

# Technical Datasheet

**Analysis Name:**  $\beta$ -Carotene in Vitamin Premix by UV Absorbance

**Method Number:** NQA-00.3006

**Scope of Application:** This method applies to the determination of total  $\beta$ -Carotene in poly-vitamin Premixes or concentrated  $\beta$ -Carotene solutions. It can also be used for encapsulated carotene premixes / raw materials.

**Description:** Extraction of  $\beta$ -Carotene with 0.1% BHT-Cyclohexane and determination by UV absorbance. Enzyme solution is used for the release of encapsulated carotene

**Sample Weight Required:** 50 g

**Method Reference:** UV-visible Spectrophotometry, or HPLC with detection at 445nm for carotene encapsulated in premix containing vitamin B2.

**Analytical Platform:** Certificate of Analysis or estimated levels must be provided for each sample. If carotene is encapsulated information must be disclosed in the specification.

| Analyte Reported                | Alias | Unit of Measure | Limit of Quantification | Reproducibility |
|---------------------------------|-------|-----------------|-------------------------|-----------------|
| $\beta$ -Carotene               |       | $\mu\text{g/g}$ | 10                      | 15%             |
| $\beta$ -Carotene, encapsulated |       | $\mu\text{g/g}$ | 10                      | 32%             |