NQAC
Nestlé Quality Assurance Center
Dublin

Technical Datasheet

Analysis Name: Determination of PAH by GC-MS/MS

Method Number: NQA-52.0005

Scope of Application: Oil, fat matrices, spices, herbs, teas, liquid milk, milk products as milk powder, skimmed milk powder and infant formula powder, cereals, and cocoa.
Method is Not Applicable to gummies and white or black pepper extract. This method is also not applicable to lecithins, nor thickeners such as guar gum, xanthum gum, or carrageenan.

Description: This method provides quantitative analysis of 4 priority polycyclic aromatic hydrocarbons (PAHs); benz[a]anthracene (BaA), benzo[a]pyrene (BaP), benzo[b]fluoranthene (BbF) and chrysene (CHR) in food by gas chromatography / tandem mass spectrometry (GC-MS/MS).

Sample Weight Required: 20g

Method Reference: EN 16619 Food analysis — Determination of benzo[a]pyrene, benzo[a]anthracene, chrysene and benzo[b]fluoranthene in foodstuffs by gas chromatography mass spectrometry (GC-MS).

Analytical Platform: GC-MS/MS

Special Information: PAHs are degraded by UV light. Protect PAHs solutions from light (wrap in foil if clear or translucent containers are used). Some plastic may have interactions with PAHs; use only polyethylene (PE) for sample containers if possible.

Limits of Quantitation:

Oil/Fat/spices/herbs/teas/ and Liquid Milk	Milk powder/infant formula/cereal	Cocoa
1.0 ug/kg	0.1 ug/kg	0.2 ug/kg

Analyte Reported	Alias	Reproducibility
benz[a]anthracene	(BaA)	±25%
benzo[a]pyrene	(BaP)	±25%
benzo[b]fluoranthene	(BbF)	±25%
chrysene	(CHR)	±25%
Sum of Quantified PAHs	*N/A*	*N/A*