

ISO 15753:2016-04 (E)

Animal and vegetable fats and oils - Determination of polycyclic aromatic hydrocarbons

Contents		Page
Foreword		iv
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Principle	2
5	Reagents and materials	2
6	Apparatus	3
7	Sampling	4
8	Sample preparation	5
9	Procedure for determination of PAHs from fats and oils: General method	5
9.1	Preliminary remarks	5
9.2	Blank	5
9.3	Determination of recovery values (without matrix)	5
9.4	Extraction (liquid/liquid extraction)	5
9.5	Purification on C18-bonded phase cartridge (solid/liquid extraction)	6
9.6	Purification on Florisil-bonded phase cartridge (solid/liquid extraction)	7
10	Procedure for determination of PAHs from fats and oils: Method specific for coconutoil	8
10.1	First extraction (liquid/liquid extraction)	8
10.2	Second extraction (liquid/liquid extraction)	8
10.3	Purification on C18-bonded phase cartridge (solid/liquid extraction)	8
10.4	Purification on Florisil-bonded phase cartridge (solid/liquid extraction)	9
11	High-performance liquid chromatography (HPLC)	10
11.1	Operating conditions	10
11.2	Detection parameters	10
11.3	Analysis of samples and standards	12
11.4	Confirmation of the presence of PAHs	12
12	Expression of results	12
13	Precision	13
13.1	Interlaboratory test	13
13.2	Repeatability	13
13.3	Reproducibility	13
14	Test report	13
Annex A (informative)	Recovery values, flowcharts, chromatograms and injection sequences	15
Annex B (informative)	Results of the interlaboratory test	20
Bibliography		23