

SCHEDULE 3

Overall and Specific Migration Testing Using Food Simulants

PART 6

Substitute Fat Test for Overall and Specific Migration

1. Subject to paragraphs 2, 4 and 5, all the test media specified in the Table to this Part shall be used in the substitute fat test for overall or specific migration under the test conditions corresponding to the test conditions for stimulant D.

2. Test conditions other than those specified in the Table to this Part may be used in the substitute fat test if the assumptions underlying the test conditions specified in the Table and, where the plastic material or article being tested is a polymer, the existing experience of that type of polymer are taken into account.

3. For each test–

- (a) a new test specimen shall be used;
- (b) the rules prescribed for simulant D in Parts 3, 4 and 5 of this Schedule shall be applied for each test medium;
- (c) subject to paragraph 4, compliance with a migration limit shall be determined by selecting the highest value using all the test methods.

4. Where carrying out a migration test causes any physical or other change in the test specimen which does not occur under the worst foreseeable conditions of use of the plastic material or article the result of that test shall not be used to ascertain compliance with a migration limit.

5. Any test conditions in the Table to this Part which are generally recognised on the basis of scientific evidence as not being appropriate for the material or article to be tested shall not be used.

6. The Table to this part shall be read with the notes to it.

<i>CONVENTIONAL CONDITIONS FOR SUBSTITUTE TESTS</i>			
<i>Test conditions with simulant D</i>	<i>Test conditions with isooctane</i>	<i>Test conditions with ethanol 95%</i>	<i>Test conditions with MPPO⁽¹⁾</i>
10 days at 5°C	0.5 days at 5°C	10 days at 5°C	–
10 days at 20°C	1 day at 20°C	10 days at 20°C	–
10 days at 40°C	2 days at 20°C	10 days at 40°C	–
2 hours at 70°C	0.5 hours at 40°C	2 hours at 60°C	–
0.5 hours at 100°C	0.5 hours at 60°C ⁽²⁾	2.5 hours at 60°C	0.5 hours at 100°C
1 hour at 100°C	1 hour at 60°C ⁽²⁾	3 hours at 60°C ⁽²⁾	1 hour at 100°C
2 hours at 100°C	1.5 hours at 60°C ⁽²⁾	3.5 hours at 60°C ⁽²⁾	2 hours at 100°C

(1) MPPO = Modified polyphenylene oxide

(2) The volatile test media are used up to a maximum temperature of 60°C. A precondition of using these tests is that the material or article will withstand the test conditions that would otherwise be used with simulant D. Immerse a test specimen in olive oil under the appropriate conditions. If the physical properties are changed (eg melting, deformation) then the material is considered unsuitable for use at that temperature. If the physical properties are not changed then proceed with the substitute tests using new specimens.

Status: This is the original version (as it was originally made). This item of legislation is currently only available in its original format.

<i>CONVENTIONAL CONDITIONS FOR SUBSTITUTE TESTS</i>			
<i>Test conditions with simulant D</i>	<i>Test conditions with isooctane</i>	<i>Test conditions with ethanol 95%</i>	<i>Test conditions with MPPO⁽¹⁾</i>
0.5 hours at 121°C	1.5 hours at 60°C ⁽²⁾	3.5 hours at 60°C ⁽²⁾	0.5 hours at 121°C
1 hour at 121°C	2 hours at 60°C ⁽²⁾	4 hours at 60°C ⁽²⁾	1 hour at 121°C
2 hours at 121°C	2.5 hours at 60°C ⁽²⁾	4.5 hours at 60°C ⁽²⁾	2 hours at 121°C
0.5 hours at 130°C	2 hours at 60°C ⁽²⁾	4 hours at 60°C ⁽²⁾	0.5 hours at 130°C
1 hour at 130°C	2.5 hours at 60°C ⁽²⁾	4.5 hours at 60°C ⁽²⁾	1 hour at 130°C
2 hours at 150°C	3 hours at 60°C ⁽²⁾	5 hours at 60°C ⁽²⁾	2 hours at 150°C
2 hours at 175°C	4 hours at 60°C ⁽²⁾	6 hours at 60° C ⁽²⁾	2 hours at 175°C

(1) MPPO = Modified polyphenylene oxide

(2) The volatile test media are used up to a maximum temperature of 60°C. A precondition of using these tests is that the material or article will withstand the test conditions that would otherwise be used with simulant D. Immerse a test specimen in olive oil under the appropriate conditions. If the physical properties are changed (eg melting, deformation) then the material is considered unsuitable for use at that temperature. If the physical properties are not changed then proceed with the substitute tests using new specimens.