



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, milk products as milk powder, skimmed milk powder and infant formula powder, cereals, and cocoa.

**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	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