SCHEDULE 4

Overall and Specific Migration Testing Using Food Simulants

Part IV

Simulants to be used in Relation to a Specific Food or a Specific Group of Foods

1. For the purposes of this Part a simulant is specified in relation to a specific food or a specific group of foods where "X" is placed in the column headed by that simulant opposite that specific food or specific group of foods in the Table to this Part, and the Table shall be read in conjunction with the notes thereto and the following paragraphs of this Part.

2. For the purposes of this Part—

(a) a reduction factor is the figure which follows an "X" and oblique stroke in the group of columns headed "Simulants to be used" in the Table to this Part;

(b) a reduction factor is specified in relation to a specific food or group of foods where, in the Table to this Part—

(i) the food or group of foods is described in the column headed "Description of food"; and

(ii) "X" is placed in a column headed by a specific simulant opposite that food or group of foods followed by an oblique stroke and a reduction factor.

3. Where, in the Table to this Part, a reduction factor is specified in relation to a specific food or a specific group of foods, that reduction factor shall be applied to the result of any migration test using the simulant specified in relation to that food or group of foods by dividing the result of the test by that reduction factor.

4. Where, in the Table to this Part, the letter "a" is shown in brackets after the "X", only one of the two simulants specified shall be used in the migration test, that is to say—

(a) if the pH value of the food is higher than 4·5, simulant A shall be used,

(b) if the pH value of the foodstuff is 4·5 or less, simulant B shall be used.

5. Where a food is listed in the Table to this Part under both a specific and a general heading, the simulant relating to the specific heading is the simulant which falls to be used for the migration test.

TABLE

Reference Number	Description of food	Simulants to be used			
		A	B	C	D
01	**Beverages**				
01.01	Non-alcoholic beverages or alcoholic beverages of	X(a)	X(a)		

(*) Simulant B shall not be used where the pH is more than 4·5.

(**) This test shall be carried out in the case of liquids or beverages of an alcoholic strength exceeding 10% vol. with aqueous solutions of ethanol of a similar strength

(***)If it can be demonstrated under regulation 11 or proved by means of an appropriate test that there is to be no fatty contact with the plastic material or article, simulant D shall not be used.

Reference Number	Description of food	Simulants to be used			
		A	B	C	D
	an alcoholic strength lower than 5% vol.: Waters, ciders, fruit or vegetable juices of normal strength or concentrated, musts, fruit nectars, lemonades and mineral waters, syrups, bitters, infusions, coffee, tea, liquid chocolate, beers and other.				
01.02	Alcoholic beverages of an alcohol strength equal to or exceeding 5% vol.: Beverages shown under heading 01.01 but with an alcoholic				

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Reference Number	Description of food	Simulants to be used			
		A	B	C	D
	strength equal to or exceeding 5% vol:				
	Wines, spirits and liquers		X(*)	X(**)	
01.03	Miscellaneous: undenatured ethyl alcohol		X(*)	X(**)	
02	**Cereals, cereal products, pastry biscuits, cakes and other bakers' wares**				
02.01	Starches				
02.02	Cereals, unprocessed, puffed, in flakes (including popcorn, cornflakes and the like)				
02.03	Cereal flour and meal				
02.04	Macaroni, spaghetti and similar products				
02.05	Pastry, biscuits, cakes and other bakers' wares, dry:				X/5

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(***) If it can be demonstrated under regulation 11 or proved by means of an appropriate test that there is to be no fatty contact with the plastic material or article, simulant D shall not be used.

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Reference Number	Description of food	Simulants to be used			
		A	B	C	D
	A. With fatty substances on the surface				
	B. Other				
02.06	Pastry, cakes and other bakers' ware, fresh:				X/5
	A. With fatty substances on the surface				
	B. Other	X			
03	**Chocolate, sugar and products thereof Confectionery products**				
03.01	Chocolate, chocolate-coated products, substitutes and products coated with substitutes				X/5
03.02	Confectionery products:				X/5
	A. In solid form:				
	(I) With fatty substances on the surface				
	(II) Other				
	B. In paste form:				X/3

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		A	B	C	D
	(I) With fatty substances on the surface				
	(II) Moist	X			
03.03	Sugar and sugar products:				
	A. In solid form:				
	B. Honey and the like	X			
	C. Molasses and sugar syrups	X			
04	**Fruit, vegetables and products thereof**				
04.01	Whole fruit, fresh or chilled				
04.02	Processed fruit:				
	A. Dried or dehydrated fruit, whole or in the form of flour or powder				
	B. Fruit in the form of chunks, purée or paste	X(a)	X(a)		
	C. Fruit preserves (jams and similar products—	X(a)	X(a)		

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		A	B	C	D
	whole fruit or chunks or in the form of flour or powder, preserved in a liquid medium):				
	(I) In an aqueous medium				
	(II) In an oily medium	X(a)	X(a)		X
	(III) In an alcoholic medium (≥5% vol.)		X$^{(*)}$	X	
04.03	Nuts (peanuts, chestnuts, almonds, hazelnuts, walnuts, pine kernels and others):				
	A. Shelled, dried				
	B. Shelled and roasted				X/5$^{(***)}$
	C. In paste or cream form	X			X/3$^{(***)}$
04.04	Whole vegetables, fresh or chilled				
04.05	Processed vegetables:				
	A. Dried or dehydrated vegetables				

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Reference Number	*Description of food*	*Simulants to be used*			
		A	B	C	D
	whole or in the form of flour or powder				
	B. Vegetables cut, in the form of purees	X(a)	X(a)		
	C. Preserved vegetables:	X(a)	X(a)		
	(I) In an aqueous medium				
	(II) In an oily medium	X(a)	X(a)		X
	(III) In an alcoholic medium (≥5% vol.)		X(*)	X	
05	**Fats and oils**				
05.01	Animal and vegetable fats and oils, whether natural or treated (including cocoa butter, lard, resolidified butter)				X
05.02	Margarine, butter and other fats and oils made from water emulsions in oil				X/2
06	**Animal products and eggs**				

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Reference Number	Description of food	Simulants to be used			
		A	B	C	D
06.01	Fish:	X			X/3[***]
	A. Fresh, chilled, salted, smoked				
	B. In the form of paste	X			X/3[***]
06.02	Crustaceans and molluscs (including oysters, mussels, snails) not naturally protected by their shells	X			
06.03	Meat of all zoological species (including poultry and game):	X			X/4
	A. Fresh, chilled, salted, smoked				
	B. In the form of paste, creams	X			X/4
06.04	Processed meat products (ham, salami, bacon and other)	X			X/4
06.05	Preserved and part-preserved meat and fish:	X(a)	X(a)		
	A. In an aqueous medium				

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		A	B	C	D
	B. In an oily medium	X(a)	X(a)		X
06.06	Eggs not in shell:				
	A. Liquid				
	B. Other	X			
06.07	Egg yolks:	X			
	A. Liquid				
	B. Powdered or frozen				
06.08	Dried white of egg				
07	**Milk products**				
07.01	Milk:	X			
	A. Whole				
	B. Partly dried	X			
	C. Skimmed or partly skimmed	X			
	D. Dried				
07.02	Fermented milk such as yoghurt, buttermilk and such products in association with fruit and fruit products		X		
07.03	Cream and sour cream	X(a)	X(a)		
07.04	Cheeses:				
	A. Whole, with rind				

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		A	B	C	D
	B. Processed cheeses	X(a)	X(a)		
	C. All others	X(a)	X(a)		X/3(***)
07.05	Rennet: A. In liquid or viscous form	X(a)	X(a)		
	B. Powdered or dried				
08	**Miscellaneous products**				
08.01	Vinegar			X	
08.02	Fried or roasted foods: A. Fried potatoes, fritters and the like				X/5
	B. Of animal origin				X/4
08.03	Preparations for soups, broths in liquid, solid or powder form (extracts, concentrates); homogenized composite food preparations, prepared dishes: A. Powdered or dried: (I) With fatty				X/5

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Reference Number	Description of food	Simulants to be used			
		A	B	C	D
	substances on the surface				
	(II) Other				
	B. Liquid or paste:	X(a)	X(a)		X/3
	(I) With fatty substances on the surface				
	(II) Other	X(a)	X(a)		
08.04	Yeast and raising agents:	X(a)	X(a)		
	A. In paste form				
	B. Dried				
08.05	Salt				
08.06	Sauces:	X(a)	X(a)		
	A. Without fatty substances on the surface				
	B. Mayonnaise sauces derived from mayonnaise, salad creams and other oil in water emulsions	X(a)	X(a)		X/3
	C. Sauce containing oil and water forming two distinct layers	X(a)	X(a)		X
08.07	Mustard (except powdered	X(a)	X(a)		X/3(***)

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		A	B	C	D
	mustard under heading 08.17)				
08.08	Sandwiches, toasted bread and the like containing any kind of foodstuff:				X/5
	A. With fatty substances on the surface				
	B. Other				
08.09	Ice creams	X			
08.10	Dried foods:				X/5
	A. With fatty substances on the surface				
	B. Other				
08.11	Frozen or deep-frozen foods				
08.12	Concentrated extracts of an alcoholic strength equal to or exceeding 5% vol		X[*]	X	
08.13	Cocoa:				X/5[***]
	A. Cocoa powder				
	B. Cocoa paste				X/3[***]
08.14	Coffee, whether or not roasted,				

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		A	B	C	D
	decaffeinated or soluble, coffee substitutes, granulated or powdered				
08.15	Liquid coffee extracts	X			
08.16	Aromatic herbs and other herbs: Camomile, mallow, mint, tea, lime blossom and others				
08.17	Spices and seasonings in the natural state: Cinnamon, cloves, powdered mustard, pepper, vanilla, saffron and others				

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