

SCHEDULE 3

OVERALL AND SPECIFIC MIGRATION TESTING USING FOOD SIMULANTS

PART 2

FOOD SIMULANTS TO BE USED IN MIGRATION TESTING

1. Subject to Parts 3, 4, 5 and 7, the simulants to be used in migration testing are specified in the Table to this paragraph (referred to in this Part as “the Table”).

<i>1</i> <i>Abbreviation</i>	<i>2</i> <i>Food Simulant</i>
Simulant A:	Distilled water or water of equivalent quality
Simulant B:	3% Acetic acid (w/v) in aqueous solution
Simulant C:	10% Ethanol (v/v) in aqueous solution except that the concentration of ethanol solution shall be adjusted to the actual alcoholic strength of the food if it exceeds 10% (v/v)
Simulant D:	Rectified olive oil having the characteristics specified in paragraph 3 or, subject to paragraph 5, any of the fatty food simulants specified in paragraph 4

2. For the purposes of this Schedule a reference to an abbreviation in column 1 of the Table shall mean a reference to the simulant in column 2 of that Table opposite that abbreviation.

3. The characteristics of rectified olive oil referred to in the Table are—

- (a) Iodine value (Wijs) = 80 to 88;
- (b) Refractive index at 25°C = 1.4665 to 1.4679;
- (c) Acidity (expressed as % of oleic acid) = 0.5% maximum;
- (d) Peroxide number (expressed as oxygen milli equivalents per kg of oil) = 10 maximum.

4. The fatty food simulants referred to in the Table are—

- (a) corn oil with standardised specifications;
- (b) sunflower oil, the characteristics of which are—
 - (i) Iodine value (Wijs) = 120 to 145;
 - (ii) Refractive index at 20°C = 1.474 to 1.476;
 - (iii) Saponification number = 188 to 193;
 - (iv) Relative density at 20°C = 0.918 to 0.925;
 - (v) Unsaponifiable matter = 0.5% to 1.5%;
- (c) a synthetic mixture of triglycerides the composition of which is as set out in the following tables:

Status: This is the original version (as it was originally made).

Fatty acid distribution

No of C atoms in fatty acid residue	6	8	10	12	14	16	18	others
GLC area (%)	1	6-9	8-11	45-52	12-15	8-10	8-12	1

Purity

Content of monoglycerides (enzymatically)	≤0.2%
Content of diglycerides (enzymatically)	≤2.0%
Unsaponifiable matter	≤0.2%
Iodine value(Wijs)	≤0.1%
Acid value	≤0.1%
Water content (K Fischer)	≤0.1%
Melting point	28 ± 2°C

Typical absorption spectrum (thickness of layer: d = 1 cm; Reference: water at 35°C)

Wavelength (nm)	290	310	330	350	370	390	430	470	510
Transmittance (%)	15	37	64	80	88	95	97	97	98

At least 10% light transmittance at 310 nm

5. Where fatty food simulant specified in paragraph 4 is used in migration testing and the result of that test shows that a plastic material or article does not comply with any migration limit specified in regulation 9 or the Annexes, verification that the plastic material or article does not comply with the specified migration shall be carried out by testing that material or article using olive oil if such testing is technically feasible, and if such testing is not technically feasible the plastic material or article shall be deemed not to comply with the specified migration limit.