Separation by paired-ion high performance liquid chromatography (HPLC) with a gradient elution, and detection by UV.

Sample Weight Required: 100 g

Analytical Platform: HPLC

Special Information: Certificate of Analysis or list of ingredients must be provided for each sample. Form of vitamin must be disclosed in the specification. Method can't detect nicotinic acid.

Analyte Reported	Alias	Unit of Measure	Limit of Quantification	Reproducibility
Vitamin B ₁ – as Thiamine hydrochloride	Thiamine hydrochloride	mg/g	0.64	15%
Vitamin B ₁ - as Thiamine mononitrate	Thiamine mononitrate	mg/g	0.62	15%
Vitamin B ₁ - as Thiamine base	Thiamine base	mg/g	0.5	15%
Vitamin B ₂	Riboflavin	mg/g	0.5	20%
Vitamin B ₃ - as Niacinamide	Niacinamide	mg/g	0.5	15
Vitamin B ₆	Pyridoxine base	mg/g	0.3	15%
Folic Acid	Vitamin B ₉	µg/g	80	15%