Changes to legislation: There are currently no known outstanding effects for the Commission Regulation (EU) No 10/2011. (See end of Document for details)

Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance)

Changes to legislation: There are currently no known outstanding effects for the Commission Regulation (EU) No 10/2011. (See end of Document for details)

#### ANNEX I

## Substances

1. F1... List of authorised monomers, other starting substances, macromolecules obtained from microbial fermentation, additives and polymer production aids

Table 1 contains the following information:

Column 1 (FCM substance No): the unique identification number of the substance

Column 2 (Ref. No): the EEC packaging material reference number

Column 3 (CAS No): the Chemical Abstracts Service (CAS) registry number

Column 4 (Substance Name): the chemical name

Column 5 (Use as additive or polymer production aid (PPA) (yes/no)): an indication if the substance is authorised to be used as additive or polymer production aid (yes) or if the substance is not authorised to be used as additive or polymer production aid (no). If the substance is only authorised as PPA it is indicated (yes) and in the specifications the use is restricted to PPA.

Column 6 (Use as monomer or other starting substance or macromolecule obtained from microbial fermentation (yes/no)): an indication if the substance is authorised to be used as monomer or other starting substance or macromolecule obtained from microbial fermentation (yes) or if the substance is not authorised to be used as monomer or other starting substance or macromolecule obtained from microbial fermentation (no). If the substance is authorised as macromolecule obtained from microbial fermentation it is indicated (yes) and in the specifications it is indicated that the substance is a macromolecule obtained from microbial fermentation.

Column 7 (FRF applicable (yes/no)): an indication if for the substance the migration results can be corrected by the Fat Consumption Reduction Factor (FRF) (yes) or if they cannot be corrected by the FRF (no).

[F2Column 8 (SML [mg/kg]): the specific migration limit applicable for the substance. It is expressed in mg substance per kg food. It is marked as ND ('not-detectable') if the substance is one in respect of which no migration is permitted, to be determined in accordance with Article 11(4).]

# **Textual Amendments**

**F2** Substituted by Commission Regulation (EU) 2016/1416 of 24 August 2016 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).

Column 9 (SML(T) [mg/kg] (group restriction No)): contains the identification number of the group of substances for which the group restriction in Column 1 in Table 2 of this Annex applies.

Column 10 (Restrictions and specifications): contains other restrictions than the specific migration limit specifically mentioned and it contains specifications related to the substance. In case detailed specifications are set out a reference to Table 4 is included.

Column 11 (Notes on verification of compliance): contains the Notes number which refers to the detailed rules applicable for verification of compliance for this substance included in Column 1 in Table 3 of this Annex.

Changes to legislation: There are currently no known outstanding effects for the Commission Regulation (EU) No 10/2011. (See end of Document for details)

If a substance appearing on the list as an individual compound is also covered by a generic term, the restrictions applying to this substance shall be those indicated for the individual compound.

F3

## **Textual Amendments**

**F3** Deleted by Commission Regulation (EU) 2016/1416 of 24 August 2016 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).

# TABLE 1

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
FCM substa No	Ref. ncNo	CAS No	Substa name	as additiv or polymo produc	obtain from microl	g nce moleculo	abl <b>eg</b> (yes/		p	cti <b>Not</b> es on cat <b>iv</b> if <b>i</b> cation of compliance
1	12310	026630	)9a <b>413</b> u7nin	no	yes	no				
2	12340	_	albumin coagulat by formald	ted	yes	no				
3	12375	_	alcohols aliphatic monohy saturated linear, primary (C <sub>4</sub> - C <sub>22</sub> )	c, dric,	yes	no				
4	22332	_	mixture of (40 % w/w) 2,2,4- trimethy diisocya and	lhexane	yes -1,6-	no		(17)	1 mg/kg in final product express as isocyan moiety.	ed

5	25360		(60 % w/w) 2,4,4-trimethy diisocya trialkyl( C <sub>15</sub> )ace acid, 2,3-epoxyprester	(fig- tic	-1,6- yes	no	ND		1 mg/kg in final product expresse as epoxygr Molecul weight is 43 Da.	ed roup.
6	25380	_	trialkyl acetic acid (C <sub>7</sub> -C <sub>17</sub> ), vinyl esters	no	yes	no	0,05			(1)
7	30370	_	acetylac acid, salts	estés	no	no				
8	30401	_	acetylat mono- and diglycer of fatty acids		no	no		(32)		
9	30610		acids, C <sub>2</sub> -C <sub>24</sub> , aliphatic linear, monoca from natural oils and fats, and their mono-, di- and triglyce esters	rboxylic	no	no				

			(branche fatty acids at naturally occuring levels are included	y S					
10	30612		acids, C <sub>2</sub> - C <sub>24</sub> , aliphatic linear, monoca syntheti and their mono-, di- and triglyce esters	rboxylic c	no	no			
11	30960		acids, aliphatic monoca (C <sub>6</sub> - C <sub>22</sub> ), esters with polygly	rboxylic	no	no			
12	31328	_	acids, fatty, from animal or vegetab food fats and oils	yes	no	no			
13	33120	_	alcohols aliphatic monohy saturate linear, primary (C <sub>4</sub> - C <sub>24</sub> )	e, dric, d,	no	no			
14	33801	_	n- alkyl(C	yes	no	no	30		

			C <sub>13</sub> )ben acid	zenesulp	honic					
15	34130		alkyl, linear with even number of carbon atoms $(C_{12}$ - $C_{20})$ dimethy	yes	no	yes	30			
16	34230		alkyl(C <sub>22</sub> )sulpacids		no	no	6			
17	34281		alkyl(C <sub>22</sub> )sulpacids, linear, primary with an even number of carbon atoms	bhuric	no	no				
18	34475	_	alumini calcium hydroxi phosphi hydrate	de	no	no				
19	39090	_	N,N- bis(2- hydroxy C <sub>18</sub> )ami	yes vethyl)all ne	no kyl(C <sub>8</sub> -	no		(7)		
20	39120	_	N,N- bis(2- hydroxy C <sub>18</sub> )ami hydroch		no kyl(C <sub>8</sub> -	no		(7)	SML(T) expresse excludin HCl	ed
21	42500	_	carbonic acid, salts	cyes	no	no				
22	43200	_	castor oil, mono-	yes	no	no				

			and diglycer	rides					
23	43515	_	chloride of choline esters of coconut oil fatty acids	syes	no	no	0,9		(1)
24	45280	_	cotton fibers	yes	no	no			
25	45440	_	cresols, butylate styrenat	d,	no	no	12		
26	46700		5,7-di- tert- butyl-3- (3,4- and 2,3- dimethy benzofu one containi a) 5,7- di-tert- butyl-3- (3,4- dimethy benzofu one (80 to 100 % w/w) and b) 5,7-di- tert- butyl-3- (2,3- dimethy benzofu one (0 to 20 % w/w)	lphenyl) ran-2- ng: lphenyl) ran-2-	-3Н-	no	5		
27	48960	_	9,10- dihydros stearic	yes xy	no	no	5		

			acid and its oligome	ers				
28	50160		di-n- octyltin bis(n- alkyl(C C <sub>16</sub> )	yes	no )	no	(10)	
29	50360	_	di-n- octyltin bis(ethy maleate	1	no	no	(10)	
30	50560	_	di-n- octyltin 1,4- butaned bis(mer		no tate)	no	(10)	
31	50800	_	di-n- octyltin dimalea esterifie	te,	no	no	(10)	
32	50880		di-n- octyltin dimalea polyme (n = 2-4)	te,	no	no	(10)	
33	51120		di-n- octyltin thioben: 2- ethylhe: mercapt	zoate	no	no	(10)	
34	54270	_	ethylhy	d <b>yex</b> yme	t <b>hy</b> lcellu	lnse		
35	54280	_	ethylhy	d <b>yex</b> ypro	pnydcellu	lonsce		
36	54450		fats and oils, from animal or vegetab food sources	yes le	no	no		
37	54480		fats and	yes	no	no		

			oils, hydroge from animal or vegetab food sources	le				
38	55520		glass fibers	yes	no	no		
39	55600	_	glass microba	yes ills	no	no		
40	56360	_	glycero esters with acetic acid	l,yes	no	no		
41	56486		glycero esters with acids, aliphatic saturate linear, with an even number of carbon atoms (C <sub>14</sub> -C <sub>18</sub> ) and with acids, aliphatic unsaturalinear, with an even number of carbon atoms (C <sub>16</sub> -C <sub>18</sub> )	c, d,	no	no		
42	56487		glycero	l,yes	no	no		

			with butyric acid					
43	56490	_	glycerol esters with erucic acid	l,yes	no	no		
44	56495		glycerol esters with 12- hydroxy acid		no	no		
45	56500	_	glycerol esters with lauric acid	l,yes	no	no		
46	56510	_	glycerol esters with linoleic acid	l,yes	no	no		
47	56520	_	glycerol esters with myristic acid		no	no		
48	56535	_	glycerol esters with nonanoi acid		no	no		
49	56540	_	glycerol esters with oleic acid	l,yes	no	no		
50	56550	_	glycerol esters with palmitic acid		no	no		
51	56570	_	glycerol esters with	l,yes	no	no		

			propion acid	ic				
52	56580	_	glycerol esters with ricinole acid		no	no		
53	56585	_	glycerol esters with stearic acid	yes.	no	no		
54	57040	_	glycerol monoold ester with ascorbid acid	eate,	no	no		
55	57120		glycerol monoold ester with citric acid		no	no		
56	57200		glycerol monopa ester with ascorbio acid	lmitate,	no	no		
57	57280	_	glycerol monopa ester with citric acid	yes lmitate,	no	no		
58	57600	_	glycerol monoste ester with ascorbio acid	earate,	no	no		
59	57680	_	glycerol monoste ester with citric acid		no	no		

60	58300 —	glycine, yes salts	no no		
62	64500 —	lysine, yes salts	no no	)	
63	65440 —	manganesses pyrophosphite	no no	)	
64	66695 —	methylhydrsoxymi	nthylcellnt	ose	
65	67155 —		no no		Not more than 0,05 % (w/w) (quantity of substance used/ quantity of the formulation). Mixture obtained from the manufacturing process in the typical ratio of (58-62 %): (23-27 %): (13-17 %).
66	67600 —	mono- n- octyltin tris(alkyl(C <sub>10</sub> - C <sub>16</sub> ) mercaptoacetate)	no no		11)
67	67840 —		no no		

			and/or with glycerol							
68	73160		phosphory acid, monoand dinalkyl $(C_{16}$ and $C_{18})$ esters	ies	no	yes	0,05			
69	74400		phosphory acid, tris(nonyl and/or dinonylph ester	l-	no	yes	30			
70	76463		polyacryl acid, salts	NCS	no	no		(22)		
71	76730		polydim <b>s</b> γ- hydroxyp			no	6			
72	76815		polyestery of adipic acid with glycerol or pentaeryt esters with even numbered unbranch C <sub>12</sub> -C <sub>22</sub> fatty acids	hritol, d, ed	no	no		(32)	The fraction with molecul weight below 1 000 Da [F2 shall] not exceed 5 % (w/w)	ar
73	76866	_	polyestery of 1,2- propaned and/ or 1,3- and/ or 1,4- butanedic	iol	no	yes		(31) (32)		

			and/or polypropyleneg with adipic acid, which may be end-capped with acetic acid or fatty acids C <sub>12</sub> -C <sub>18</sub> or n-octanol and/ or n-decanol					
74	77440		polyethy <b>les</b> egly diricinoleate	cnb	yes	42		
75	77702		polyethylæsegly esters of aliph. monocarb. acids (C <sub>6</sub> -C <sub>22</sub> ) and their ammonium and sodium sulphates	cnb	no			
76	77732	_	polyethylesse glycol (EO = 1-30, typically 5) ether of butyl 2-cyano 3-(4-hydroxy-3-	no	no	0,05	Only for use in PET	

			methoxypheny acrylate	71)				
77	77733		polyethylesseg (EO = 1-30, typically 5) ether of butyl-2- cyano-3- (4- hydroxypheny acrylate		no	0,05	Only for use in PET	
78	77897		polyethylesseg (EO = 1-50) monoalkylethe (linear and branched, C <sub>8</sub> -C <sub>20</sub> ) sulphate, salts		no	5		
79	80640	_	polyoxyalksyl (C <sub>2</sub> - C <sub>4</sub> ) dimethylpolys	no iloxane	no			
80	81760		powdersyes flakes and fibres of brass, bronze, copper, stainless steel, tin, iron and alloys of copper, tin and iron	no	no			
81	83320	_	propylhyydroxy	/ethnydcellu	losse			
82	83325	_	propylhyydroxy	/m <b>eth</b> ylcel	lunlose			

83	83330	_	propylh	yydersoxyp	r <b>op</b> ylcell	ulose			
84	85601	_	silicates natural (with the exception of asbestos	on	no	no			
85	85610	_	silicates natural, silanate (with the exception of asbestos	d on	no	no			
86	86000	_	silicic acid, silylated	yes i	no	no			
[F287	86285		Silicon dioxide, silanate	ļ	no	no		For syntheti amorphesilicon dioxide, silanated primary particles of 1–100 nm which are aggregato a size of 0,1–1 µm and may form agglome within the size distribution of 0,3 µm to the mm size. ]	ous d: s ted

88	86880	_	sodium monoall dialkylp	kyl	no enzened	no isulphon	9 ate			
89	89440	_	stearic acid, esters with ethylene	yes eglycol	no	no		(2)		
90	92195	_	taurine, salts	yes	no	no				
91	92320	_	tetradec polyeth = 3-8) ether of glycolic acid	ylenegly	no col(EO	yes	15			
92	93970	_	tricyclo bis(hexa	d <b>øea</b> nedi ahydropl	mothano thalate)	lno	0,05			
93	95858		waxes, paraffin refined, derived from petroleu based or syntheti hydroca feedstoo low viscosit	ım c rbon eks,	no	no	0,05		Not to be used for articles in contact with fatty foods for which [F2 simul D1 and/ or D2] is laid down. Average molecul weight not less than 350 Da. Viscosit at 100 °C not less	e ar

							than 2,5 cSt $(2,5 \times 10^{-6} \text{ m}^2/\text{s})$ . Content of hydroca with Carbon number less than 25, not more than $40 \% (\text{w/w})$ .	
94	95859	waxes, refined, derived from petroleu based or syntheti hydroca feedstochigh viscosit	um c urbon cks,	no	no		Average molecul weight not less than 500 Da. Viscosit at 100 °C not less than 11 cSt (11 × 10-6 m²/s). Content of mineral hydroca with Carbon number less than 25, not more than 5 % (w/w).	ar Y

95	95883		white mineral oils, paraffin derived from petroleu based hydroca feedstoo	iic, um arbon	no	no	Average molecular weight not less than 480 Da. Viscosity at 100 °C not less than 8,5 cSt (8,5 × 10 <sup>-6</sup> m <sup>2</sup> /s). Content of mineral hydrocarbons with Carbon number less than 25, not more than 5 % (w/w).
96	95920	_	wood flour and fibers, untreate	yes ed	no	no	
97	72081/	10—	petroleu hydroca resins (hydrog	innes arbon genated)	no	no	Petroleum hydrocarbon resins, hydrogenated are produced by the catalytic or thermalpolymerisation of dienes and olefins

							of the	
							aliphatic	c,
							alicyclic	
							and/or	
							monobe	nzenoidarylalkene
							types	Ž
							from	
							distillate	es
							of	
							cracked	
							petroleu	
							stocks	
							with a	
							boiling	
							range	
							not	
							greater	
							than	
							220 °C,	
							as well	
							as the	
							pure	
							monom	ers
							found	
							in	
							these	
							distillati	
							streams	,
							subsequ	ently
							followe	d
							by	
							distillat	ion,
							hydroge	nation
							and	1
							addition	
							process	ing.
							Properti	
							_	Viscosity
								at 120 °C:
								120°C.
								3
								Pa.s,
							_	Softening
								point:
								> >
								95 °C
								as
								determined
								by
								ASTM
								Method
. '	•	•		'	1	'	'	

A										_	E 28-67, Bromine number:
17260										_	40 (ASTM D1159), The colour
Second											50 % solution in toluene <
98										_	on the Gardner scale, Residual aromatic monomer ≤
199	98	17260	0000050	Of <b>Oth</b> ald	esheyade	yes	no		(15)		
100   24490   0000050sottotol yes   yes   no		54880									
100   24490   0000050s3fbitol   yes   yes   no	99	19460	0000050		yes	yes	no				
101   36000   0000050a8de7bic yes   no   no   no       102		62960		acid							
101   36000   0000050a8de7bic yes   no   no       102	100	24490	000005	Os <b>øø</b> itol	yes	yes	no				
102   17530   0000050g90edse no   yes   no		88320									
103	101	36000	000005	0a8de7bio acid	yes	no	no				
104   58960   0000057   1092   201	102	17530	0000050	0 <b>g90</b> e7se	no	yes	no				
104   58960   0000057	103	18100	000005	6 <b>g&amp;yle6</b> ro]	lyes	yes	no				
bromide		55920									
70400 acid 106 24550 0000057stlebardc yes yes no	104	58960	000005	7h@Qa@lec bromide	yl <b>ts</b> imetl	nydammo	o <b>nio</b> um	6			
106 24550 0000057stlebar4c yes yes no	105	22780	000005	7p <b>hO</b> mitic	yes	yes	no				
acid   acid		70400		acid							
89040 acid	106	24550	000005		yes	yes	no				
		89040		acıd							

107	25960	0000057ut8	a6 no	yes	no			
108	24880	0000057sfi0	rdse no	yes	no			
109	23740	00000571525-		yes	no			
	81840	pro	panediol					
110	93520	0000059e02 0010191teddo	-	no	no			
111	53600	0000060ed0		net <b>etr</b> aac	eti <b>a</b> o			
112	64015	0000060H3A3		no	no			
113	16780	0000064e117a	anfol yes	yes	no			
	52800							
114	55040	0000064fd8 acid	-	no	no			
115	10090	0000064a <b>¢9</b>	-	yes	no			
	30000	acio	1					
116	13090	0000065b&fi		yes	no			
	37600	acio	d					
117	21550	0000067n560	hlanoho	yes	no			
118	23830	0000067263	-	yes	no			
	81882	pro	panol					
119	30295	0000067a64	tdne yes	no	no			
120	49540	0000067 <b>d68</b> sulp	ethylyes ohoxide	no	no			
121	24270	0000069san		yes	no			
	84640	acio	1					
122	23800	0000071123 proj	-8 no panol	yes	no			
123	13840	0000071136 buta	-3 no	yes	no			
124	22870	0000071141 pen	-0 no tanol	yes	no			
125	16950	0000074e8by	ylleneno	yes	no			
126	10210	0000074a86	t-2len <b>c</b> no	yes	no			
127	26050	0000075 <b>v01</b>	y4 no oride	yes	no	ND	1 mg/ kg in final product	

128	10060	000007	5a0₹ta0lde	hnyode	yes	no		(1)		
129	17020	000007	5elliylend oxide	eno	yes	no	ND		1 mg/ kg in final product	(10)
130	26110	000007	5 <b>v36y4</b> ide chloride		yes	no	ND			(1)
131	48460	000007	51317–6 difluore	yes ethane	no	no				
132	26140	000007	5v318y1/ide fluoride		yes	no	5			
133	14380 23155	000007	5e4fb6ny chloride		yes	no	ND		1 mg/ kg in final product	(10)
134	43680	000007	5e <b>hI</b> ofod	ifl <b>es</b> rom	enthoane	no	6		Content of chlorofl less than 1 mg/ kg of the substant	uoromethane
135	24010	000007	5 <b>ръ́6р9</b> le oxide	nieo	yes	no	ND		1 mg/ kg in final product	
136	41680	000007	6e2i2np2ho	ryes	no	no				(3)
137	66580	000007	methyle methyl- (1-	yes nebis(4- 6- yclohex	no yl)pheno	yes		(5)		
138	93760	000007	7tf90n7 butyl acetyl citrate	yes	no	no		(32)		
139	14680 44160	000007	7е <b>912</b> і <b>0</b> acid	yes	yes	no				
140	44640	000007	7e93i0 acid, triethyl ester	yes	no	no		(32)		

141	13380	000007		yes	yes	no	6			
	25600		trimethy	ylolpropa	ine					
	94960									
142	26305	000007	8 <b>v0&amp;y</b> Uri	<b>etho</b> xysi	aynes	no	0,05		Only to be used as a surface treatment agent	[ <sup>F9</sup> (1)]
143	62450	000007	8i₅ <b>⊼op∉</b> nta	nyes	no	no				
144	19243	000007		no	yes	no	ND		1 mg/	
	21640		methyl- butadie						kg in final product	
145	10630	000007	9a <b>06yll</b> am	ide	yes	no	ND			
146	23890	000007	9 <b>p00p4</b> on acid	i <b>y</b> es	yes	no				
	82000									
147	10690	000007	9a&0y11c acid	no	yes	no		(22)		
148	14650	000007	9 <b>ell⪙</b> otr	i <b>filo</b> ioroei	hydsene	no	ND			(1)
149	19990	000007	9 <b>n30t10</b> acı	<b>yla</b> mide	yes	no	ND			
150	20020	000007	9m/dt//act acid	yrlóc	yes	no		(23)		
[ <sup>F6</sup> 151	13480	000008	bis(4-	no rphenyl)	yes	no	0,05		Not to be used for the manufactof polycarl feeding bottles.  Not to be used for the manufactof polycarl drinking cups or	cture

									bottles which, due to their spill proof character are intended for infants and young children in .	I
152	15610	000008		no dipheny e	yes l	no	0,05			
153	15267	000008		no dipheny e	yes l	no	5			
154	13617	000008		no	yes	no	0,05			
	16090		sulphon							
155	23470	000008	0e56-8 pinene	no	yes	no				
156	21130	000008	0n62tl6acr acid, methyl ester	yrlóc	yes	no		(23)		
157	74880	000008	1pMh2lic acid, dibutyl ester	yes	no	no	0,3	(32)	Only to be used as: (a)	plasticiser in repeated use materials and articles contacting nonfatty foods; technical support agent in

158	23380 76320	000008	5 <del>pM</del> Alic anhydri	yes de	yes	no				polyolefins in concentrations up to 0,05 % in the final product.
159	74560	000008	5pt 8h alicacid, benzyl butyl ester	yes	no	no	30	(32)	Only to be used as: (a)	plasticiser in repeated use materials and articles; plasticiser in single-use materials and articles contacting non-fatty foods except for infant formulae and follow-on formulae as defined by Directive 2006/141/EC or processed cereal-

									(c)	based foods and baby foods for infants and young children as defined by Directive 2006/125/ EC; technical support agent in concentrations up to 0,1 % in the final product.
160	84800	000008	7s <b>åBe3</b> /lid acid, 4-tert- butylph ester		no	yes	12			
[ <sup>F10</sup> 161	92160	000087-	69(4)- tartaric acid	yes	no	no ]				
162	65520	000008	7 <b>ค7ีสลาธ</b> ito	lyes	no	no				
163	66400	000008	82221'-4 methyle bis(4- ethyl-6- tert- butylph		no	yes		(13)		
164	34895	000008		yes enzamido	no	no	0,05		Only for use in PET for water and beverage	es

165	23200	000008		yes	yes	no				
	74480		phthalic acid	}						
166	24057	000008	9 <b>p3/2</b> 07me anhydri	l <b>hti</b> c de	yes	no	0,05			
167	25240	000009	1208–7 toluene diisocya	no anate	yes	no		(17)	1 mg/kg in final product expresse as isocyan moiety	
168	13075	000009		no	yes	no	5			[ <sup>F9</sup> (1)]
	15310		diamino phenyl- triazine							
169	16240	000009	dimethy	no 'l-4,4'- anatobipl	yes	no		(17)	1 mg/kg in final product express as isocyan moiety	
170	16000	000009		no xybiphei	yes nyl	no	6			
171	38080	000009	3b <b>58</b> zbic acid, methyl ester	yes	no	no				
172	37840	000009	3b&91z@ic acid, ethyl ester	yes	no	no				
173	60240	000009-		yes benzoic	no	no				
174	14740	000009	5 <i>e</i> 48-7 cresol	no	yes	no				
175	20050	000009	6n06thaci acid, allyl ester	yrlic	yes	no	0,05			

176	11710	000009	6a3ByRc acid, methyl ester	no	yes	no		(22)		
177	16955	000009	6e <b>419y l</b> lend carbona		yes	no	30		SML expressed as ethylened Residual content of 5 mg ethylened carbonal per kg of hydroged with max 10 g of hydroged in contact with 1 kg of food.	eglycol. l e te
178	92800	000009	6469-5 thiobis( tert- butyl-3- methylp		no	yes	0,48			
179	48800	000009	dihydro 5,5'-		no Imethane	yes	12			
[F11180	17160	000009	7efigenol	no	yes	no		(33)]		
181	20890	000009	7n63th2acr acid, ethyl ester	yrlóc	yes	no		(23)		
182	19270	000009	7 <b>itat</b> ethic acid	no	yes	no				
183	21010	000009	7n86thacr acid, isobutyl ester		yes	no		(23)		
184	20110	000009	7 <b>n&amp;&amp;thl</b> acr acid,	yrlóc	yes	no		(23)		

			butyl ester							
185	20440	000009	7r9ethacr acid, diester with ethylene	•	yes	no	0,05			
186	14020	000009	845 <del>ter4</del> - butylph	no enol	yes	no	0,05			
187	22210	000009	8683-9 methyls	no tyrene	yes	no	0,05			
188	19180	0000099	9i60pBtha acid dichlori		yes	no		(27)		
189	60200	0000099	9476-3 hydroxy acid, methyl ester	yes benzoic	no	no				
190	18880	0000099	9 <i>p</i> 96-7 hydroxy acid	no benzoic	yes	no				
191	24940	000010	Ot200p9hth acid dichlori		yes	no		(28)		
192	23187	_	phthalic acid	no	yes	no		(28)		
193	24610	000010	Os <b>tl/2re</b> fne	no	yes	no				
194	13150	000010	Obsthztyl alcohol	no	yes	no				
195	37360	000010	Ob <b>saza</b> ld	eyheysde	no	no				(3)
196	18670	000010	Oh&XaOme	t <b>lyy s</b> eneto	tyresmine	no		(15)		
	59280									
197	20260	000010	lmActhacr acid, cyclohe ester		yes	no	0,05			
198	16630	000010	l <b>d6øh8</b> ny diisocya		ey∕ <b>e</b> ,sl′-	no		(17)	1 mg/ kg in final product expresse as	

								isocyan moiety	ate
199	24073	000010	Iren fein diglycic ether		yes	no	ND	Not to be used for articles in contact with fatty foods for which [F2 simul D1 and/ or D2] is laid down. For indirect food contact only, behind a PET layer.	ant
200	51680	000010		yes Ithiourea	no a	yes	3		
201	16540	000010	2d <b>09</b> h0ny carbona	lno te	yes	no	0,05		
202	23070	000010		no nedioxy)	yes diacetic	no	0,05		[ <sup>F9</sup> (1)]
203	13323	000010	bis(2-	no vethoxy)	yes benzene	no	0,05		
204	25180	000010		yes	yes	no			
	92640		',N'- tetrakist hydroxy	(2- propyl)	thylenec	liamine			
205	25385	000010	2 <b>:</b> 67: <b>0</b> 1:5y la	mine	yes	no		40 mg/ kg hydroge at a ratio of 1 kg food	el

									to a maximul of 1,5 gran of hydroge Only to be used in hydroge intended for non-direct food contact use.	ns el.
206	11500	000010	Bactylic acid, 2- ethylher ester	no xyl	yes	no	0,05			
207	31920	0000103	Ballspilc acid, bis(2- ethylhes ester	yes xyl)	no	yes	18	(32)		(2)
208	18898	0000103		no /phenyl) de	yes	no	0,05			
209	17050	0000104	4276-7 ethyl-1- hexanol	no	yes	no	30			
210	13390 14880	000010		no roxymetl	yes nyl)cyclo	no hexane				
211	23920	000010	5p38p4on acid, vinyl ester	i <b>a</b> o	yes	no		(1)		
212	14200	000010	5 <b>e6</b> pr <b>2</b> la	ctyaera	yes	no		(4)		
	41840									
213	82400	000010		yes neglycol	no	no				

214	61840	000010	6174-9	yes	no	no				
	01010	000010	hydroxy acid	-						
215	14170	000010	6 <b>6311y0</b> ic anhydri	no de	yes	no				
216	14770	000010	6p44-5 cresol	no	yes	no				
217	15565	000010		no benzene	yes	no	12			
218	11590	000010	6a6By lic acid, isobutylester	no	yes	no		(22)		
219	14570 16750	000010	6 <b>e89cB</b> lor	ronloydrin	yes	no	ND		1 mg/ kg in final product	(10)
220	20590	000010	6n9dth2acı acid, 2,3- epoxypi ester		yes	no	0,02			(10)
221	40570	000010	6b9a7afie	yes	no	no				
222	13870	000010	6498-9 butene	no	yes	no				
223	13630	000010	6 <b>⊳999a0</b> ie≀	neo	yes	no	ND		1 mg/ kg in final product	
224	13900	000010	7201-7 butene	no	yes	no				
225	12100	000010	7 <b>a&amp;Byl</b> lon	itmde	yes	no	ND			
226	15272	000010	7e <b>tl</b> byBen	e <b>dia</b> mine	yes	no	12			
	16960									
227	16990	000010	7 <b>e2hiyll</b> end	egelscol	yes	no		(2)		
	53650	1								
228	13690	000010	748 <b>%</b> –0 butaned	no iol	yes	no				
229	14140	000010	7 <b>5922y6</b> ic acid	no	yes	no				
230	16150	000010	8elOmethy	laoninoe	thyænsol	no	18			

	T .	T	ı			ı	I		1
231	10120	000010	8a05ti4: acid, vinyl ester	no	yes	no	12		
232	10150 30280	000010	8a <b>2∉t</b> i <b>7</b> anhydri	yes de	yes	no			
233	24850	000010	8s <b>û0e5</b> nic anhydri		yes	no			
234	19960	000010	8m3ale6c anhydri	no de	yes	no		(3)	
235	14710	000010	8n3-9-4 cresol	no	yes	no			
[F12236	23050	000010		no nediamii	yes ne	no	ND		(28)]
237	15910 24072	000010		no xybenze	yes ne	no	2,4		
238	18070	000010	8g <b>55tar</b> ic anhydri		yes	no			
[F13239	19975	000010		yes	yes	no	2,5		
	25420		triamino triazine	)-1,3,5-					
	93720]								
240	45760	000010	8 <b>e9¢l8</b> he	x <b>yda</b> mine	eno	no			
[F10241	22960	000010	8 <b>p905</b> +1201	no	yes	no	3]		
242	85360	0000109	9sdBaðic acid, dibutyl ester	yes	no	no		(32)	
243	19060	0000109	9i <b>sobú</b> tyl vinyl ether	no	yes	no	0,05		(10)
244	71720	0000109	9 <b>p66t0</b> ne	yes	no	no			
245	22900	0000109	9467-1 pentene	no	yes	no	5		
246	25150	0000109	9t <b>99</b> aByc	l <b>no</b> furan	yes	no	0,6		
247	24820	0000110	Os <b>íli5eí</b> ónic	yes	yes	no			
	90960		acid						
248	19540	0000110	1	yes	yes	no		(3)	
	64800	1	acid				1		

249	17290	0000114	Of <b>ulinaa</b> ric		*****	***				
249	55120	0000110	acid	yes	yes	no				
250	53520	0000110		yes ebisstear	no amide	no				
251	53360	0000110		yes ebisolear	no nide	no				
252	87200	0000110	Os <b>dabi</b> c acid	yes	no	no				
253	15250	0000110	046 <b>0</b> –1 diamino	no butane	yes	no				
254	13720 40580	0000110	046 <b>3</b> –4 butaned	yes iol	yes	no		(30)		
255	25900	0000110	Otel 8x3anc	no	yes	no	5			
256	18010 55680	0000110	0g <b>9dta</b> lric acid	yes	yes	no				
[F11257	13550	0000110	) D <b>el918r</b> 5py	l <b>øæ</b> glyc	o√yes	no				
1 -0,	16660	002526	1 12							
	51760 ]									
258	70480	000011	l padn&itio acid, butyl ester	yes	no	no				
259	58720	000011	l hb‡bt&no acid	i <b>y</b> es	no	no				
260	24280	000011	ls <b>20a6</b> ic acid	no	yes	no				
261	15790	000011	l <b>e110</b> t10yle	<b>me</b> triami	nyees	no	5			
262	35284	000011	N-(2) aminoet	yes thyl)etha	no nolamine	no e	0,05		Not to be used for articles in contact with fatty foods for which [F2 simul D1 and/	ant

									or D2] is laid down. For indirect food contact only, behind a PET layer.	
263	13326	000011	1 <b>eH6H6</b> yle	nyæglyco	yes	no		(2)		
	15760									
	47680									
264	22660	000011	1466-0 octene	no	yes	no	15			
265	22600	000011	1487-5 octanol	no	yes	no				
266	25510	000011	2t£d₹tKoyle	nyeglyco	lyes	no				
	94320									
267	15100	000011	2430-1 decanol	no	yes	no				
268	16704	000011	2441-4 dodecer	no ne	yes	no	0,05			
269	25090	000011	2 <b>t6t0</b> a <b>₹</b> th	y <b>læs</b> egly	c <b>ye</b> s	no				
	92350									
270	22763	000011	1	yes	yes	no				
	69040		acid							
271	52720	000011	2 <b>e&amp;deā</b> m	djæs	no	no				
272	37040	000011	2b&factnic acid	yes	no	no				
273	52730	000011	2 <b>e86</b> e7c acid	yes	no	no				
274	22570	000011	2006dec isocyan	۲	yes	no		(17)	1 mg/kg in final product expresse as isocyana moiety	
275	23980	000011	5p0dplyle	næo	yes	no				

27.6	10000	000011	-: 1 11 7:					T		
276	19000		5iddbi/dte		yes	no				
277	18280	000011	5h2xæhl anhydri		myeetshyle:	n <b>eto</b> trahy	d <b>Ndp</b> htha	alic		
278	18250	000011	5 <b>h2∾</b> hl acid	aroendo	m <b>æts</b> hylei	n <b>ete</b> trahy	d <b>Ndp</b> htha	alic		
279	22840	000011	5p <b>enta</b> er	ythersitol	yes	no				
	71600									
280	73720	000011	5pMospho acid, trichlor ester		no	no	ND			
281	25120	000011	6tdt#aßlu	methyle	en,æs	no	0,05			
282	18430	000011	6h <b>exæ</b> flu	o <b>no</b> propy	lyas	no	ND			
283	74640		7pthalic acid, bis(2- ethylhe ester	xyl)	no	no	1,5	(32)	Only to be used as: (a)	plasticiser in repeated use materials and articles contacting nonfatty foods; technical support agent in concentration up to 0,1 % in the final product.
284	84880	000011	9saheylio acid, methyl ester	yes	no	no	30			
285	66480	000011	9242'-1 methyle bis(4-	yes ene	no	yes		(13)		

			methyl- tert- butylph							
286	38240	0000119	9b6en±3opl	n <b>gneo</b> ne	no	yes	0,6			
287	60160	0000120		yes benzoic	no	no				
288	24970	0000120	Oterbythth acid, dimethy ester		yes	no				
289	15880	0000120		no	yes	no	6			
	24051		dihydro	xybenze	ne					
290	55360	000012	lganio acid, propyl ester	yes	no	no		(20)		
291	19150	000012	lisop <b>5</b> tha acid	aho	yes	no		(27)		
292	94560	0000122	2 <b>t:210s-2</b> pro	<b>pen</b> olan	nime	no	5			
293	23175	0000122	2ph2spho acid, triethyl ester	nous	yes	no	ND		1 mg/ kg in final product	(1)
294	93120	000012	3t2180dlipr acid, didodec ester		no	yes		(14)		
295	15940	000012		yes	yes	no	0,6			
	18867		dihydro	xybenze	ne					
	48620	-								
296	23860	000012	3 <b>p38p6</b> on	andehyde	yes	no				
297	23950	000012	3 <b>p62p6</b> on anhydri		yes	no				
298	14110	000012	3b7a2y&alc	lenloyde	yes	no				
299	63840	000012	3l∂⁄ou⊠ni acid	cyes	no	no				
300	30045	0000123	Ba86ti4 acid, butyl ester	yes	no	no				

301	89120	000012	3steansc acid, butyl ester	yes	no	no			
302	12820	000012	3 <b>a29l3</b> ic acid	no	yes	no			
303	12130	000012		yes	yes	no			
	31730		acid						
304	14320	000012	4e@pr⊋lic	yes	yes	no			
	41960		acid						
305	15274	000012	<b>4h@Ջa4</b> met	<b>h</b> ølened	iayansine	no	2,4		
	18460								
306	88960	000012	4ร <b>ณิสาร</b> ์	<b>gle</b> s	no	no			
307	42160	000012	4ea8b9n dioxide	yes	no	no			
308	91200	000012	6s <b>u</b> 3r <b>6</b> se acetate isobutyra	-	no	no			
309	91360	000012	6s <b>udr</b> 7se octaaceta		no	no			
310	16390	000012	6 <b>2320</b> –7 dimethyl	no	yes	no	0,05		
	22437		propaneo						
311	16480	000012	6el5p8eptae	<b>sycts</b> hrito	yes	no			
	51200								
312	21490	000012	6 <b>n9⁄8</b> th7acry	<b>rlo</b> nitril	eyes	no	ND		
313	16650	000012	7 <b>d6j3</b> h@nyl	-	yes	no	3		
	51570		sulphone						
314	23500	000012	7β91-3 pinene	no	yes	no			
315	46640	000012	8236-00- tert- butyl- p- cresol	yes	no	no	3		
316	23230	000013	lph¶hՁlic acid, diallyl ester	no	yes	no	ND		

					,					
317	48880	000013	dihydro	yes xy-4- ybenzop	no henone	yes		(8)		
318	48640	000013		yes xybenzo	no phenone	no		(8)		
319	61360	000013	hydroxy	yes 7-4- ybenzop	no henone	yes		(8)		
320	37680	000013	6b <b>60</b> zbic acid, butyl ester	yes	no	no				
321	36080	000013	7 <b>a66</b> e <b>6</b> by palmita		no	no				
322	63040	000013	8la247 acid, butyl ester	yes	no	no				
323	11470	000014	0a88ylic acid, ethyl ester	no	yes	no		(22)		
324	83700	000014	1 <b>r22n0</b> 1e acid	i <b>y</b> es	no	yes	42			
325	10780	000014	lað Dy II c acid, n- butyl ester	no	yes	no		(22)		
326	12763 35170	000014	1243-5 aminoet	yes hanol	yes	no	0,05		Not to be used for articles in contact with fatty foods for which [F2 simul D1 and/ or D2] is laid down.	ant

									For indirect food contact only, behind a PET layer.	
327	30140	000014	la <b>78ti6</b> acid, ethyl ester	yes	no	no				
328	65040	000014	1 <b>n82163</b> nic acid	yes	no	no				
329	59360	0000142	2 <b>h62</b> ahoi acid	cyes	no	no				
330	19470	000014		yes	yes	no				
	63280		acid							
331	22480	000014	3108-8 nonanol	no	yes	no				
332	69760	000014	3e <b>2</b> &y2 alcohol	yes	no	no				
333	22775	000014		yes	yes	no	6			
	69920		acid							
334	17005	000015	l <b>efl<del>byll</del>e</b> nd	imine	yes	no	ND			
335	68960	000030	1 <b>⊖0-2a</b> m∂nid	eyes	no	no				
336	15095	0000334		yes	yes	no				
	45940		decanoi acid	c						
337	15820	000034	549 <b>4</b> ′-6 difluoro	no benzoph	yes enone	no	0,05			
338	71020	000037	3p49n9ito acid	leyices	no	no				
339	86160	0000409	9s <b>2lic2</b> n carbide	yes	no	no				
[F14340	47440	000046	1 <b>d5&amp;y5</b> no	djesnide	no	no	60 J			
341	13180	000049	8 <b>666y8</b> lo	2n@.1]he	pte2-	no	0,05			
	22550		ene							
342	14260	0000502	2e <b>4∌</b> r∂lao	tome	yes	no		(29)		
343	23770	0000504	416 <b>3</b> –2 propane	no diol	yes	no	0,05			

[ <sup>F10</sup> 344	13810 21821]	000050	5165-7 butaned formal	no liol	yes	no	0,05	15 30		(21)
345	35840	000050	6a <b>30eb</b> id acid	icyes	no	no				
346	10030	000051		no	yes	no				
347	13050 25540	000052	8 <b>tr14n0</b> lli acid	ti <b>n</b> o	yes	no		(21)		
348	22350 67891	000054	4n63ri8tic acid	yes	yes	no				
349	25550	000055	2 <b>tı3Ωn∂</b> lli anhydri	1	yes	no		(21)		
350	63920	000055	7li <b>59no</b> cei acid	riges	no	no				
351	21730	000056	3345-1 methyl- butene	no 1-	yes	no	ND		Only to be used in polypro	(1)
352	16360	000057		no Iphenol	yes	no	0,05			
353	42480	000058	4e0958ni acid, rubidiui salt		no	no	12			
354	25210	000058	42841–9 toluene diisocya	1	yes	no		(17)	1 mg/kg in final product express as isocyan moiety	
355	20170	000058	5n007lf9aci acid, tert- butyl ester	yrlic	yes	no		(23)		
356	18820	000059	2141-6 hexene	no	yes	no	3			
357	13932	000059	8332-3 buten-2 ol	no	yes	no	ND		Only to be used	(1)

358	14841	000059	0464-4				0,05		as a co- monome for the preparat of polymer additive	tion ric
	14841	000039	cumylp	no nenol	yes	no	0,03			
359	15970 48720	000061		yes xybenzo	yes phenone	no		(8)		
360	57920	0000620	0 <b>gbye∉</b> rol trihepta	l yes noate	no	no				
361	18700	0000629	91 <b>16-</b> 8 hexaned	no liol	yes	no	0,05			
362	14350	0000630	0 <b>e@&amp;&gt;0</b> n monoxi		yes	no				
363	16450	000064	640 <b>%</b> –0 dioxola	no ne	yes	no	5			
[F10364	15404	000065	21647-35,6- dianhyd	no rosorbito	yes ol	no	5		Only to be used as: (a)	a co- monomer in poly(ethylene- co- isosorbide terephthalate); a co- monomer at levels of up to 40 mole % of the diol component in

									together with 1,4-	rosorbitol roxymethyl)cyclohexane
365	11680	0000689	9a&2yBc acid, isopropy ester	no yl	yes	no		(22)		
366	22150	000069	1437-2 methyl- pentene	no 1-	yes	no	0,05			
367	16697	0000693	3n23-2 dodecar acid	no nedioic	yes	no				
368	93280	0000693	3tBiodipr acid, dioctade ester		no	yes		(14)		

369	12761	000069		no odecanoi	yes c	no	0,05				
370	21460	000076	0 <del>n98tl0</del> acı anhydri		yes	no		(23)			
371	11510 11830	000081	8a6tlyllic acid, monoes with ethylen		yes	no		(22)			
372	18640	000082	2 <b>h0&amp;</b> എne diisocya		yes	no		(17)	l mg/ kg in final product expresse as isocyan moiety		
373	22390	000084		no lenedica	yes rboxylic	no	0,05				
374	21190	000086	8n7@thacr acid, monoes with ethylen	ter	yes	no		(23)			
375	15130	000087	2105-9 decene	no	yes	no	0,05				
[ <sup>F13</sup> 376	66905	000087		yes yrrolido	no ne	no	60]				
377	12786	000091		no ropyltrie	yes hoxysila	no ne	0,05		Residua extracta content of 3- aminopi to be less than 3 mg/ kg filler when used for the reactive surface	ble ropyltrietho	oxys

									treatment of inorgani fillers. SML = 0,05 mg kg when used for the surface treatment of material and articles.	c /
378	21970	000092		no lmethac	yes rylamide	no	0,05			
379	21940	0000924		no lacrylan	yes nide	no	ND			
380	11980	000092	5a6flyllc acid, propyl ester	no	yes	no		(22)		
381	15030		le§ <del>8ld</del> oc		yes	no	0,05		Only to be used in polymer contacti foods for which simulan A is laid down	ng
382	19490	000094	71 <b>-00-41-06</b> 1 a c	tam	yes	no	5			
383	72160	000094	8265-2 phenyli	yes ndole	no	yes	15			
384	40000	000099	bis(octy (4- hydroxy di-tert-	 ilino)-1,3	ŕ	yes	30			

385	11530		cid,	no	yes	no	0,05		SML expresse	(1)
		2 h	-	propyl					as the sum of acrylic acid, 2-hydroxy ester and acrylic acid, 2-hydroxy ester. It may contain up to 25 % (m/m) of acrylic acid, 2-hydroxy ester	
									(CAS No 0002918	3-23-2).
386	55280	0	allict cid, ctyl ster	yes	no	no		(20)		
387	26155	000107216 v		no idazole	yes	no	0,05			[ <sup>F9</sup> (1)]
388	25080	000112043 te	36-1 etradec	no ene	yes	no	0,05			
389	22360			no lenedica	yes rboxylic	no	5			
390	55200	d	52H5 cid, odecyl ster	yes	no	no		(20)		
[F2391	22932	0001187pg	<b>&amp;3fK</b> 10r erfluor ther	omethyl ovinyl	yes	no	0,05		Only to be used in:	

									antistick coatings; fluoro- and perfluoropolymers intended for repeated use applications where the contact ratio is 1 dm 2 surface in contact with at least 150 kg food. l
392	72800	000124	lpM4spho acid, dipheny 2- ethylhes ester	1	no	yes	2,4		
393	37280	0001302	2 <b>b&amp;&amp;ŧ</b> ⊕nit	æyes	no	no			
394	41280	000130:	5 <b>e612-i0</b> ım hydroxi	yes de	no	no			
395	41520	000130:	5e <b>āk:iš</b> im oxide	yes	no	no			
396	64640	0001309	9m/2gnes hydroxi	i <b>vuers</b> de	no	no			
397	64720	0001309	oxide	ityters	no	no			
[ <sup>F12</sup> 398	35760	0001309	9 <b>a64ir4</b> on trioxide		no	no			(6)]
399	81600	0001310	D <b>p5&amp;a3</b> siu hydroxi		no	no			

400	86720	000131	0ร <b>ซิสิเนิ</b> m hydroxi		no	no				
401	24475	000131	3s <b>8ā</b> i <b>2</b> m sulphide	no	yes	no				
402	96240	000131	4z1n3e2 oxide	yes	no	no				
403	96320	000131	4 <b>z9</b> 8e3 sulphide	yes	no	no				
404	67200	000131	7m36ly5bd disulphi		no	no				
405	16690	000132	lei74in0ylt	ocnozene	yes	no	ND		It may contain up to 45 % (m/m) of	
406	83300	000132		yes neglycol earate	no	no				
407	87040	000133	0s <b>4đi4</b> m tetrabor		no	no		(16)		
408	82960	000133		yes neglycol eate	no	no				
409	62240	000133	2in367n-2 oxide	yes	no	no				
[F10410	62720	000133	2k <b>5</b> 84ih	yes	no	no			Particle can be thinner than 100 nm only if incorpo at a quantity of less than 12 % w/w	rated

								in an ethylene vinyl alcohol copolymer (EVOH) inner layer of a multilayer structure, in which the layer in direct contact with the food provides a functional barrier preventing migration of particles into the food. ]	
411	42080	000133	Be <b>8694</b> n black	yes	no	no		Primary particles of 10 – 300 nm which are aggregated to a size of 100 – 1 200 nm which may form agglomerates within the size	

					distribu	tion
					of	
					300 nm	
					– mm.	
					Toluene	
					extracta	
					maximu	
						1111
					0,1 %, determi	لممط
					accordi	ıg
					to ISO	
					method	
					6209.	
					UV	
					absorpti	on
					of	
					cyclohe	xane
					extract	
					at	
					386 nm	
					< 0,02	
					AU	
					for a	
					1 cm	
					cell or	
					< 0,1 AU	
					for a	
					5 cm	
					cell,	
					determi	
					accordi	ıg
					to a	
					generall	У
					recognis	sed
					method	
					of	
					analysis	
					Benzo(a	)pyrene
					content:	
					max	
					0,25 mg	<u>-</u> /
					kg	•
					carbon	
					black.	
					Maximi	ım
					use	*111
					level	
					of	
					carbon	
					black	
					in the	
					polyme	:

									2,5 % w/w.	
412	45200	000133	5e2ppfer iodide	yes	no	no		(6)		
413	35600	000133	6a2rlm6on hydroxi		no	no				
414	87600	000133	8s <b>8fb1</b> an monola		no	no				
415	87840	000133	8s <b>4ilbit</b> an monost		no	no				
416	87680	000133	8s <b>4</b> BbRan monool		no	no				
417	85680	000134	3s <b>98eic</b> acid	yes	no	no				
418	34720	000134	4a <b>2</b> 03mlini oxide	uynes	no	no				
419	92150	000140	l <b>tátíni</b> c acids	yes	no	no			According to the JECFA specific	
420	19210	000145	9is0pHtha acid, dimethy ester		yes	no	0,05			
[ <sup>F14</sup> 421	13000	000147		no dimetha	yes namine	no		(34)]		
422	38515	000153	bis(2-	yes azolyl)sti	no lbene	yes	0,05			(2)
423	22937	000162	3p@ff&ioi ether	oporopylj	<b>yes</b> uoro	winyl	0,05			
424	15070	000164	741%-1 decadie	no ne	yes	no	0,05			
425	10840	000166	3a39y4c acid, tert- butyl ester	no	yes	no		(22)		
426	13510 13610	000167	bis(4-		yes propane	no			In complia with Commi Regulat (EC)	ssion

							No 1895/2005 <sup>a</sup>
427	18896	0001679451-2 no (hydroxymethy cyclohexene	yes /1)-1-	no	0,05		
428	95200	0001709478),52 yes trimethyl-2,4,6 tris(3,5-di-tert-butyl-4-hydroxybenzyl		no			
429	13210	000176 lb7s(48 no aminocyclohex	yes (yl)metha	no ne	0,05		
430	95600	000184340B,34 yes tris(2- methyl-4- hydroxy-5- tert- butylphenyl) butane	no	yes	5		
431	61600	0001843295-6 yes hydroxy-4- n- octyloxybenzo	no phenone	yes		(8)	
432	12280	0002035adbple no anhydride	yes	no			
433	68320	0002082e79adecyles 3-(3,5- di-tert- butyl-4- hydroxyphenyl	no )propiona	yes	6		
434	20410	0002082n&dth7acrydic acid, diester with 1,4- butanediol	yes	no	0,05		
435	14230	0002123eapralactam, sodium salt	yes	no		(4)	
436	19480	0002146kadri6 no acid, vinyl ester	yes	no			
437	11245	0002156a@fylic no acid,	yes	no	0,05		(2)

			dodecyl						
[ <sup>F13</sup> 438	13303	000216	2b7s(-256- diisopro carbodi	pylphen	yes yl)	no	0,05		Expressed as the sum of bis(2,6-diisopropylphenyl)carbodiimide and its hydrolysis product 2,6-diisopropylaniline l
439	21280	000217	7#7@th@co acid, phenyl ester	yrlóc	yes	no		(23)	
440	21340	000221	0m2&Haci acid, propyl ester	yrlic	yes	no		(23)	
441	38160	000231	5b68z6ic acid, propyl ester	yes	no	no			
442	13780	000242	butaned bis(2,3-		yes	no	ND		Residual(10) content = 1 mg/ kg in final product expressed as epoxygroup. Molecular weight is 43 Da.
443	12788	000243		no ndecanoi	yes c	no	5		
444	61440	000244	hydroxy		no nzotriaz	no ole		(12)	
445	83440	000246	6 <b>р99</b> ө <b>р</b> ho acid	sydsoric	no	no			

446	10750	000249	5að fyllic acid, benzyl ester	no	yes	no		(22)		
447	20080	000249	5n3&tlfacı acid, benzyl ester	yrlic	yes	no		(23)		
448	11890	000249	9a <b>59yH</b> c acid, n-octyl ester	no	yes	no		(22)		
[ <sup>F11</sup> 449	49840	000250	0d8&etlade disulphi		no	yes	0,05 ]			
450	24430	000256	1s <b>88a8</b> ic anhydri		yes	no				
451	66755	000268	2220-4 methyl- isothiaz one	yes 4- olin-3-	no	no	0,5		Only to be used in aqueous polyme dispersi and emulsio	ons
[F13452	38885	000272	bis(2,4- dimethy (2- hydroxy n-	yes rlphenyl) y-4- yphenyl)		no	5]			
453	26320	000276	8 <b>v0@y7</b> trii	methoxy	sidene	no	0,05			(10)
454	12670	000285	amino-3	no 3- nethyl-3, vlcycloho		no	6			
455	20530	000286	7m6th2aci acid, 2- (dimeth ethyl ester	<b>ylic</b> ylamino	yes )-	no	ND			
456	10810	000299	8a08yfic acid, sec-	no	yes	no		(22)		

		butyl ester							
457	20140	0002998nl&Hilacr acid, sec- butyl ester	yrlóc	yes	no		(23)		
458	36960	0003061b <b>@he4</b> an	njde	no	no				
459	46870	tert- butyl-4-		no	no c				
460	14950	0003173e§&l3hex isocyana		yes	no		(17)	1 mg/ kg in final product expresse as isocyana moiety	
461	22420	0003173472–6 naphthal diisocya		yes	no		(17)	l mg/ kg in final product expresse as isocyana moiety	
462	26170	0003195NV8-6 vinyl- N- methyla	no cetamide	yes	no	0,02			[ <sup>F9</sup> (1)]
463	25840	0003290192,44 trimethy trimetha		yes ane	no	0,05			
464	61280	0003293297-8 hydroxy n- hexylox		no	yes		(8)		
465	68040	000333376[2:H- naphtho- (1,2- D)triazo yl]-3- phenylco	1-2-	no	no				

466	50640	000364	8d1&1-8 octyltin dilaurat		no	no		(10)		
[ <sup>F15</sup> 467	14800 45600]	3724-65	ortonic acid	yes	yes	no		(35)		
468	71960	000382	5p26fluor acid, ammon salt	oywstano	ano	no			Only to be used in repeated use articles, sintered at high tempera	
469	60480	000386	hydroxy di-tert- butylph	yes y-3,5'- enyl)-5- enzotriaz	no	yes		(12)		
470	60400	000389	hydroxy tert- butyl-5' methylp			yes		(12)		
471	24888	000396.			yes c	no	0,05			
472	66560	000406	methyle methyl-	yes nebis(4- 6- xylphene		yes		(5)		
473	12265	0004074	adopic acid, divinyl ester	no	yes	no	ND		5 mg/kg in final product Only to be used as comonomic	
474	43600	000408		yes llyl)-3,5,	no 7-	no	0,3			

			triaza-1 azoniaa chloride	damanta	ne					
475	19110	000409	isocyan isocyan	no ato-3- atomethy yleycloho		no		(17)	1 mg/ kg in final product expresse as isocyana moiety	
476	16570	000412	8d7βh8ny diisocya		4ýes	no		(17)	1 mg/kg in final product expresse as isocyana moiety	
477	46720	000413	0240-di- tert- butyl-4- ethylph		no	yes	4,8			(1)
478	60180	000419		yes ybenzoic yl	no	no				
479	12970	000419	6a <b>26ktic</b> anhydri	no de	yes	no				
480	46790	000422	13%0-di- tert- butyl-4- hydroxy acid, 2,4-di- tert- butylph ester	benzoic	no	no				
481	13060	000442		no etricarbo	yes xylic	no	0,05		expresse as 1,3,5-	[ <sup>F9</sup> (1)] ed tricarboxylic
482	21100	000465	5m3ettPacı acid,	yrlic	yes	no		(23)		

			isoprop	yl						
483	68860	000472		yes osphonic	no	no	0,05			
484	13395	000476		no roxymetl	yes nyl)propi	no onic	0,05			(1)
485	13560	000512			thyænse-4,4	'no		(17)	1 mg/	(10)
	15700		diisocya	inate					kg in final product expresse as isocyana moiety	
486	54005	000513	6e <b>tlay</b> lend N- palmita N'- stearam	mide-	no	no				
487	45640	000523	cyano-3 dipheny acid, ethyl ester		no	no	0,05			
488	53440	000551	8 <b>N,8</b> V3 ethylen	yes ebispalm	no itamide	no				
489	41040	000574	Be <b>atoil</b> um butyrate	-	no	no				
490	16600	000587	3d5pheny diisocya	l ,	eyÆş4′-	no		(17)	l mg/ kg in final product expresse as isocyana moiety	
491	82720	000618		yes neglycol te	no	no				
492	45650	000619	cyano-3	yes ,3- lacrylic	no	no	0,05			

			ethylhe	kyl					
493	39200	000620	hydroxy hydroxy	yes yethyl)-2 ypropyl-3 loxy)me	3-	no	1,8		
494	62140	000630	3h3/þæph acid	oyphorou	isno	no			
495	35160	000664	2631-5 amino-1 dimethy		no	no	5		
496	71680	000668	tetrakis (3,5- di-tert- butyl-4- hydroxy propion	[3- yphenyl)-	no	no			
497	95020	000684	62520,40 trimethy pentane diisobu	diol	no	no	5	Only to be used in single-use gloves	
498	16210	000686	dimethy	no /l-4,4'- odicycloł	yes nexylmet	no hane	0,05	Only to be used in polyamic	(5)
499	19965 65020	000691	5n1ahid acid	yes	yes	no		In case of use as a monome only to be used as a comonome in aliphatic polyester up to maximul level of 1 % on a	er rs

									molar basis	
500	38560	000712	bis(5- tert- butyl-2-	yes zolyl)th	no	yes	0,6			
501	34480	_	alumini fibers, flakes and powder		no	no				
502	22778	000745		no benzenes	yes ulphony	no I	0,05			[ <sup>F9</sup> (1)]
503	46080	000758	5β39-9 dextrin	yes	no	no				
504	86240	000763	Is N6c n dioxide	yes	no	no			For synthetia amorphisilicon dioxide: primary particles of 1 – 100 nm which are aggregato a size of 0,1 – 1 µm which may form agglome within the size distribut of 0,3 µm to the mm size.	ted erates
505	86480	000763	ls <b>0dit</b> m bisulphi	yes te	no	no		(19)		

506	86920	0007632s <b>00i0</b> m nitrite	yes	no	no	0,6		
507	59990	0007647hodhoch	nlyoerisc	no	no			
508	86560	0007647s <b>ddi6</b> m bromide		no	no			
509	23170 72640	0007664 <b>ph&amp;sp</b> ho	o <b>ņie</b> s	yes	no			
510	12789	000766 <del>4a<b>41</b>m</del> on	iayes	yes	no			
511	35320 91920	0007664s@ <b>IpB</b> ur	iges	no	no			
512	81680	000768 lpbta@siu	inynes	no	no		(6)	
513	86800	000768 ls <b>8ai6</b> m iodide	yes	no	no		(6)	
514	91840	0007704s <b>34pb</b> ur	yes	no	no			
515	26360 95855	0007732wlætes	yes	yes	no			In compliance with Directive 98/83/ EC <sup>b</sup>
516	86960	0007757s <b>8đ</b> ịữm sulphite		no	no		(19)	
517	81520	0007758p@2a3siu bromide		no	no			
518	35845	000777 la <b>44a</b> c <b>b</b> ide	oyies	no	no			
519	87120	0007772s <b>98</b> iนีm thiosulp		no	no		(19)	
520	65120	0007773 <b>n0dng</b> an		no	no			
521	58320	0007782g#apħite	yes	no	no			
522	14530	0007782 <b>еБ0</b> эбіпе	no	yes	no			
523	45195	0007787eðøpær bromide		no	no			
524	24520	000800 Isaybear oil	no	yes	no			
525	62640	000800 lj <b>æpa6</b> wax	yes	no	no			

526	43440	000800	le <b>ēfes</b> in	WAG	no	no				
527	14411	000800								
321		000800	oil	yes	yes	no				
	42880									
528	63760		2l <b>el⊘iŧb</b> in	-	no	no				
529	67850	000800	2 <b>n53n</b> Tan wax	yes	no	no				
530	41760	000800	6e <b>44e</b> &lil wax	layes	no	no				
531	36880	000801	2 <b>b&amp;9</b> s <b>3</b> va:	xyes	no	no				
532	88640		3s0yb&ar oil, epoxidi	yes	no	no	60 30(*)	(32)	(*)	In the case of PVC gaskets used to seal glass jars containing infant formulae and follow-on formulae as defined by Directive 2006/141 EC or processed cereal-based foods and baby foods for infants and young children as defined

								Oxirane < 8 %, iodine number < 6.	by Directive 2006/125/ EC, the SML is lowered to g/30 kg.
533	42720	000801	5 <b>e86n9</b> ub wax	ayes	no	no			
534	80720	000801	7 <b>pbbyþ</b> ho acids	spelsoric	no	no			
535	24100	000805	0 <b>r09</b> in7	yes	yes	no			
	24130								
	24190								
	83840	-							
536	84320	000805	Ord Sith, hydroge ester with methan		no	no			
537	84080	000805	Orasi+8 ester with pentaery	yes ythritol	no	no			
538	84000	000805	Orðdirfi, ester with glycero	yes	no	no			
539	24160	000805	2 <b>rd Qi+6</b> tall oil	no	yes	no			
540	63940	000806	2Hgnosul acid	phesnic	no	no	0,24	Only to be used as dispersa for plastics dispersi	

541	58480	0009000g@m5 ye arabic	s no	no	
542	42640	0009000eåifböxynae	shylcettalose	no	
543	45920	0009000da6n2nar ye	s no	no	
544	58400	0009000 <b>gmar</b> 0 ye	s no	no	
545	93680	0009000ttagalcantle	s no	no	
546	71440	0009000p <b>69</b> tm ye	s no	no	
547	55440	0009000 <b>g₹0a&amp;</b> n ye	s no	no	
548	42800	0009000 <b>ease</b> n ye	s no	no	
549	80000	0009002p&\$y4thylen wax	se no	no	
550	81060	0009003 <b>p07yp</b> rop <b>yd</b> wax	sne no	no	
551	79920	0009003pbly(ethyk 0106392pt@pylene) glycol		no	
552	81500	0009003 <b>pдУ</b> у&iny <b>yp</b>	yrroli <mark>dwn</mark> e	no	The substance shall meet the purity criteria as laid down in Commission Directive 2008/84/ EC°
553	14500 43280	000900 <mark>4едН</mark> ибовеуе	s yes	no	
554	43300	0009004e3flt8oseye acetate butyrate	s no	no	
555	53280	0009004eff7yRcellyb	sse no	no	
556	54260	0009004efl8ylhydyc	xyeth <b>ylo</b> ellulo	SIGO	
557	66640	0009004n5@tlfyleths	scellu hoose	no	
558	60560	0009004h6/2h0xyete	sylcel <b>luk</b> ose	no	
559	61680	0009004h6y4hr2xypynx	spylceHalose	no	

					Y	1			
560	66700	0009004	n6éthylh	<b>yds</b> oxyp	m <b>o</b> pylcel	lunloose			
561	66240	0009004	n667tH5ylc	ed <b>es</b> lose	no	no			
562	22450	0009004	n700e0cel	lukose	yes	no			
563	78320	0009004		y <b>læs</b> egly inoleate		yes	42		
564	24540	0009005		yes	yes	no			
	88800		edible						
565	61120	0009005	h <b>3/7</b> l+ <b>0</b> xy starch	v <b>eytebs</b> yl	no	no			
566	33350	0009005	aßginīlc acid	yes	no	no			
567	82080			yes neglycol	no	no			
568	79040		p <b>64y5</b> th sorbitan monola		enb	no			
569	79120		p <b>65y6</b> thy sorbitan monool		enb	no			
570	79200		p <b>66y</b> €thy sorbitan monopa		cnb	no			
571	79280	1	p <b>67y8</b> thy sorbitan monoste		cnb	no			
572	79360	1	p <b>oly</b> 3thy sorbitan trioleate		enb	no			
573	79440		poly <b>4</b> thy sorbitan tristeara		enb	no			
574	24250	0009006		yes	yes	no			
	84560		natural						
575	76721		<b>5p62y1</b> im (Mw > 6 800 Da)	ng tebny Isilo	xxane	no		Viscos: at 25 °C not less than 100 cSt (100 ×	ity

576	60880	000903	2 <b>h4/2l+2</b> xy	<b>yytes</b> ylme	<b>thy</b> lcellu	lnse			10 <sup>-6</sup> m <sup>2</sup> /s)	
577	62280	000904	4isloloutyl butene copolyn		no	no				
578	79600	000904	op@ly@th tridecyl ether phospha		enb	no	5		(EO ≤ 11) tridecyl ether phospha (monoand dialkyl ester) with a maximu 10 % content of	d yleneglycol ate
579	61800	000904	9h <b>yd</b> røxy starch	ynspyl	no	no				
580	46070	001001	6e20-3 dextrin	yes	no	no				
581	36800	001002	2b <b>3.t</b> in <b>3</b> m nitrate	yes	no	no				
582	50240	001003	octyltin bis(2- ethylher maleate	куl	no	no		(10)		

						,	_		
583	40400	0010043	Bbbless nitride	yes	no	no		(16)	
584	13620	0010043		yes	yes	no		(16)	
	40320		acid						
585	41120	0010043	Be <b>āl</b> c <del>il</del> um chloride		no	no			
586	65280		Bn&angan hypopho		no	no			
587	68400	0010094	<del>lot</del> ta8ec	y <b>les</b> ucan	ride	yes	5		
588	64320		7litthii 2m iodide	yes	no	no		(6)	
589	52645	0010436	6e0&451 - eicosena	yes ımide	no	no			
590	21370		5n80tPacr acid, 2- sulphoe ester		yes	no	ND		(1)
591	36160		5a00oilby stearate	lyes	no	no			
592	34690		7a59a9ini magnesi carbona hydroxi	um te	no	no			
593	44960	0011104	le60balt oxide	yes	no	no			
594	65360		า <b>ชอ</b> ท <b>ร</b> ูลก oxide	e <b>se</b> s	no	no			
595	19510	0011132	24iZn3cel	l <b>n</b> bose	yes	no			
596	95935		gum	yes	no	no			
597	67120	0012001	m2i6e2	yes	no	no			
598	41600		lealteizum SsalpHoa		no	no			
599	36840		7 <b>๒๎ฉธ</b> ันรัก tetrabor		no	no		(16)	
600	60030	0012072	2h <b>90</b> lrbm	a <b>vers</b> esite	no	no			
601	35440		laที่ที่คริงทi bromide		no	no			
602	70240	0012198	8 <b>e2∂k5</b> erit	eyes	no	no			
603	83460	0012269	₽ <b>ӯ</b> 8⊖҈⊅Һу	Witte	no	no			

604	60080	0012304	lhoy tal gite	no	no		
605	11005	0012542	Padfyllc no acid, dicyclopento ester	yes	no	0,05	(1)
606	65200	0012626	on&anganeses hydroxide	no	no		
607	62245	0012751	if23h-3 yes phosphide	no	no		Only to be used in PET polymers and copolymers
608	40800	0013003	butylidene- bis(6- tert- butyl-3- methylphen ditridecyl phosphite)		yes	6	
609	83455	0013445	Бр <b>Убор</b> ho <b>syds</b> acid	orousno	no		
610	93440	0013463	dioxide	no	no		
611	35120	0013560	349-1 yes aminocrotor acid, diester with thiobis (2- hydroxyethy ether	nic	no		
612	16694	0013811	N5,0N2 no divinyl-2- imidazolidir	yes	no	0,05	(10)
613	95905	0013983	Swlo7H@stoppits	no	no		
614	45560	001446	le <b>dis</b> tobaliyt <b>e</b> s	no	no		
615	92080	0014807	7 <b>t2016</b> -6 yes	no	no		
616	83470	0014808	Sq600ar7z yes	no	no		
617	10660	0015214	1289-8 no acrylamido-	yes 2-	no	0,05	

			methylp acid	ropanes	ulphonic				
618	51040		octyltin	yes oacetate	no	no		(10)	
619	50320		octyltin bis(2- ethylhex	yes cyl oacetate	no )	no		(10)	
620	50720		d60n-5 octyltin dimalea	yes te	no	no		(10)	
621	17110			no nebicyc	yes o[2,2,1]l	no nept-2-	0,05		(9)
622	69840	0016260	<b>⊌19</b> yfpal	n <b>nėt</b> samid	eno	yes	5		
623	52640	0016389	<b>d&amp;&amp;</b> imit	eyes	no	no			
624	18897		hydroxy	no 7-2- lenecarb	yes oxylic	no	0,05		
625	36720	0017194	<b>ba0iн2</b> m hydroxi		no	no			
626	57800	0018641	g\$ye&rol tribehen		no	no			
627	59760	0019569	h2iht2te	yes	no	no			
628	96190	0020427	z <b>518</b> 6-1 hydroxi	yes de	no	no			
629	34560	0021645	a <b>5dm2</b> init hydroxid	-	no	no			
630	82240	0022788		yes neglycol e	no	no			
631	59120		hexame bis(3- (3,5- di-tert- butyl-4-	•	no	yes mide)	45		
632	52880		409-7 ethoxyb acid,	yes enzoic	no	no	3,6		

			ethyl ester							
633	53200	0023949	9266-8 ethoxy- ethylox	yes 2'- anilide	no	yes	30			
634	25910	002480	) <del>tr<b>1∮</b>ғ</del> θру	laneglyc	oyles	no				
635	40720	0025013	Stdi6-5 butyl-4- hydroxy		no	no	30			
636	31500	0025134	labilylic acid, acrylic acid, 2-ethylherester, copolyn		no	no	0,05	(22)	SML expresse as acrylic acid, 2- ethylher ester	
637	71635	002515	lp <b>%6t6</b> er	ythersitol	no	no	0,05		Not to be used for articles in contact with fatty foods for which [F2 simul D1 and/ or D2] is laid down	ant
638	23590 76960	0025322	2 <b>p68y3</b> th	y <b>læs</b> egly	cyes	no				
620		002522	Dur 6 M . A	da						
639	23651	0025322	∠ <b>povy†</b> no	p <b>yde</b> negl	yycien	no				
(40	80800	0025250	)(01. £1.1	_1_1_1			0.05			
640	54930	0025359	naphtho copolyn		no	no	0,05			
[ <sup>F2</sup> 641	22331	002551	of (35-45 ° w/w) 1,6-		yes	no	0,05 ]			

			diamino trimethy and (55-65 % w/ w)1,6- diamino trimethy	lhexane % -2,4,4-						
642	64990	002573	ontaleac anhydric styrene, copolym sodium salt	le-	no	no			The fraction with molecul weight below 1 000 Da [F2 shall] not exceed 0,05 % (w/w)	ar
643	87760	002626	6s <b>67</b> bHan monopa		no	no				
644	88080	002626	6s <b>68</b> 90tan trioleate	yes	no	no				
645	67760	002640	n- octyltin tris(isoo mercapt		no )	no	(1	11)		
646	50480	002640	ld9-71-8 octyltin bis(isoo mercapte		no )	no	(1	10)		
647	56720	0026402	2g <b>2</b> 3e8rol monohe		no	no				
648	56880	0026402	2g <b>2%e6</b> rol monooc		no	no				
649	47210	002642	7d07u6yltl acid polymer		onico	no			Molecul unit = (C <sub>8</sub> H <sub>18</sub> S (n = 1,5-2)	
650	49600	002663	6d0thetthy bis(isoo mercapto	etyl	no )	no	(9	9)		

651	88240	002665	8ร <b>ง ยิงส</b> ิลท tristeara		no	no				
652	38820	002674	lb5s(27,4- di-tert- butylpho pentaery diphosp	enyl) ythritol	no	yes	0,6			
653	25270	002674	7 <b>290</b> –0 toluene diisocya dimer	no anate	yes	no		(17)	1 mg/kg in final product express as isocyan moiety	
654	88600	002683	6s <b>47</b> bitol monoste		no	no				
655	25450	002689	6 <b>t:48y0</b> lo	d <b>œo</b> anedi	in <b>aes</b> hano	lno	0,05			
656	24760	002691	4stly2re2nes acid	sumphonic	yes	no	0,05			
657	67680	002710	n- octyltin tris(2- ethylhex	yes kyl oacetate	no )	no		(11)		
658	52000	002717	6 <b>d&amp;7le0</b> cyl acid	bænzene	s <b>ul</b> phoni	eno	30			
659	82800	002719		yes neglycol urate	no	no				
660	47540	002745	8d90e8t- dodecyl disulphi		no	yes	0,05			
661	95360	002767	tris(3,5- di-tert- butyl-4- hydroxy	/benzyl)-	no -1,3,5- 1,3H,5H)	yes	5			
662	25927	002795	tris(4-	no phenol)	yes ethane	no	0,005		Only to be used in polycarl	[F9(1)]

663	64150	0028290	li7tellenic acid	eyes	no	no				
664	95000		tiondthy trimetha methyl methacr copolym	crylate- ylate	ime)	no				
665	83120		128-3 propyler monopal		no	no				
666	87280	0029116	s <b>985i</b> tan dioleate	yes	no	no				
667	55190	0029204	<b>g020</b> 01eic acid	yes	no	no				
668	80240	0029894	p <b>&amp;fy</b> glyc ricinolea		no	no				
669	56610	0030233	g <b>byle8</b> rol monobel		no	no				
670	56800		g <b>62e8</b> rol monolau diacetate	ırate	no	no		(32)		
671	74240		ploospho acid, tris(2,4- di-tert- butylphe		no	no				
672	76845		ptsyste of 1,4- butanedi with caprolac	iol	no	no		(29) (30)	The fraction with molecul weight below 1 000 Da [F2 shall] not exceed 0,5 % (w/w)	ar
673	53670		glycol bis[3,3- bis(3- tert- butyl-4-		no butyrate]	yes	6			

67.4	46400	000064	7 127 0	1. 1						
674	46480	003264	7 <b>d6b7e</b> ମ୍ସzy sorbitol		no	no				
675	38800	003268	bis(3- (3,5- di-tert- butyl-4-	yes (phenyl)	no propiony	yes l)hydraz	15			
676	50400	003356	8d99n-9 octyltin bis(isoo maleate		no	no		(10)		
677	82560	003358		yes neglycol tate	no	no				
678	59200	003507-	hexame bis(3- (3,5- di-tert- butyl-4-		no	yes te)	6			
679	39060	003595	bis(2- hydroxy di-tert-	yes 7-3,5- enyl)etha	no	yes	5			
680	94400	003644	bis[3- (3-tert- butyl-4- hydroxy methylp propion	y-5- henyl)	lno	no	9			
681	18310	003665	3182-4 hexadeo	no anol	yes	no				
682	53270	003720	5e¶9y1caı	bycesyme	thnyolcellu	losse				
683	66200	003720	6n0dth2ylc	a <b>yrb</b> oxyn	nentohylcel	lulose				
684	68125	003724	4n <b>26</b> tfelin syenite	n <b>y</b> es	no	no				
685	85950	003729	6slive c acid, magnes sodium- fluoride salt	<u> </u>	no	no	0,15		SML expressed as fluoride Only to be used	

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							in layers of multi-layer materials not coming into direct contact with food.
686	61390	003735	3h5y9H6xymeethylo	enthulose	no		
687	13530	003810		yes	no	0,05	
	13614		bis(4- hydroxyphenyl) bis(phthalic anhydride)	propane			
688	92560	0038613	di-tert- butyl- phenyl)-4,4'- biphenylylene diphosphonite	no	yes	18	
689	95280	004060	yes tris(4- tert- butyl-3- hydroxy-2,6- dimethylbenzyl) triazine-2,4,6(11 trione	no -1,3,5- H,3H,5H)	yes	6	
690	92880	0041484	this diethnesol bis(3- (3,5- di-tert- butyl-4- hydroxy phenyl) propionate)	no	yes	2,4	
691	13600	004746	bis(3- methyl-4- hydroxyphenyl) indolinone	yes 2-	no	1,8	
692	52320	005204	725 <del>043</del> yes dodecylphenyl)i	no ndole	yes	0,06	

693	88160	005414	0s <b>&amp;fb#</b> an tripalmi		no	no			
694	21400	005427	ondethaci acid, sulphop ester		yes	no	0,05		(1)
695	67520	005484	9 <b>n3&amp;n6</b> m tris(isoc mercapt		no )	no		(9)	
696	92205	005756	Otel@plhth acid, diester with 2,2'- methyle methyl- tert- butylph	enebis(4- 6-	no	no			
697	67515	005758	3n3dn3m tris(ethy mercapt		no )	no		(9)	
698	49595	005758	Belsmethy bis(ethy mercapt		no )	no		(9)	
699	90720	005844	6s <b>б2н%</b> уl	byeenszoylı	methane	no			
700	31520	006116	7a58ytic acid, 2-tert- butyl-6- (3-tert- butyl-2- hydroxy methylt ester	y-5- enzyl)-4	no	yes	6		
701	40160	006126	bis(2,2, tetrame piperidy	thyl-4- /l)hexam oethane,	no ethylene	no diamine-	2,4		
702	87920	006175	2s <b>6fbf</b> tan tetrastea		no	no			
703	17170	006178	8fatfy4 acids, coco	no	yes	no			

704	77600	006178	Sp&5y0thy ester of hydroge castor oil		cob	no				
705	10599/9	<b>0.4</b> 61783	fatty, unsatura (C <sub>18</sub> ), dimers, non hydroged distilled and non-distilled	enated,	yes	no		(18)		(1)
706	17230	0061790	Ofatay3 acids, tall oil	no	yes	no				
707	46375	0061790	O <b>d53to2</b> ma earth	cyccosus	no	no				
708	77520	006179	lpb2y6thy ester of castor oil	y <b>keis</b> egly	cnb	no	42			
709	87520	0062568	8s <b>øilbû</b> tan monobe		no	no				
710	38700	006339	carbobu bis(isoo	yes toxyethy ctyl oacetate		yes	18			
711	42000	0063438	carbobu tris(isoc	yes toxyethy ctyl oacetate		yes	30			
712	42960	006414	7e <b>49t&amp;</b> r oil, dehydra	yes ted	no	no				
[ <sup>F10</sup> 713	43480	006436	5ehhrðoa activate 9-44-0]	lyes d	no	no			Only for use in PET at maximu 10 mg/kg of polymer	

								Same purity requirer as for Vegetab Carbon (E 153) set out by Commis Regulat (EU) No 231/201 do with exception of ash content which can be up to 10 % (w/w).	le ssion ion
714	84400	006436	hydroge ester with pentaery		no	no			
715	46880	0065140	tert- butyl-4-	benzylp nyl	no hosphoni	no	6		
716	60800	006544	hydroxy	ne- :	no -	no	30		
717	84210	006599	7 <b>ғ0£н</b> 0) hydroge	yes enated	no	no			

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718	84240	0065997rdsirfi hydro ester with glyce	ogenated,	no	no			
719	65920	N,N-dime N- carbo chlor sodiv salt - octac meth ethyl meth cyclo meth N- vinyl pyrro	acryloylox thyl- oxymethyla ide, im lecyl acrylate- acrylate- shexyl acrylate-		m			
720	67360	tris(i	yes  cyltin  sooctyl  aptoacetat	no e)	no	(25)		
721	46800	0067845393-d tert- butyl hydro acid, hexad ester	-4- oxybenzoi	no	no			
722	17200	0068308f56fy2 acids soya		yes	no			
723	88880	0068412s22rc	h, yes olysed	no	no			
724	24903	starc	olysed	yes	no		In complia with the purity criteria for maltitol	

Elic								syrup E 965(ii) as laid down in Commic Directive 2008/60 EC <sup>e</sup>	re
F16									
726	83599	006844	sodium sulphide and	oethyl		yes	(9)		
727	43360	006844	2 <b>e8ที่เ</b> มื่อs regenera		no	no			
728	75100	006851 002855	5ph8h@lic 3a&240 diesters with primary saturate C <sub>8</sub> -C <sub>10</sub> branche alcohols more than 60 % C <sub>9</sub>	, d	no	no	(26) (32)	Only to be used as: (a)	plasticiser in repeated use materials and articles; plasticiser in single-use materials and articles contacting non-fatty foods except

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729	75105	006851	5 <del>p#9</del> h <b>å</b> lic	yes	no	no	(26)	(c)	for infant formulae and follow- on formulae as defined by Directive 2006/141/ EC or processed cereal-based foods and baby foods for infants and young children as defined by Directive 2006/125/ EC; technical support agent in concentrations up to 0,1 % in the final product. (7)
.2)	,0100	002676	la4(14)0 diesters with primary saturate C <sub>9</sub> -C <sub>11</sub> alcohols	, d			(32)	to be used as: (a)	plasticiser in repeated use

	more than 90 % C <sub>10</sub>			(b)	materials and articles; plasticiser in single- use materials and articles contacting non- fatty foods except for infant formulae and follow- on formulae as defined by Directive 2006/141/ EC or processed cereal- based foods and baby foods for infants and young children as defined by Directive 2006/125/ EC; technical support agent in concentrations up
--	--------------------------------	--	--	-----	---

730	66930			i <b>Jsæs</b> quic	mane	no			< 1 mg methylt kg of	ilsesquioxane: rimethoxysilane/ ilsesquioxane
731	18220	006856		no ninound	yes ecanoic	no	0,05			(2)
732	45450	006861	cresol-		no ne-	yes	5			
733	10599/9	<b>2)A</b> 6878.	fatty, unsatura (C <sub>18</sub> ), dimers, hydroge distilled and non-distilled	enated,	yes	no		(18)		(1)
734	46380	006885.	earth, soda ash flux- calcined		no	no				
735	40120	006895	1 <b>55£0(p%</b> oly	estesylene	glycol)h	yadroxym	<b>etJ6</b> ylpho	sphonat	e	
736	50960	006922	octyltin ethylene	yes eglycol captoace	no tate)	no		(10)		
737	77370	0070142		y <b>læs</b> egly ydroxyst		no				
738	60320	007032	128 <b>62-7</b> hydroxy	yes 7-3,5-	no	yes	1,5			

			bis(1,1-dimethy	lbenzyl)	phenyl]b	enzotria	zole			
739	70000	007033	oxamid (3,5- di-tert- butyl-4-	phenyl).		no				
740	81200	007187	triazine- diyl]- [(2,2,6,0 tetrame- piperidy	thylbutyl -2,4- 5- thyl-4- /1)- exameth	no )amino]- ylene[(2		3			
741	24070 83610	0073133	8r82r6 acids and rosin acids	yes	yes	no				
742	92700	007830	1242,454- tetrame: (2,3- epoxypi oxa-3,2 diazadis [5.1.11. heneico one, polyme:	thyl-20- ropyl)-7- 0- spiro- 2]- san-21-	no	yes	5			
743	38950	0079072		yes nzyliden	no e)sorbito	no l				
[F15744	18888	080181-	hydroxy acid-3-	no butanoid pentano		no		(35)	The substance is used as product obtained by bacteria ferment In compliar with	i l ation.

									the specific mention in the Table 4 of Annex I. ]	
745	68145	008041	nitrilo(tris(3,3', tetra-tert-butyl-1, bi-phenyl-2, diyl)pho	.5,5'- 1'- 2,2'-	no	yes	5		SML expresse as sum of phosphi and phospha	te
746	38810	0080693	3508(21,6- di-tert- butyl-4- methylp diphosp	henyl)pe	no entaeryth	yes	5		SML expresse as sum of phosphi and phospha	te
747	47600	0084030	0d6-ln-5 dodecyl bis(isoo mercapt	ctyl	no )	yes		(25)		
748	12765	0084434	tN-228 aminoet β- alanine, sodium salt	no hyl)-	yes	no	0,05			
749	66360	0085209	methyle bis(4,6- di-tert- butylpho sodium phospha	enyl)	no	yes	5			
750	66350	0085209	9292'-4 methyle di-tert- butylpho lithium phospha	enyl)	no 5-	no	5			
751	81515	0087189	9p <b>25y(</b> zin glycerol	øes ate)	no	no				

			1	1				1		
[F2752	39890	0087826b4s(me 0069158-41-4 0054686-97-4 0081541-12-0	th <b>yes</b> enzy	dindene)s	o <b>nlo</b> it <b>l</b> ol					
753	62800	0092704k46lin, calcine		no	no					
754	56020	0099880gbyle6ro	ol yes nate	no	no					
755	21765	chloro-	no enebis(3- 2,6- aniline)	yes	no	0,05			(1)	
756	40020	0110553224-0 bis(oct methyl	yes ylthiomet phenol	no hyl)-6-	yes		(24)			
757	95725	0110638vetnoic reaction product with citric acid, lithium salt	n t	no	no					
758	38940	0110675 <b>22,6</b> -8 bis(doc methyl	yes lecylthior phenol	no nethyl)-6	yes 5-		(24)			
759	54300	di-tert- butylpl			yes	6				
760	83595	0119345redefio produc of ditert-butylph with biphen obtained by conden of 2,4-di-tert-butylph with Friedel Craft	t nosphonit yl, d sation nenol	no e	no	18		Compos	4,4'- biphenylend bis[0,0- bis(2,4- di- tert-	])phosphonite]

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	reaction				_	4,3'-
	product					biphenylene-
	of					bis[0,0-
1						hig(2.4
	phospho	orous				bis(2,4-
	trichlori	de				di-
	and					tert-
	bipheny	1				butylphenyl)phosphonite]
	- r - J					(CAS
						No
						0118421-00-4)
						(17-23 %
						w/
						W
						(*))
						(*)), 3,3'-
					_	hinh and an
						biphenylene-
						bis[0,0-
						bis(2,4-
						di-
						tert-
						butylphenyl)phosphonite]
						(CAS
						No.
						No
						0118421-01-5)
						(1-5 %
						w/
						W
						(*)),
						4-
					_	
						biphenylene-0,0-
						bis(2,4-
						di-
						tert-
						butylphenyl)phosphonite
						(CAS
						No
						0091362-37-7)
						(11-19 %
						w/
						W
						(*)),
					_	tris(2,4-
						di-
						tert-
						butylphenyl)phosphite
						(CAS
						No
						0031570-04-4)
						(9-18 %
						w/
						W
						(*)),

761	92930	012021	8tBib@et methox dimethy	ycarbony	(500 d-2,6-	no	6		
								_	10 mg KOH per gram, Melt range of 85- 110 °C,
								_	min. 5,4 % to max. 5,9 %, Acid value of max.
								Other specific	formulation ations: Phosphor content of
								(*)	Quantity of substance used/ quantity of
									di- tert- butylphenyl)phosphonate-0 bis(2,4- di- tert- butylphenyl)phosphonite (CAS No 0112949-97-0) (< 5 % w/ w (*))
								_	4,4'- biphenylene-0,0- bis(2,4-

			dihydro carboxy	pyridine late)	-3-				
762	31530	012396	acid, 2,4-di- tert- pentyl-6 (1- (3,5- di-tert- pentyl-2	<b>?</b> -	no ethyl)phe	yes	5		
763	39925	012922	bis(met	yes hoxymet Ihexane	no hyl)-2,5-	yes	0,05		
764	13317	013245	bis[4- (ethoxy	no carbonyl lenetetra	yes )phenyl] carboxy	no -1,4,5,8- diimide	0,05	Purity > 98,1 % (w/w). Only to be used as co- monom (max 4 %) for polyeste (PET, PBT).	
765	49485	013470	dimethy (1-		no yl)pheno	yes	1		
766	38879	013586	1 <b>556(-2</b> ),4- dimethy		no dene)sor	no bitol			
767	38510	013650-	bis(3-	2,6,6- thyl-4-	no	no mine,	5		

			trichlore	b-1,3,5-					
768	34850	014392	5 <b>a9i2i+i2</b> es,	yes rogenate	no d	no		Not to be used for articles in contact with fatty foods for which [F2simul D1 and/ or D2] is laid down. Only to be used in: (a)	polyolefins at 0,1 % (w/ w) concentration and in PET at 0,25 % (w/ w) concentration
769	74010	014565	Ophospho acid, bis(2,4- di-tert- butyl-6- methylp ethyl ester		no	yes	5	SML express as sum of phosphi and phospha	te
770	51700	014731	525(4,26- dipheny triazin-2 yl)-5- (hexylo		no	no	0,05		

		1	1			i .	1		ĺ	
771	34650	015184	latanini hydroxy [2,2'- methyle (4,6- di-tert- butylph phospha	rbis enebis enyl)	no	no	5			
772	47500	015325			no -	no	5			
773	38840	015486	264s(-284- dicumy diphosp	phenyl)	no pentaeryt	yes hritol-	5		phospha and its hydroly product (2,4-	ce I Iphenyl)pentaerythritol- ite
774	95270	016171	tris(tert-	nenyl-2- 3-	no	yes	2		SML expressed as sum of phosphia and the hydroly product = TTBP	te, ite
775	45705	016641		yes xanedica ıyl	no rboxylic	no		(32)		
776	76723	016788	3pbbydim 3- aminopi termina	ropyl	omane,	no			The fraction with molecul	

			polymer with dicyclol diisocya	nexylmet	thane-4,4	<u>'-</u>		weight below 1 000 Da [F2shall] not exceed 1,5 % (w/w)	
777	31542	0174254	la2Bylic acid, methyl ester, telomer with 1-dodecar $C_{16}$ - $C_{18}$ alkyl esters	yes	no	no		0,5 % in final product	(1)
778	71670	017867	lp <b>&amp;8t4</b> ery tetrakis (2- cyano-3 dipheny		no e)	yes	0,05		
[F2779	39815	018212		yes noxymet	no hyl)fluor	yes	0,05		[ <sup>F9</sup> (2)]]
780	81220	019226	[[6- [N- (2,2,6,6 tetramer piperidi n- butylam triazine- diyl] [(2,2,6,6 tetramer piperidi hexanec tetramer	thyl-4- nyl)- nyl)- ino]-1,3, -2,4- 6- thyl-4- nyl)imin iyl[(2,2, thyl-4- nyl)imin	o]-1,6- 6,6-	no	5		

			hexyl]- [1,3,5- triazine- triamine ω- N,N,N ',N'-	nyl)- - - hyl-4- nylamin -2,4,6- -2]- yl-1,3,5-	0)-					
781	95265	0227099	946 <b>0</b> ,57- tris(4- benzoyl benzene		no	no	0,05			
782	76725	0661470		ropyl ted,	yl-3,5,5-	no			The fraction with molecul weight below 1 000 Da [F2 shall] not exceed 1 % (w/w)	ar
783	55910	0736150	ogbyeðrið castor- oil mono-, hydroge acetates	nated,	no	no		(32)		
[F10784	95420	0745070	tris (2,2- di-	yes propanan	no nido)	no	5]			
785	24910	000010	0 <b>t≙rbp0</b> hth acid	adic	yes	no		(28)		

786	14627	0000117	7321-5 chlorop anhydri		yes	no	0,05	SML expressed as 3- chlorophthalic acid
787	14628	0000118	8445-6 chlorop anhydri		yes	no	0,05	SML expressed as 4- chlorophthalic acid
788	21498	0002530		no ryloxy)p	yes ropyl]tri	no methoxy	0,05 silane	Only (1) to be (11) used as a surface treatment agent of inorganic fillers
789	60027		hydroge homopo and/or copolyn made of 1- hexene and/ or 1- decene and/ or 1- decene and/ or 1- decene (Mw: 440– 12 000)	olymers ners	no	no		Average (2) molecular weight not less than 440 Da. Viscosity at 100 °C not less than 3,8 cSt (3,8 × 10 <sup>-6</sup> m <sup>2</sup> /s).
790	80480		lp@fy&6- lmf&rp7ho triazine diyl)- [(2,2,6,0 tetrame	lino-1,3, -2,4- 6-		no	5	Average (16) molecular weight not less than

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				<b>5</b> -				yl)hexar diamine < 15 000 mg/ kg, and of 2,4- dichloro	ine 5,6- hylpiperidin-4- ie-1,6-
791	92470	0106990	',N ",N"- tetrakis( bis(N- butyl- (N- methyl- tetramet yl)amin yl)-4,7-	2,2,6,6- hylpiper o)triazin cane-1,1	-2-	no	0,05		
792	92475	020325	ester with [3-(3- tert- butyl-4- hydroxy	tert- ,2'- xybipher	no nyl, ropyl]oxy	yes	5 onous	SML expresse as the sum of phosphit and phospha form of the substant and the	te

								hydrolysis products	1
793	94000	000010	2trīl <b>etHo</b> an	oyæmine	no	no	0,05	SML expressed as the sum of triethanola and the hydrochlo adduct expressed as triethanola	amine ride
[F13794	18117	000007	9gl <b>y</b> le <b>b</b> lic acid	no	yes	no		Only to be used for manufactur of polyglycoracid (PGA) for (i) indirect food contact behind polyesters such as polyethyle terephthals (PET) or polylactic acid (PLA); and (ii) direct food contact of a blend of PGA up to 3 % w/ w in PET	lic ene ate

									or PLA. ]	
795	40155	012417	bis(2,2,0) tetrament piperidy N,N'-	thyl-4- ⁄l)-	no thylened	no	0,05			(2) (12)
796	72141	001860	(1,4-	yes ne)bis[4: nzin-4-	no H-3,1-	yes	0,05		SML including the sum of its hydroly product.	sis
[ <sup>F13</sup> 797	76807	007301	of adipic acid with 1,3- butaned 1,2- propane and 2- ethyl-1- hexanol	iol, diol	no	yes		(31) (32)]		
798	92200	000642	2t&6phth acid, bis(2- ethylhes	a <b>dės</b> kyl)ester	no	no	60	(32)		
[ <sup>F10</sup> 799	77708		polyethy (EO = 1-50) ethers of linear and branche primary (C <sub>8</sub> - C <sub>22</sub> ) alcohols		cnb	no	1,8		In complia with the maximu ethylene oxide content as laid down in the purity criteria for food additive in Commis Regulat	s ssion

800	94425	000086	7tdi8tt0yl phospho	yes onoaceta	no te	no		(EU) No 231/201 I Only for use in PET	2.
801	30607		acids, C <sub>2</sub> -C <sub>2</sub> -C <sub>2</sub> -, aliphatic linear, monoca from natural oils and fats, lithium salt	yes c, rboxylic	no	no			
802	33105	0146340	Oalcobols C <sub>12</sub> - C <sub>14</sub> seconda β-(2- hydroxy ethoxyla	ry, vethoxy),	no	no	5		(12)
803	33535	015226	alkeness C <sub>24</sub> ) copolyn with maleic anhydrireaction product with 4-	ner de,	no	no		Not to be used for articles in contact with fatty foods for which [F2simul D1 and/ or D2] is laid down. Not to be used in contact	

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								with alcoholic foods.
804	80510	101012	diyl)- block- poly(x- oleyl-7- hydroxy diimino diyl), process mixture with x = 1 and/ or 5, neutralii with	,1- - bane-1,3- v-1,5- octane-1	,8-	no		Only to be used as polymer production aid in polyethylene (PE), polypropylene (PP) and polystyrene (PS)
805	93450		and	ner chlorosila	no ane ylenepho	no		The content of the surface treatment copolymer of the coated titanium dioxide is less than 1 % w/ w
806	14876	000107		no xanedica	yes irboxylic	no	5	Only to be used for manufacture of polyesters
[ <sup>F11</sup> 807	93485		titanium nitride, nanopar		no	no		No migration of titanium nitride nanoparticles.

									Only to be used in polyethy terephth (PET) up to 20 mg/kg. In the PET, the agglome have a diameter of 100-500 consisting of primary titanium nitride nanopart particles have a diameter of approxing 20 nm. I	erates nm ng
808	38550	088207.		yes enzylide	no ne)propy	no Isorbitol	5		SML including the sum of its hydrolys products	sis
809	49080	085228	(2,6-disopro [4- (1,1,3,3 tetrame)	hylbutyl	no yl)-6- )phenox nolin-1,3	yes y]-1H- (2H)-	0,05		for use	(6) (14) (15)
810	68119		neopent glycol, diesters and		no	no	5	(32)	Not to be used for	

			monoes with benzoic acid and 2- ethylhes acid					articles in contact with fatty foods for which [F2 simul D1 and/ or D2] is laid down.	ant
811	80077	006844	lpbly8thy waxes, oxidised		no	no	60		
[F13812	80350	012457	8pb2y(12 hydroxy acid)- polyethy copolyn	vstearic yleneimi	no	no		Only to be used in plastics up to 0,1 % w/w. Prepare by the reaction of poly(12 hydroxy acid) with polyethy l	_
813	91530	_	sulphos acid alkyl (C <sub>4</sub> - C <sub>20</sub> ) or cyclohe diesters salts	xyl	no	no	5		
814	91815		sulphos acid monoall (C <sub>10</sub> - C <sub>16</sub> ) polyethy		no	no	2		

			esters, salts							
815	94985		trimethy mixed triesters and diesters with benzoic acid and 2-ethylhes acid		nme)	no	5	(32)	Not to be used for articles in contact with fatty foods for which [F2 simul D1 and/ or D2] is laid down	ant
816	45704	_	cis-1,2- cyclohe acid, salts	yes xanedica	no rboxylic	no	5			
817	38507		cis- endo- bicyclo  dicarbo: acid, salts	yes [2.2.1]he xylic	no ptane-2,3	no 3-	5		Not to be used with polyethy in contact with acidic foods. Purity ≥ 96 %.	ylene
818	21530	_	methally acid, salts	ynhaulpho	n <b>ye</b> s	no	5			
819	68110		neodeca acid, salts	nywisc	no	no	0,05		Not to be used in polymer contactif fatty foods. Not to be	

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								used for articles in contact with fatty foods for which [F2 simul D1 and/ or D2] is laid down. SML expresse as neodeca acid.	ed
820	76420	_	pimelic acid, salts	yes	no	no			
821	90810		stearoyl lactylic acid, salts	- <b>父e</b> s	no	no			
[ <sup>F17</sup> 822	71938		Perchlor acid, salts	riyæs	no	no	0,002		(4)]
823	24889	_	5- Sulphoi acid, salts	no sophthal	yes ic	no	5		
854	71943	032923	8p24f Goor acetic acid, α- substitu with the copolyn of perfluor propyle glycol and perfluor ethylene	ted ner ro-1,2- ne	no	no		Only to be used in concent up to 0,5 % w/w in the polymer of fluorope that are processed	risation olymers

			glycol, termina with chloroh groups	ted exafluor	opropylo	xy		at tempera at or above 340 °C and are intended for use in repeated use articles	i
[ <sup>F18</sup> 855	40560		(butadie styrene, methyl methaci copolyn cross- linked with 1,3- butaned dimetha	ylate) ner iol	no	no		Only to be used in rigid poly(vir chloride (PVC) at a maximulevel of 12 % at room tempera or below.	e) nm
[ <sup>F19</sup> 856	40563	25101-2	864tadic styrene, methyl methaci butyl acrylate copolyn cross- linked with divinyll or 1,3- butaned dimetha	ylate, ) ner  enzene	no	no		Only to be used in:	rigid poly(vinyl chloride) (PVC) at a maximum level of 12 % at room temperature or below; or

							_	at
								up
								to
								40 % w/
								W
								in
								blends
								of
								styrene
								acrylonitrile
								acrylonitrile copolymer
								(SAN)/
								(SAN)/ poly(methyl methacrylate) (PMMA)
								(PMMA)
								repeat-
								use
								articles
								at
								room
								temperature
								or
								below,
								and
								when
								either
								in
								contact
								only
								with
								aqueous,
								acidic
								and/
								or
								low
								alcoholic
								(< 20 %)
								foodstuffs
								for
								less
								than
								1 day,
								or
								when
								in
								contact
								only
								with
								dry
								foodstuffs
								for
								any
								duration
								of
,		'	'	ا ا	,	!		

								time.
857	66765	0037953(thethy methac butyl acrylate styrene glycidy methac copolyr	rylate, e, , rylate)	no	no		Only to be used in rigid poly(vir chloride (PVC) at a maximulevel of 2 % at room tempera or below.	nyl s) m
[F7[X185	838565	dimeth		2,4,8,10-		0,05	SML expressed as the sum of the substant and its oxidation product 3-[(3-(3-tert-butyl-4-hydroxymethylput (3-(3-tert-butyl-4-hydroxymethylput (3-(3-tert-butyl-4-tert-buty	ce  7-5- henyl)prop-2- y)-1,1- lethyl]-9-  7-5- henyl)propionyloxy)-1,1- lethyl]-2,4,8,10- spiro[5,5]- ie  ium

				methid tautomer.
[F <sup>4</sup> 859	(butadience, sethyl acrylate, methyl methacrylate, styrene) copolymer crosslinked with divinylbenzene, in nanoform	no	no	tautomer.  Only to be used as particles in non-plasticised PVC up to 10 % w/w in contact with all food types at room temperature or below including long-term storage. When used together with the substance with FCM No 998 and/ or the substance with FCM No 1043, the restriction of 10 %
				w/w applies

						sum of those substant The diamete of particles shall be > 20 nm, and for at least 95 % by number it shall be > 40 nm. ]	r
860	71980	(poly(n- propoxy acid]	v))propar	no	no	Only to be used in the polymer of fluorope that are processed at tempera at or above 265 °C and are intended for use in repeated use articles	olymers ed tures
861	71990	(n-	oj@s ∕)propano	no oic	no	Only to be used in the polymer of fluoropo that are	

								processed at temperatures at or above 265 °C and are intended for use in repeated use articles
[F13862	15180	001808:	5302-4 diacetox butene	no xy-1-	yes	no	0,05	SML (17) including 19)] the hydrolysis product 3,4-dihydroxy-1-butene Only to be used as a commonomer for ethylvinylalcohol (EVOH) and polyvinylalcohol (PVOH) copolymers.
[F18863	15260	000064	6121503 decaned	no liamine	yes	no	0,05	Only to be used as a co- monomer for manufacturing polyamide articles for repeated use in contact with aqueous, acidic

								and dairy foodsturat room temperator for short term contact up to 150 °C.	iture
864	46330	000005	diamino	yes -6- pyrimid	no	no	5	Only to be used in rigid poly(vin chloride (PVC) in contact with non- acidic and non- alcoholi aqueous food	ic
[F11865	40619	002532	2(9919) acrylate methyl methaci butyl methaci copolyn	ylate, ylate)	no	no		Only to be used in: (a)	rigid poly(vinyl chloride) (PVC) at a maximum level of 1 % w/ w; polylactic acid (PLA) at a

866	40620		(butyl acrylate methyl methacr copolyn cross- linked with	ylate)	no	no	Only to be used in rigid poly(vir chloride (PVC)	maximum level of 5 % w/ w. ]
			allyl methacr	ylate			at a maximu level of 7 %	ım
867	40815	004047	nethacrethyl acrylate methyl methacr copolyn	ylate)	no	no	Only to be used in rigid poly(vir chloride (PVC) at a maximu level of 2 %	<b>;</b> )
[F11868	53245	000901	acrylate methyl methacr copolyn	ylate)	no	no	Only to be used in: (a)	rigid poly(vinyl chloride) (PVC) at a maximum level of 2 % w/ w; polylactic acid (PLA) at

							(c)	a maximum level of 5 % w/ w; polyethylene terephthalate (PET) at a maximum level of 5 % w/ w. l
869	66763	0027136(协  acrylate methyl methacr styrene) copolyn	ylate,	10	no		Only to be used in rigid poly(vin chloride (PVC) at a maximulevel of 3 %	<b>;</b> )
870	95500	0160535M,M6 ',N"- tris(2- methylo propane tricarbo	yclohexyl		no	5		
[ <sup>F20</sup> 871		0287916d8decar acid, 12- amino-, polymer with ethene, 2,5- furandia α- hydro- ω- hydroxy (oxy-1,2	one,	10	no		Only to be used in polyole at levels of up to 20 weight %. These polyole shall	

	ı	ı		la as	1	1		,		1
			ethaned	iyl)					only	
			and 1-						be .	
			propene	Ì					used	
									in	
									contact with	
									foods	
									for	
									which	
									Table	
									2 of	
									Annex	
									III	
									assigns	
									food	
									simulan	t
									E, at	
									ambient	
									tempera or	uure
									below,	
									and	
									when	
									migratio	on
									of the	
									total	
									oligome	ric
									fraction	
									of less	
									than 1 000	
									Da	
									does	
									not	
									exceed	
									50 μg/	
									kg	
									food.	
[F21872		000660	7241-6	no	yes	no	0,05		To be	(20)]
1 0/2			phenyl-		)		-,		used	(= -/1
			bis(4-						only	
			hydroxy	phenyl)	phthalim	idine			as a	
									co-	
									monom	er
									in	
									polycarl	oonate
-									copolyn	
[F18873	93460		titanium	yes	no	no			Reactio	
			dioxide						product	
			reacted						of titonium	
			with	thoxysil	ane				titanium	
			octyfule	uioxysii	ane				dioxide	

									with up to 2 % w/w surface treatment substance octyltriethoxysilane, processed at high temperatures.
[ <sup>F7</sup> 874	16265	015606	dimethy (4'- hydroxy methox; ω-3- dimethy (4'- hydroxy methox; methox;	y-3'- yphenyl) yl-3- y-3'-	yes propylsi propylsi oxane		0,05	(33)	Only to be used as comonomer in siloxane modified polycarbonate. The oligomeric mixture shall be characterised by the formula C 24 H 38 Si 2 O 5 (SiOC 2 H 6 )n (50 > n ≥ 26). ]
875	80345	005812	8p21y612 hydroxy acid) stearate	-yes vstearic	no	yes	5		
878	31335		acids, fatty (C <sub>8</sub> -C <sub>22</sub> ) from animal or vegetab fats	yes le	no	no			

			and oils, esters with branche alcohols aliphatic monohy saturate primary (C <sub>3</sub> -C <sub>22</sub> )	s, c, dric, d,					
879	31336		acids, fatty (C <sub>8</sub> -C <sub>22</sub> ) from animal or vegetab fats and oils, esters with alcohols linear, aliphatic monohy saturate primary (C <sub>1</sub> -C <sub>22</sub> )	s, c, vdric, d,	no	no			
[ <sup>F10</sup> 880	31348		acids, fatty (C <sub>8</sub> - C <sub>22</sub> ), esters with pentaery	yes ythritol'	no	no			
881	25187	0003010	02915,45,4- tetramen diol	no hylcyclo	yes butane-	no ,3-	5	Only for: (a)	repeated use articles for long term storage at room

				(b)	temperature or below and hotfill; single use materials and articles as a co-monomer at a maximum use level of 35 mole % of the diol component of polyesters, and if such materials and articles are for long
					such materials and articles are for long term storage at room temperature
					or below of food types which have an alcohol content

									of up to 10 % and for which Table 2 of Annex III does not assign simulant D2. Hot fill conditions are allowed for such single use materials and articles. ]
882	25872	000241	6 <b>2931,66</b> trimethy	no /lphenol	yes	no	0,05		
883	22074	000445	7371-0 methyl- pentane	no 1,5- diol	yes	no	0,05	Only to be used in material in contact with food at a surface to mass ratio up to 0,5 dm²/kg	S

		T			1				
884	34240	0091083	2alkyt(C C <sub>21</sub> )sulp acid, esters with phenol		no	no	0,05	Not to be used for articles in contact with fatty foods for which [F2simul D1 and/ or D2] is laid down.	ant
885	45676	026324	leyelle oligome of (butyler terephth	ne	no	no		Only to be used in poly(eth terephth (PET), poly(buterephth (PBT), polycard (PC), polystyr (PS) and rigid poly(vin chloride (PVC) plastics in concent up to 1 % w/w, in contact with aqueous acidic and alcoholifoods, for long	tylene talate) tylene talate) conate rene  rene  rens

[ <sup>F18</sup> 894	93360	001654	5tl5it6dipr acid, ditetradester		no	no		(14)	term storage at room tempera	ture.
895	47060	017109	di-tert- butyl-4- hydroxy acid, esters with C13- C15 branche and linear alcohols	phenyl) <sub>I</sub> d	no	no	0,05		Only to be used in polyolef in contact with foods other than fatty/ high-alcoholi and dairy products	c
896	71958	095844	perfluor [(3-methox)	y- ⁄)propano	no	no			Only to be used in the polymer of fluorope when:	

								up to 30 % w/ w for use in blends with polyoxymethylene polymers and intended for repeated use articles.
[ <sup>F7</sup> 902	000012	8142–9 benziso one 1,1- dioxide, sodium salt	yes thiazol-3	no (2H)-	no		The substant shall comply with the specific purity criteria as set out in Commis Regulat (EU) No 231/201 h. ]	ssion
[ <sup>F4</sup> 903	37486-6	perfluor [(5,8,11 tetramet	,14-	no	no		Only to be used as a polymer product aid in the polymer of fluorope intended for: (a)	risation Dlymers

					(b)	materials and articles when sintered or processed (non- sintered) at temperatures at or above 360 °C for at least 10 minutes or at higher temperatures for equivalent shorter times; repeated use materials and articles when processed (non- sintered) at temperatures from 300 °C and up to 360 °C for at least 10 minutes. ]
--	--	--	--	--	-----	---

	1			1					
923	39150	0000120	bis(2-	yes	no	no	5	The residual	(18)
			hydroxy	ethyl)do	decanan	nide		amount of	
									olamine
								in	
								plastics	
								as an impurity	v
								and	
								decomp	osition
								product of the	
								substan	ce,
								[F2shall]	
								not result	
								in a	
								migratio	on
								of	olamine
								higher	Diamine
								than	
								0,3 mg/	
								kg food.	
924	94987		trimethy	y <b>l<sub>y</sub>ods</b> propa	i imeo	no	0,05	Only	
			mixed		,			for	
			triesters and					use in PET in	
			diesters					contact	
			with					with	
			n-					all	
			octanoic					types of	
			decanoi	c				foods	
			acids					other	
								than fatty,	
								high-	
								alcoholi	ic
								and dairy	
								product	S.
926	71955	0908020	Op <b>&amp;2H0</b> 101		no	no		Only	
			ethylox					to be	
			ethoxy)acid],	acetic				used in the	
			ammon	ium				polyme	risation
			salt					of	
								tluoropo	olymers

								that are process at tempera higher than 300 °C for at least 10 minutes	tures
[ <sup>F4</sup> 969			784Bylend vinyl acetate copolyn wax	ner	no	no		Only to be used as a polymer additive up to 2 % w/ w in polyole The migration of low molecul weight oligome fraction below 1 000 Da shall not exceed 5 mg/kg food.]	fins. on ar eric
971	25885	000245	9 <b>tilithe</b> thy trimellit	vho tate	yes	no		Only to be used as a commonom up to 0,35 % w/w to produce modifie polyeste intended to be	d ers

								used in contact with aqueous and dry foodstur containing no free fat at the surface.	ffs
972	45197	001215	8e <b>∂∳pte</b> r hydroxi phospha	de	no	no			
973	22931	0019430	0 <del>(</del> ₽ŝ⊧Ĥuo	nodo utyl)	etheslene	no		Only to be used as a commonomoup to 0,1 % w/w in the polymer of fluorope sintered at high tempera	risation olymers,
[F17974	74050	939402	and 4- (1,1-	lpropyl) Ipropyl)		yes	10	sML expresse as the sum of the phosphi and phospha forms of the substand 4-tertamylpho and 2,4-ditertamylpho The migration	te ce, enol

								of 2,4-di-tert-amylphenol shall not exceed 1 mg/kg food.
[ <sup>F7</sup> 979	79987	_	(polyeth terephth hydroxy polybut pyrome anhydri copolym	lalate, rlated adiene, llitic de)	no	no		Only to be used in polyethylene terephthalate (PET) at a maximum level of 5 % w/w.]
[ <sup>F21</sup> 988		3634-83	3-IJ,3- bis(isoc	no yanatom	yes ethyl)ber	no nzene	(34)	SML(T) applies to the migration of its hydrolysis product, 1,3- benzenedimethanamine To be used only as co- monomer in the manufacture of a middle layer coating on a poly(ethylene terephthalate) polymer film in a multilayer film ]

[ <sup>F4</sup> 998	(butadienyæ,s	no	no	Only
1 //6	ethyl	110		to be
	acrylate,			used
	methyl			as
	methacrylate,			particles
	styrene)			in
	copolymer			non-
	not			plasticised
	cross-			PVC
	linked,			up to
	in			10 %
	nanoform			w/w in
	nanorom			contact
				with
				all
				food
				types
				at
				room
				temperature
				or
				below
				including
				long-
				term
				storage.
				When
				used
				together
				with
				the
				substance
				with
				FCM
				No
				859
				and/
				or the
				substance
				with
				FCM
				No
				1043,
				the
				restriction
				of
				10 %
				w/w
				applies
				to the
				sum of
				those
				substances.

							The diamete of particles shall be > 20 nm, and for at least 95 % by number it shall be > 40 nm.	
[F221007	976-56-	Aliethyl[[bis(1,1-dimethylhydroxy	lethyl)-4	yes  methyl]p	no	ate	Only to be used up to 0,2 % w/w based on the final polymer weight in the polymer process to manufactory poly(eth terephth (PET).	risation cture rylene
1016		(methaci acid, ethyl acrylate, n- butyl acrylate, methyl methacry and butadien copolym in nanoforr	ylate ne) ner	no	no		Only to be used up to: (a)	10 % w/ w in non- plasticised PVC; 15 % w/ w in non-

					plasticised PLA.  The final material shall be used at room temperature or below.
1017	25618-5\$	Myglycyeol	no	no	To be processed under conditions preventing the decomposition of the substance and up to a maximum temperature of 275 °C.
[F221030	cl m by di C	nontmo <b>vitto</b> nite ay nodified y imethyldialkyl( 18)ammonium nloride		no	Only to be used up to 12 % (w/ w) in polyolefins in contact with dry foods to which simulant E is assigned in table 2 of Annex III at room

						temperature or below. The sum of the specific migration of 1- chlorohexadecane and 1- chlorooctadecane shall not exceed 0,05 mg/ kg food. Can contain platelets in the nanoform that are only in one dimension thinner than 100 nm. Such platelets shall be oriented parallel to the polymer surface and shall be fully embedded in the polymer.
[ <sup>F20</sup> 1031	3238-40	Oferan-2, dicarbo acid	yes	no	5	Only (22) to be used as a

							monomin the product of polyethy furanoa The migratic of the oligome fraction of less than 1 000 Da shall not exceed 50 µg/kg food (express as furan-2, dicarbot acid).	ylene te. on eric
1034	3710-30	)-13,7- octadier	no ne	yes	no	0,05	Only to be used as a crosslin comonoming the manufactor of polyoles for contact with any type of foods for long term storage at room tempera including when	er cture fins

				packaged under hot-fill conditions.
1043	(butadienyes ethyl acrylate, methyl methacrylate, styrene) copolymer crosslinked with 1,3-butanediol dimethacrylate, in nanoform	no	no	Only to be used as particles in non-plasticised PVC up to 10 % w/w in contact with all food types at room temperature or below including long-term storage. When used together with the substance with FCM No 859 and/ or the substance with FCM No 998, the restriction of 10 %

							w/w applies to the sum of those substant The diamete of particles shall be > 20 nm, and for at least 95 % by number it shall be > 40 nm. l	r
[F201045	119093	p27flhor acid, 2-[(5- methox; dioxolar yl)oxy] ammon salt	n-4- },	no	no		Only to be used as a polymer product aid during the manufact of fluorope under high tempera condition of at least 370 °C.	ion cture olymers ture
1046		zinc oxide, nanopar coated with [3- (methac trimetho (FCM	yes ticles, tryloxy)p oxysilane	no ropyl]	no		Only to be used in unplasti polymer The restriction and specific	rs. ons

		No 788)					specifie for FCM substant No 788 shall be respected	ce
1048	g	ethyleneyes glycol dipalmitate	no	no		(2)	Only to be used when produce from a fatty acid precurso that is obtained from edible fats or oils.	or
1050	o n	rinc yes oxide, nanoparticles, uncoated	no	no			Only to be used in unplasti polymer	
1051	to p	yes pis(2,2,6,6- etramethyl-4- piperidinyl) sophthalamide	no	no	5			
1052	to d	A4,8,10-no etraoxaspiro[5,4 liethanol,β3,β3, etramethyl-		no ne-3,9-	5		Only to be used as a monomin the product of polyeste The migratic of oligome of less than 1 000	ion ers. on

							Da shall not exceed 50 µg/kg food (express as SPG).	sed
1053		fatty acids, C16– 18 saturate esters with dipentac	yes d, erythritol	no	no		Only to be used when produce from a fatty acid precurse that is obtained from edible fats or oils ]	or
[F221055	7695-91 58-95-7	tocophe acetate	yes rol	no	no		Only to be used as antioxid in polyole	
[F231059	147398	co- (R)-3-	)n&- /butyrate /hexanoa		no	(35)	Only to be used either alone or blended with other polymer in contact with all foods under contact condition of	rs

							up to 6 month and/or 6 month and more, at room tempera or below, including hot fill or a short heating up phase. The migration of all oligome with a molecule weight below 1 000 Da shall not exceed 5,0 mg/kg food.	ture g on ers ar
1060		ground sunflow seed hulls	yes er	no	no		Only to be used at room tempera or below in contact with foods for which Table 2 of Annex 1 assigns	Ш

						food simulan The seed hulls shall be obtained from sunflow seeds that are fit for human consum The processi tempera of the plastic containing the additive shall not exceed 240 °C.	er ption. ng ture
[F241061	80512-4	<b>42,3</b> ,4'- trifluoro	no benzoph	yes enone	no	Only to be used as a commonome in the manufactor of polyether ether ketone plastics up to 0,3 % www of the final material l	eture er
1062		mixture compos of 97 %		yes	no	Only to be used for the	

	tetraeth orthosi (TEOS with CAS No 78- and 3 % hexam (HMD with CAS No 999	licate ) 10-4 ethyldisila S)	azane		production of recycled PET and at up to 0,12 % (w/w). ]
[F241063	1547-26-28,3,3,4 heptafl penten	uoro-1-	yes	no	Only to be used together with tetrafluoroethylene and/or ethylene commonomers to manufacture fluorocopolymers for application as polymer processing aid at up to 0,2 % w/w of the food contact material, and when the low-molecular mass fraction below 1 500 Da in the fluorocopolymer does not exceed

							30 mg/   kg.
1064	39318-3	8u8gster oxide	nyes	no	no	0,05	Stoichio (25) y: WO
							n = 2,72-2,90
1065	85711-2	Shoxture of methylbranche and linear C 14 - C 18 alkanan derived from fatty acids	d	no	no	5	Only to be used in the manufacture of articles made of polyolefins, and which do not come into contact with foods for which food simulant D2 is assigned in Table 2 of Annex III.
[F151066	23985-7	75-3,3,4- tetrahyc dicarbo acid, dimethy ester	lronaphtl xylic	yes nalene-2,	no 6-	0,05	Only to be used as a co- monomer in the manufacture of a polyester non- food contact layer in a plastic multilayer

							material which is to be used only in contact with foods for which food simulan A, B, C and/ or D1 are assigned in Table 2 of Annex III. The specific migration limit in column 8 refers to the sum of the substant and of its dimers (cyclic and open chain). I	ts I
[F251067	616-38-	dimethy carbona	lno te	yes	no		Only to be used: a)	with 1,6- hexanediol in the manufacture

						of
						polycarbonate
						pre-
						polymers
						that
						are
						used
						at
						up
						to
						30 %
						to
						manufacture
						thermoplastic
						polyurethanes
						poryuremanes
						with
						4,4'-
						methylenediphenyldiisocya
						and
						diols,
						such
						as
						polypropylene
						glygol
						glycol
						and
						1,4-
						butanediol.
						The
						resulting
						material
						shall
						only
						be
						applied
						in
						repeated
						use
						articles
						intended
						to
						come
						into
						short-
						term
						contact
						( 20 min
						(≤ 30 min
						at
						room
						temperature)
						with
						food
						for
						which
1					Į	WIIICII

				b)	simulants A and/ or B are assigned in Table 2 of Annex III; or for the production of other polycarbonates and/ or under other conditions provided that the migration of dimethyl carbonate does not exceed 0,05 mg/ kg food and that the migration of all polycarbonate oligomers with a molecular
					oligomers with a

							Da together does not exceed 0,05 mg/ kg food.
[F151068	2530-83	(2,3-	no ropoxy)p	yes ropyl]tri	no	Only to be used as a compon of a sizing agent to treat glass fibres to be embedd in glass-fibre-reinforc low diffusiv plastics (polyeth terephth (PET), polycarl (PC), polybut terephth (PBT), thermos polyeste and epoxy bisphen vinylest in contact with all foodstuff in treated glass fibres, residues	ed  ity  ylene alate  ponate ylene alate et ers  ol er)

							of the substant must not be detectable at 0,01 mg kg for the substant and 0,06 mg kg for each of the reaction products (hydrolymonome and epoxycontainic cyclic dimer, trimer and tetramer l	ole // ce // sed ers
[F251069	75-28-5	isobutar	nges	no	no	1	Only to be used as a blowing agent. ]	
[F261075		clay modifie with	yltrimetl	no	no		Only to be used as additive at up to 4,0 % w/ w in polylact acid plastics intended for long- term storage	ic

107/	122702					0.05	of water at ambient tempera or below. Can form platelets in the nanofor that are in one or two dimensi thinner than 100 nm. Such platelets shall be oriented parallel to the polymer surface and shall be fully embedd in the polymer.	ture  m  ons
1076	1227937	retension acid, tripheny ester, polymer with alpha-hydro-omega-hydroxy ethaned C10-16 alkyl ester	r r vpoly[ox; iyl)],	no y(methyl	no -1,2-	0,05	Only to be used as an additive at up to 0,2 % w/w in high impact polystyn material and articles intended	rene S

I				contact
				with
				food at
				room
				temperature
				and
				below,
				including
				hot-fill
				and/or
				heating
				up to
				100 °C
				for up
				to 2
				hours.
				It shall
				not be
				used
				in
				contact
				with
				foods
				for
				which
				simulant
				C and/
				or
				D1 is
				assigned
				in
				Annex
				III.
077	Titaniumyes	no n	10	Only 29]
	dioxide			to be
	surface-			used at
	treated			up to
	with			25,0 %
	fluoride-			w/w,
	modified			including
	alumina			in the
	wishining.			nanoform.
	2005, p. 28.			manororini.

b OJ L 330, 5.12.1998, p. 32.

c OJ L 253, 20.9.2008, p. 1.

 $I^{F4} Commission \ Regulation \ (EU) \ No \ 231/2012 \ of \ 9 \ March \ 2012 \ laying \ down \ specifications \ of food \ additives \ listed \ in$ Annexes II and III to Regulation (EC) No 1333/2008 of the European Parliament and of the Council (OJ L 83, 22.3.2012, p. 1).]

OJ L 158, 18.6.2008, p. 17. e

 $I^{FS}I^{FG}$ Infant as defined in Article 2(2)(a) of Regulation (EU) No 609/2013 of the European Parliament and of the Council of 12 June 2013 on food intended for infants and young children, food for special medical purposes, and total

Changes to legislation: There are currently no known outstanding effects for the Commission Regulation (EU) No 10/2011. (See end of Document for details)

diet replacement for weight control and repealing Council Directive 92/52/EEC, Commission Directives 96/8/EC, 1999/21/EC, 2006/125/EC and 2006/141/EC, Directive 2009/39/EC of the European Parliament and of the Council and Commission Regulations (EC) No 41/2009 and (EC) No 953/2009 (OJ L 181, 29.6.2013, p. 35).]

- g This restriction is applicable from 1 May 2011 as regards the manufacture and from 1 June 2011 as regards the placing on the market and importation into the Union.]
- **h** [F7OJ L 83, 22.3.2012, p. 1.]
- i [F8Infant as defined in Article 2(2)(a) of Regulation (EU) No 609/2013.
- j Young children as defined in Article 2(2)(b) of Regulation (EU) No 609/2013.]

#### **Editorial Information**

X1 Substituted by Corrigendum to Commission Regulation (EU) No 1183/2012 of 30 November 2012 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Official Journal of the European Union L 338 of 12 December 2012).

#### **Textual Amendments**

- **F4** Inserted by Commission Regulation (EU) 2015/174 of 5 February 2015 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- **F5** Inserted by Commission Implementing Regulation (EU) No 321/2011 of 1 April 2011 amending Regulation (EU) No 10/2011 as regards the restriction of use of Bisphenol A in plastic infant feeding bottles (Text with EEA relevance).
- **F6** Substituted by Commission Regulation (EU) 2018/213 of 12 February 2018 on the use of bisphenol A in varnishes and coatings intended to come into contact with food and amending Regulation (EU) No 10/2011 as regards the use of that substance in plastic food contact materials (Text with EEA relevance).
- **F7** Inserted by Commission Regulation (EU) No 1183/2012 of 30 November 2012 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- **F8** Inserted by Commission Regulation (EU) 2018/213 of 12 February 2018 on the use of bisphenol A in varnishes and coatings intended to come into contact with food and amending Regulation (EU) No 10/2011 as regards the use of that substance in plastic food contact materials (Text with EEA relevance).
- **F9** Deleted by Commission Regulation (EU) 2017/752 of 28 April 2017 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- **F10** Substituted by Commission Regulation (EU) 2015/174 of 5 February 2015 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- **F11** Substituted by Commission Regulation (EU) No 1183/2012 of 30 November 2012 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- **F12** Substituted by Commission Regulation (EU) 2020/1245 of 2 September 2020 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- **F13** Substituted by Commission Regulation (EU) No 1282/2011 of 28 November 2011 amending and correcting Commission Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- **F14** Substituted by Commission Regulation (EU) No 202/2014 of 3 March 2014 amending Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).

- **F15** Substituted by Commission Regulation (EU) 2019/37 of 10 January 2019 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- **F16** Deleted by Commission Regulation (EU) 2015/174 of 5 February 2015 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- **F17** Substituted by Commission Regulation (EU) 2018/831 of 5 June 2018 amending Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- F18 Inserted by Commission Regulation (EU) No 1282/2011 of 28 November 2011 amending and correcting Commission Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- **F19** Substituted by Commission Regulation (EU) 2018/79 of 18 January 2018 amending Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- **F20** Inserted by Commission Regulation (EU) 2016/1416 of 24 August 2016 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- **F21** Inserted by Commission Regulation (EU) No 202/2014 of 3 March 2014 amending Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance)
- **F22** Inserted by Commission Regulation (EU) 2017/752 of 28 April 2017 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- **F23** Substituted by Commission Regulation (EU) 2019/1338 of 8 August 2019 amending Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- **F24** Inserted by Commission Regulation (EU) 2018/79 of 18 January 2018 amending Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- **F25** Inserted by Commission Regulation (EU) 2019/37 of 10 January 2019 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- **F26** Inserted by Commission Regulation (EU) 2020/1245 of 2 September 2020 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).

# **Textual Amendments**

F1 Word in Annex 1 point 1 omitted (31.12.2020) by virtue of The Materials and Articles in Contact with Food (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/704), regs. 1, 76; 2020 c. 1, Sch. 5 para. 1(1)

# 2. Group restriction of substances

Table 2 on Group restrictions contains the following information:

Column 1 (Group restriction No): contains the identification number of the group of substances for which the group restriction applies. It is the number referred to in Column 9 in Table 1 of this Annex.

Column 2 (FCM substance No): contains the unique identification numbers of the substances for which the group restriction applies. It is the number referred to in Column 1 in Table 1 of this Annex.

Column 3 (SML (T) [mg/kg]): contains the total specific migration limit for the sum of substances applicable to this group. It is expressed in mg substance per kg food. It is indicated ND if the substance shall not migrate in detectable quantities.

Column 4 (Group restriction specification): contains an indication of the substance whose molecular weight forms the basis for expression of the result.

TABLE 2

(1)	(2)	(3)	(4)
Group Restriction No	FCM substance No	SML (T)[mg/kg]	Group restriction specification
1	128 211	6	expressed as acetaldehyde
[F22	89 227 263 1048	30	expressed as ethyleneglycol]
3	234 248	30	expressed as maleic acid
4	212 435	15	expressed as caprolactam
5	137 472	3	expressed as the sum of the substances
6	412 512 513 588	1	expressed as iodine
7	19 20	1,2	expressed as tertiary amine
8	317 318 319 359 431 464	6	expressed as the sum of the substances
9	650 695 697 698 726	0,18	expressed as tin
10	28 29 30 31 32 33	0,006	expressed as tin

Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and...

ANNEX I

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	466 582 618 619 620 646 676 736		
11	66 645 657	1,2	expressed as tin
12	444 469 470	30	expressed as the sum of the substances
13	163 285	1,5	expressed as the sum of the substances
[ <sup>F13</sup> 14	294 368 894]	5	expressed as the sum of the substances and their oxidation products
[F1015	98 196 344	15	expressed as formaldehyde]
16	407 583 584 599	6	expressed as boron Without prejudice to the provisions of Directive 98/83/EC
17	4 167 169 198 274 354 372 460 461 475 476 485 490 653	ND	expressed as isocyanate moiety
18	705 733	0,05	expressed as the sum of the substances
19	505 516 519	10	expressed as SO <sub>2</sub>

20	290 386 390	30	expressed as the sum of the substances
21	347 349	5	expressed as trimellitic acid
22	70 147 176 218 323 325 365 371 380 425 446 448 456 636	6	expressed as acrylic acid
23	150 156 181 183 184 355 370 374 439 440 447 457 482	6	expressed as methacrylic acid
24	756 758	5	expressed as the sum of the substances
25	720 747	0,05	sum of mono- n-dodecyltin tris(isooctylmercaptoacetate), di-n-dodecyltin bis(isooctyl mercaptoacetate), mono-dodecyltin trichloride and di- dodecyltin dichloride) expressed as the sum of mono- and di- dodecyltin chloride
26	728 729	9	expressed as the sum of the substances

192   ter	pressed as ephthalic acid  pressed as the sum 6-hydroxyhexanoic d and caprolactone pressed as 1,4-tanediol]  pressed as the sum the substances
672 of acid acid acid acid acid acid acid acid	6-hydroxyhexanoic d and caprolactone pressed as 1,4-tanediol]
344 672  31  73  797  30  ex of  32  8  72  73  138  140  157  159	pressed as the sum
797 of  8	
72 73 138 140 157 159	the substances
207 242 283 532 670 728 729 775 783 797 798 810 815	pressed as the sum the substances
I <sup>F7</sup> 33 180 ND ex	pressed as eugenol]
I <sup>F21</sup> 34         421 988         0,05 be         Ex be	pressed as 1,3- nzenedimethanamine
[F25]35 467 0,05 ex ac	pressed as crotonic

# 3. Notes on verification of compliance

Table 3 on notes on verification of compliance contains the following information:

Column 1 (Note No): contains the identification number of the Note. It is the number referred to in Column 11 in Table 1 of this Annex.

Column 2 (Notes on verification of compliance): contains rules that shall be respected when testing for compliance of the substance with specific migration limits or other restrictions or it contains remarks on situations where there is a risk of non-compliance.

TABLE 3

(1)	(2)
Note No	Notes on verification of compliance
(1)	Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.
(2)	There is a risk that the SML or OML could be exceeded in fatty food simulants.
(3)	There is a risk that the migration of the substance deteriorates the organoleptic characteristics of the food in contact and then, that the final product does not comply with Article 3(1) c of the Framework Regulation (EC) No 1935/2004.
[F11(4)	Compliance testing when there is a fat contact [F2shall] be performed using saturated fatty food simulants as simulant D2.]
(5)	Compliance testing when there is a fat contact [F2shall] be performed using isooctane as substitute of simulant D2 (unstable).
(6)	Migration limit might be exceeded at very high temperature.
(7)	If testing in food is performed, Annex V 1.4 shall be taken into account.
(8)	Verification of compliance by residual content per food contact surface area (QMA); QMA = 0,005 mg/6 dm <sup>2</sup> .
(9)	Verification of compliance by residual content per food contact surface area (QMA) pending the availability of analytical method for migration testing. The ratio surface to quantity of food shall be lower than 2dm²/kg.
(10)	Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
(11)	Only a method of analysis for the determination of the residual monomer in the treated filler is available.

(12)	There is a risk that the SML could be exceeded from polyolefins.
(13)	Only a method for determination of the content in polymer and a method for determination of the starting substances in food simulants are available.
(14)	There is a risk that the SML could be exceeded from plastics containing more than 0,5 % w/w of the substance.
(15)	There is a risk that the SML could be exceeded in contact with foods with high alcoholic content.
(16)	There is a risk that the SML could be exceeded from low-density polyethylene (LDPE) containing more than 0,3 % w/w of the substance when in contact with fatty foods
(17)	Only a method for determination of the residual content of the substance in the polymer is available
[F18(18)	There is a risk that the SML could be exceeded from low-density polyethylene (LDPE)
(19)	There is a risk that the OML could be exceeded in direct contact with aqueous foods from ethylvinylalcohol (EVOH) and polyvinylalcohol (PVOH) copolymers]
[F21(20)	The substance contains aniline as an impurity; verification of compliance with the restriction set for primary aromatic amines in Annex II (2) is necessary]
[ <sup>F4</sup> (21)	In case of reaction with foods or simulants verification of compliance shall include verification that the migration limits of the hydrolysis products, formaldehyde and 1,4-butanediol, are not exceeded.]
[F20(22)	When used in contact with non-alcoholic foods for which Table 2 of Annex III assigns food simulant D1, food simulant C shall be used for verification of compliance instead of food simulant D1.
(23)	When a final material or article containing this substance is placed on the market, a well described method to determine whether the oligomer migration complies with the restrictions specified in column 10 of Table 1 shall form part of the supporting

	documentation referred to in Article 16. This method shall be suitable for use by a competent authority to verify compliance. If an adequate method is publicly available, reference shall be made to that method. If the method requires a calibration sample, a sufficient sample shall be supplied to the competent authority on its request.]
[F22(24)	The substance or its hydrolysis products are authorised food additives and compliance with Article 11(3) shall be verified.]
[F24(25)	When used as reheat agent in polyethylene terephthalate (PET) verification of compliance with the specific migration limit is not required; in all other cases compliance with the specific migration limit shall be verified in accordance with Article 18; the specific migration limit is expressed as mg tungsten/kg food.
(26)	Migration of stearamide, listed in Table 1 under FCM substance No 306 to which no specific migration limit applies, shall be excluded from verification of the compliance of the migration of the mixture with the specific migration limit laid down for the mixture.]
[F25(27)	When a final material or article containing this substance and produced under conditions other than those described in point (a) column 10 of Table 1 is placed on the market, a well described method to determine whether the oligomer migration complies with the restrictions specified in point (b) column 10 of Table 1 shall form part of the supporting documentation referred to in Article 16. This method shall be suitable for use by a competent authority to verify compliance. If an adequate method is publicly available, reference shall be made to that method. If the method requires a calibration sample, a sufficient sample shall be supplied to the competent authority on its request.]
[F26(28)	A detection limit of 0,002 mg/kg food or food simulant applies
(29)	In polar polymers which swell in contact with foods for which simulant B is assigned in Annex III, there is a risk that under severe contact conditions the migration limits for aluminium and fluoride are exceeded. Under

contact conditions above 4 hours at 100 °C this exceedance can be high.]

# 4. Detailed specification on substances

Table 4 on detailed specifications on substances contains the following information

Column 1 (FCM substance No): contains the unique identification number of the substances referred to in Column 1 in Table 1 of Annex I to which the specification applies.

Column 2 (Detailed specification on the substance): contains the specification on the substance.

TABLE 4

(1)	(2)		
FCM substance No	Detailed specification on the substance		
744	Definition	The copolymers are produced by the controlled fermentation of Alcaligenes eutrophus using mixtures of glucose and propanoic acid as carbon sources. The organism used has not been genetically engineered and has been derived from a single wildtype organism Alcaligenes eutrophus strain H16 NCIMB 10442. Master stocks of the organism are stored as freeze-dried ampoules. A submaster/ working stock is prepared from the master stock and stored in liquid nitrogen and used to prepare inocula for the fermenter. Fermenter samples will be examined daily both microscopically and for any changes in colonial morphology on a variety of agars at different temperatures. The copolymers are isolated fron heat treatment bacteria by controlled digestion of the other cellular components, washing and drying. These copolymers are normally offered as formulated, melt formed granules containing additives such as nucleating agents, plasticisers, fillers,	

	stabilisers and pigments which all conform to the general and individual specifications
Chemical name	Poly(3-D-hydroxybutanoate-co-3-D-hydroxypentanoate)
CAS number	0080181-31-3
Structural formula	where $n/(m+n)$ greater than 0 and less or equal to 0,25
Average molecular weight	Not less than 150 000 Daltons (measured by gel permeation chromatography)
Assay	Not less than 98 % poly(3-D-hydroxybutanoate-co-3-D-hydoxy-pentanoate) analysed after hydrolysis as a mixture of 3-D-hydro-xybutanoic and 3-D-hydroxypentanoic acids
Description	White to off-white powder after isolation
Characteristics	
Identification tests:	
Solubility	Soluble in chlorinated hydrocarbons such as chloroform or dichloromethane but practically insoluble in ethanol, aliphatic alkanes and water
[F15Restriction	Specific migration limit for crotonic acid is 0,05 mg/kg food]
Purity	Prior to granulation the raw material copolymer powder must contain:
— nitrogen,	Not more than 2 500 mg/kg of plastic
— zinc,	Not more than 100 mg/kg of plastic
— copper,	Not more than 5 mg/kg of plastic

_	lead,	Not more than 2 mg/kg of plastic
	arsenic,	Not more than 1 mg/kg of plastic
_	chromium,	Not more than 1 mg/kg of plastic

# [F12ANNEX II

# Restrictions on plastic materials and articles

The following restrictions on plastic materials and articles apply:

1. Plastic materials and articles shall not release the substances in Table 1 below in quantities exceeding the specific migration limits expressed in mg/kg food or simulant specified in column (3), and subject to the remarks in Column (4).

Substances listed in Table 1 shall only be used in accordance with the compositional requirements set out in Chapter II. If Chapter II does not provide a basis for the authorised use of such a substance, that substance may only be present as an impurity subject to the restrictions specified in Table 1.

Table 1	
General list of migration limits for substances migrating from materials and articles	plastic

(1)	(2)	(3)	(4)
Name	Salts allowed in accordance with Article 6(3)(a)	SML [mg/kg food or food simulant]	Remark
Aluminium	yes	1	
Ammonium	yes		(1)
Antimony	no	0,04	(2)
Arsenic	no	ND	
Barium	yes	1	
Cadmium	no	ND (LOD 0,002)	
Calcium	yes		(1)
Chromium	no	ND	(3)
Cobalt	yes	0,05	
Copper	yes	5	
Europium	yes	0,05	(4)
Gadolinium	yes	0,05	(4)
Iron	yes	48	

Table 1

# General list of migration limits for substances migrating from plastic materials and articles

Lanthanum	yes	0,05	(4)
Lead	no	ND	
Lithium	yes	0,6	
Magnesium	yes		(1)
Manganese	yes	0,6	
Mercury	no	ND	
Nickel	no	0,02	
Potassium	yes		(1)
Sodium	yes		(1)
Terbium	yes	0,05	(4)
Zinc	yes	5	

ND:Not Detectable; detection limit assigned in accordance with second subparagraph of Article 11(4); LOD: specified Limit of Detection.

#### Remarks

(1)The migration is subject to Article 11(3) and Article 12

to in Article 16.

(2) The note in Annex I, Table 1, FCM No 398 applies: SML might be exceeded at very high temperature

(3)To verify compliance with the Regulation, the detection limit of 0,01 mg/kg shall apply for total chromium. However if the operator that placed the material on the market can prove on the basis of pre-existing documentary evidence that the presence of hexavalent chromium in the material is excluded because it is not used or formed or during the entire production process, a limit for the total chromium of 3,6 mg/kg food shall apply.

(4)The lanthanide substances europium, gadolinium, lanthanum, and/or terbium can be used in accordance with Article 6(3)(a) provided that:

- (a) The sum of all lanthanide substances migrating to the food or food simulant does not exceed the specific migration limit of 0.05 mg/kg; and analytical evidence using a well described methodology demonstrating that the lanthanide substance(s) used are present in dissociated ionic form in the food or the food simulant, forms part of the documentation referred
- 2. Primary aromatic amines ('PAAs') listed in entry 43 to Appendix 8 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council<sup>(1)</sup> and for which no migration limit is specified in Table 1 of Annex I shall not migrate or shall not otherwise be released from plastic materials and articles into food or food simulant. They shall not be detectable using analytical equipment with a limit of detection of 0,002 mg/kg food or food simulant applied to each individual primary aromatic amine ('PAA'), in accordance with Article 11(4).

For PAAs not listed in entry 43 to Appendix 8 of Annex XVII to Regulation (EC) No 1907/2006, but for which no specific migration limit is specified in Annex I, compliance with Article 3 of Regulation (EC) No 1935/2004 shall be verified in accordance with Article 19. The sum of those PAAs shall however not exceed 0,01 mg/kg in food or food simulant.]

#### **ANNEX III**

#### Food simulants

#### 1. Food simulants

For demonstration of compliance for plastic materials and articles not yet in contact with food the food simulants listed in Table 1 below are assigned.

# **[**<sup>F2</sup>TABLE 1

#### List of food simulants

Food simulant	Abbreviation
Ethanol 10 % (v/v)	Food simulant A
Acetic acid 3 % (w/v)	Food simulant B
Ethanol 20 % (v/v)	Food simulant C
Ethanol 50 % (v/v)	Food simulant D1
Any vegetable oil containing less than 1 % unsaponifiable matter	Food simulant D2
poly(2,6-diphenyl-p-phenylene oxide), particle size 60-80 mesh, pore size 200 nm	Food simulant E]

#### 2. General assignment of food simulants to foods

Food simulants A, B and C are assigned for foods that have a hydrophilic character and are able to extract hydrophilic substances. Food simulant B shall be used for those foods which have a pH below 4.5. Food simulant C shall be used for alcoholic foods with an alcohol content of up to 20 % and those foods which contain a relevant amount of organic ingredients that render the food more lipophilic.

Food simulants D1 and D2 are assigned for foods that have a lipophilic character and are able to extract lipophilic substances. Food simulant D1 shall be used for alcoholic foods with an alcohol content of above 20 % and for oil in water emulsions. Food simulant D2 shall be used for foods which contain free fats at the surface.

Food simulant E is assigned for testing specific migration into dry foods.

# [F23. Specific assignment of food simulants to foods for migration testing of materials and articles not yet in contact with food

For testing migration from materials and articles not yet in contact with food the food simulants that corresponds to a certain food category shall be chosen according to Table 2 below.

For testing migration from materials and articles intended to come into contact with foods not listed in Table 2 below, or a combination of foods, the general food simulant assignments in point 2 shall be used for specific migration testing, and for overall migration testing the food simulant assignments in point 4 shall be applicable.

Table 2 contains the following information:

— Column 1 (Reference number): contains the reference number of the food category

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- Column 2 (Description of food): contains a description of the foods covered by the food category
- Column 3 (Food simulants): contains sub-columns for each of the food simulants

The food simulant for which a cross is contained in the respective sub-column of column 3 shall be used when testing migration of materials and articles not yet in contact with food.

For food categories where in sub-column D2 or E the cross is followed by an oblique stroke and a figure, the migration test result shall be corrected by dividing the result by this figure. The corrected test result shall then be compared to the migration limit to establish compliance. The test results for substances that shall not migrate in detectable quantities shall not be corrected in this way.

For food category 01.04 food simulant D2 shall be replaced by 95 % ethanol.

For food categories where in sub-column B the cross is followed by (\*) the testing in food simulant B can be omitted if the food has a pH of more than 4,5.

For food categories where in sub-column D2 the cross is followed by (\*\*) the testing in food simulant D2 can be omitted if it can be demonstrated that there is no 'fatty contact' with the plastic food contact material.]

TABLE 2 food category specific assignment of food simulants

(1)	(2)	(3)					
Reference	Description	nFood sim	ulants				
number	of food	A	В	C	D1	D2	E
01	Beverages						
01.01	Non-alcoholic beverages or alcoholic beverages of an alcoholic strength lower than or equal to 6 % vol.:						
		lear rinks:	X(*)	X			

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	or concentrated, fruit nectars, lemonades, syrups, bitters, infusions, coffee, tea, beers,			
	soft drinks, energy drinks and the like, flavoured water, liquid coffee extract			
	B. cloudy drinks: juices and nectars and soft drinks containing fruit pulp, musts containing fruit pulp, liquid chocolate	X(*)	X	
01.02	Alcoholic beverages of an alcoholic strength of between 6 %vol and 20 %.	)	ζ .	
01.03	Alcoholic beverages of an alcoholic strength above 20 % and		X	

	all cream liquors					
01.04	Miscellaneo undenaturat ethyl alcohol		X(*)		Substitute 95 % ethanol	
02	Cereals, cereal products, pastry, biscuits, cakes and other bakers' wares					
02.01	Starches					X
02.02	Cereals, unprocessed puffed, in flakes (including popcorn, corn flakes and the like)	d,				X
02.03	Cereal flour and meal					X
02.04	Dry pasta e.g. macaroni, spaghetti and similar products and fresh pasta					X
02.05	Pastry, biscuits, cakes, bread, and other bakers' wares, dry:				_	
	A. W	ith tty			X/3	

	~	ubstances	I	I	I	I	I
		n ubstances					
	th	ne					
	SI	urface					
	B. C	ther					X
02.06	Pastry, cakes, bread, dough and other bakers' wares, fresh:						
	fa si o th si	Vith atty ubstances n ne urface				X/3	X
	B. C	ther					Λ
03	Chocolate, sugar and products thereof Confection products						
03.01	Chocolate, chocolate-coated products, substitutes and products coated with substitutes					X/3	
03.02	Confection products:	ery					
		n olid orm:					
	fa	Vith atty ubstances				X/3	

	1	on	I	I	
	1	the			
	5	surface			
	II.	Other			X
	]	In paste form:			
	S	With fatty substances on the surface		X/2	
	II.	Moist	X		
03.03	Sugar and sugar products				
		In solid form: crystal or powder			X
	S S S S S S S S S S S S S S S S S S S	X Molasses, sugar syrups, honey and the like			
04	Fruit, vegetable and products thereof				
[F204.01	Fruit, fresh or chilled:				
		unpeeled and uncut			X/10

			,		Y		
	B.	X peeled and/	X (*)				]
		or cut					
04.02	Processed fruit:						
		Dried or dehydrated fruits, whole, sliced, flour or powder					X
		Fruit in the form of purée, preserves, pastes or in its own juice or in sugar syrup (jams, compote, and similar products)	X(*)	X			
		Fruit preserved in a liquid medium:					
	I.	In an				X	

		oily medium				
		In an alcoholic medium		X		
04.03	Nuts (peanuts, chestnuts almonds, hazelnuts walnuts, pine kernels and others):	,				
		Shelled, dried, flaked or powdered				X
		Shelled and roasted				X
		X In paste or cream form			X	
[F204.04	Vegetable fresh or chilled:	es,				
		unpeeled and uncut				X/10
		X peeled and/ or cut	X (*)			1
[F204.05						X

		vegetables whole, sliced or in the form of flour or powder.					
	B.	(obsolete)					
	C.	Vegetables in the form of purée, preserves, pastes or in its own juice (including pickled and in brine).	X (*)	X			
	D.	Preserved vegetables:					
	I.	X In an oily medium				X	
	II.	In an alcoholic medium			X		l
05	Fats and oils						
05.01	Animals and vegetable fats and					X	

	oils, whether natural or treated (including cocoa butter, lard, resolidified butter)					
05.02	Margarine, butter and other fats and oils made from water emulsions in oil				X/2	
06	Animal products and eggs					
06.01	Fish:					
	ci p sa o si ir fi	X resh, hilled, rocessed, alted r moked cluding sh ggs			X/3(**)	
		reserved sh:				
	I. In an o				X	
	II. II		X(*)	X		
06.02	Crustacean and molluscs (including					

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	oysters, mussels, snails)					
		Fresh within the shell				
	]	Shell removed, processed, preserved or cooked with the shell				
		X In an oily medium			X	
		In an aqueous medium	X(*)	X		
06.03	Meat of all zoologica species (including poultry and game):					
		X Fresh, chilled, salted, smoked			X/4(**)	
		X Processed meat products (such as ham, salami, bacon, sausages,			X/4(**)	

		and other) or in the form of paste, creams				
	C.	X Marinated meat products in an oily medium			X	
06.04	Preserved meat:					
		X In an fatty or oily medium			X/3	
		In an aqueous medium	X(*)	X		
06.05	Whole eggs, egg yolk, egg white	5				
		Powdered or dried or frozen				X
		Liquid and cooked		X		
07	Milk products	5				
07.01	Milk					

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		Milk and milk based drinks whole, partly dried and skimmed or partly		X		
		Milk powder including infant formula (based on whole milk powder)				X
07.02	Fermented milk such as yoghurt, buttermilk and similar products		X(*)	X		
07.03	Cream and sour cream		X(*)	X		
07.04	Cheeses:					
		Whole, with not edible rind				X
	1	Natural cheese without rind or with edible			X/3(**)	

		rind (gouda, camembert, and the like) and melting cheese				
	C.	Processed cheese (soft cheese, cottage cheese and similar)	X(*)	X		
	D.	Preserved cheese:				
	I.	X In an oily medium			X	
	II.	In an aqueous medium (feta, mozarella, and similar)	X(*)	X		
08	Miscella products					
08.01	Vinegar		X			
08.02	Fried or roasted foods:					
	A.	X Fried potatoes, fritters and the like			X/5	

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		37			37/4	
	B.	Of			X/4	
		animal				
		origin				
08.03	Preparat for soup broths, sauces, in liquid solid or powder form (extracts concentr homoger composi food preparat prepared dishes including yeast and raising	ions s, rates); nised te ions, l				
	agents					
	A.	Powdered or dried:				
	I.	With fatty character			X/5	
	II.	Other				X
	В.	any other form than powdered or dried:				
	I.	X With fatty character	X(*)		X/3	
	II.	Other	X(*)	X		
08.04	Sauces:					

		With aqueous	X(*)	X		
	B	with fatty character e.g. mayonnaise,	X(*)		X	
		sauces derived from mayonnaise, salad creams and other oil/ water mixtures				
00.07	1	e.g. coconut based sauces	<b>3</b> 7(4)		W/2(44)	
08.05	Mustard (except powdered mustard under heading 08.14)	X	X(*)		X/3(**)	
08.06	Sandwich toasted bread pizza and the like containing any kind of foodstuff					
	5	X With fatty substances on the surface			X/5	
	В.	Other				X

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08.07	Ice- creams			X			
08.08	Dried foods:						
	fa si o th	Vith atty ubstances n ne urface				X/5	
	B. C	ther					X
08.09	Frozen or deep- frozen foods						X
08.10	Concentrate extracts of an alcoholic strength equal to or exceeding 6 % vol.	ed	X(*)		X		
08.11	Cocoa:						
	p ir fa re a h fa	ocoa owder, ocluding at- educed nd ighly at educed					X
		ocoa aste				X/3	
08.12	Coffee, whether or not roasted, decaffeinat or soluble, coffee substitutes.						X

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	granulated or powdered				
08.13	Aromatic herbs and other herbs such as camomile, mallow, mint, tea, lime blossom and others				X
08.14	Spices and seasonings in the natural state such as cinnamon, cloves, powdered mustard, pepper, vanilla, saffron, salt and other				X
08.15	Spices and seasoning in oily medium such as pesto, curry paste			X	

# [F274. Food simulant assignment for testing overall migration

For tests to demonstrate compliance with the overall migration limit food simulants shall be chosen as set out in Table 3:

# TABLE 3

Food simulant assignment for demonstrating compliance with the overall migration limit

Foods covered	Food simulants in which testing shall be performed
all types of food	distilled water or water of equivalent quality or food simulant A;
	2. food simulant B; and
	3. food simulant D2.
all types of food except for acidic foods	distilled water or water of equivalent quality or food simulant A; and
	2. food simulant D2.
$\[\]$ I <sup>F15</sup> all aqueous and alcoholic foods and milk products with a pH $\geq$ 4,5	food simulant D1
all aqueous and alcoholic foods and milk products with a pH < 4,5	food simulant D1 and food simulant B]
all aqueous foods and alcoholic foods up to an alcohol content of 20 $\%$	food simulant C
all aqueous and acidic foods and alcoholic foods up to an alcohol content of 20 %	1. food simulant C; and
	2. food simulant B.]

#### **Textual Amendments**

**F27** Substituted by Commission Regulation (EU) 2017/752 of 28 April 2017 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).

# [F205. General derogation to the assignment of food simulants

By derogation from the assignments of food simulants in points 2 to 4 of this Annex, where testing with several food simulants is required, a single food simulant shall be sufficient if on the basis of evidence acquired using generally recognised scientific methods this food simulant is shown to be the most severe food simulant for the particular material or article being tested under the applicable time and temperature conditions selected in accordance with Chapters 2 and 3 of Annex V.

The scientific basis on which this derogation is used shall in such cases form part of the documentation required under Article 16 of this Regulation.]

## ANNEX IV

#### Declaration of compliance

The written declaration referred to in Article 15 shall contain the following information:

Changes to legislation: There are currently no known outstanding effects for the Commission Regulation (EU) No 10/2011. (See end of Document for details)

- (1) the identity and address of the business operator issuing the declaration of compliance;
- (2) the identity and address of the business operator which manufactures or imports the plastic materials or articles or products from intermediate stages of their manufacturing or the substances intended for the manufacturing of those materials and articles;
- (3) the identity of the materials, the articles, products from intermediate stages of manufacture or the substances intended for the manufacturing of those materials and articles;
- (4) the date of the declaration;
- (5) [F2 confirmation that the plastic materials or articles, products from intermediate stages of manufacture or the substances meet the relevant requirements laid down in this Regulation and in Article 3, 11(5), 15 and 17 of Regulation (EC) No 1935/2004;]
- [F12] adequate information relative to the substances used or products of degradation thereof for which restrictions and/or specifications are set out in Annex I and II to the Regulation to allow the downstream business operators to ensure compliance with the Regulation.

At intermediate stages, this information shall include the identification and amount of substances in the intermediate material,

- that are subject to restrictions in Annex II, or
- for which genotoxicity has not been ruled out, and which originate from an intentional use during a manufacturing stage of that intermediate material and which could be present in an amount that foreseeably gives rise to a migration from the final material exceeding 0,00015 mg/kg food or food simulant;]
- (7) adequate information relative to the substances which are subject to a restriction in food, obtained by experimental data or theoretical calculation about the level of their specific migration and, where appropriate, purity criteria in accordance with Directives 2008/60/EC, 95/45/EC and 2008/84/EC to enable the user of these materials or articles to comply with the F28... provisions applicable to food;
- (8) specifications on the use of the material or article, such as:
  - (i) type or types of food with which it is intended to be put in contact;
  - (ii) time and temperature of treatment and storage in contact with the food;
  - (iii) [F27the highest food contact surface area to volume ratio for which compliance has been verified in accordance with Article 17 and 18 or equivalent information;]
- (9) when a functional barrier is used in a multi-layer material or article, the confirmation that the material or article complies with the requirements of Article 13(2), (3) and (4) or Article 14(2) and (3) of this Regulation.

## **Textual Amendments**

F28 Words in Annex 4 para. 7 omitted (31.12.2020) by virtue of The Materials and Articles in Contact with Food (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/704), regs. 1, 77; 2020 c. 1, Sch. 5 para. 1(1)

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#### ANNEX V

#### **COMPLIANCE TESTING**

For testing compliance of migration from plastic food contact materials and articles the following general rules apply.

#### CHAPTER 1

# Testing for specific migration of materials and articles already in contact with food

# 1.1. Sample preparation

The material or article shall be stored as indicated on the packaging label or under conditions adequate for the packaged food if no instructions are given. The food shall be removed from contact with the material or article before its expiration date or any date by which the manufacturer has indicated the product should be used for reasons of quality or safety.

# 1.2. Conditions of testing

The food shall be treated in accordance with the cooking instructions on the package if the food is to be cooked in the package. Parts of the food which are not intended to be eaten shall be removed and discarded. The remainder shall be homogenised and analysed for migration. The analytical results shall always be expressed on the basis of the food mass that is intended to be eaten, in contact with the food contact material.

#### 1.3. Analysis of migrated substances

The specific migration is analysed in the food using an analytical method in accordance with the requirements of Article 11 of Regulation (EC) No 882/2004.

# [F2] 4 Account of substances originating from other sources

In case there is evidence linked to the food sample that a substance partially or wholly originates from a source or sources other than the material or article for which the test is being carried out, the test results shall be corrected for the amount of that substance originating from the other source or sources before comparing the test results to the applicable specific migration limit.]

#### **CHAPTER 2**

### Testing for specific migration of materials and articles not yet in contact with food

# 2.1. Verification method

Verification of compliance of migration into foods with the migration limits shall be carried out under the most extreme conditions of time and temperature foreseeable in actual use taking into account paragraphs 1.4, 2.1.1, 2.1.6 and 2.1.7.

Verification of compliance of migration into food simulants with the migration limits shall be carried out using conventional migration tests according to the rules set out in paragraphs 2.1.1 to 2.1.7.

## 2.1.1. Sample preparation

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The material or article shall be treated as described by accompanying instructions or by provisions given in the declaration of compliance.

Migration is determined on the material or article or, if this is impractical, on a specimen taken from the material or article, or a specimen representative of this material or article. For each food simulant or food type, a new test specimen is used. Only those parts of the sample which are intended to come into contact with foods in actual use shall be placed in contact with the food simulant or the food.

#### 2.1.2. Choice of food simulant

Materials and articles intended for contact with all types of food shall be tested with food simulant A, B and D2. However, if substances that may react with acidic food simulant or foods are not present testing in food simulant B can be omitted.

Materials and articles intended only for specific types of foods shall be tested with the food simulants indicated for the food types in Annex III.

## 2.1.3. Conditions of contact when using food simulants

[F2The sample shall be placed in contact with the food simulant in a manner representing the worst of the foreseeable conditions of use as regard contact time in Table 1 and as regard contact temperature in Table 2.

By way of derogation to the conditions set out in Tables 1 and 2, the following rules apply:

- (i) If it is found that carrying out the tests under the combination of contact conditions specified in Tables 1 and 2 causes physical or other changes in the test specimen which do not occur under worst foreseeable conditions of use of the material or article under examination, the migration tests shall be carried out under the worst foreseeable conditions of use in which these physical or other changes do not take place;
- (ii) if the material or article during it intended use is subjected only to precisely controlled time and temperature conditions in food processing equipment, either as part of food packaging or as part of the processing equipment itself, testing may be done using the worst foreseeable contact conditions that can occur during the processing of the food in that equipment;
- (iii) if the material or article is intended to be employed only for hot-fill conditions, only a 2-hour test at 70 °C shall be carried out. However, if the material or article is intended to be used also for storage at room temperature or below, the test conditions set out in Tables 1 and 2 of this Section or in Section 2.1.4 of this Chapter apply depending on the duration of storage.
- (iv) [F26if the plastic material or article intended to come into contact with food of which the compliance must be verified becomes in its final application part of a food processing equipment or an appliance, or a part thereof, the migration tests may be carried out by determining the specific migration into the food or food simulant produced or processed by the whole equipment or appliance, or the part thereof, as appropriate, subject to the following conditions:
  - the food or food simulant is processed during testing by the equipment or part thereof in accordance with the worst foreseeable conditions that can be achieved if the equipment or its part is operated in accordance with its operating instructions, and
  - the migration from parts used for storage such as from reservoirs, containers, or capsules or pads which are part of the equipment during the processing of

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the food, is determined using conditions representative for their use, unless the applied testing conditions for the whole tested equipment or appliance are representative also of their use.

When migration testing is done under the above conditions, and the transfer of constituents from the equipment or appliance as a whole does not exceed the migration limits, the plastic parts or materials present in the equipment or appliance shall be considered to comply with Article 11(1).

The testing of the parts used for storage or supply such as reservoirs, containers, capsules or pads shall be under conditions representative of their use, and shall include the foreseeable storage conditions of the food in these parts.

The supporting documentation referred to in Article 16 shall clearly document the testing on the whole food processing and/or food producing equipment or appliance, or on parts thereof. It shall demonstrate that the testing was representative of its foreseeable use, and shall indicate for which substances migration testing was carried out and provide all testing results. The manufacturer of individual plastic parts shall ensure the absence of migration for substances for which the Regulation specifies that their migration shall not be detectable at a specified level of detection in accordance with Article 11(4).

Compliance documentation supplied in accordance with the Regulation to the producer of the final equipment or appliance, or part thereof, shall list all substances subject to migration limits that might be exceeded under the foreseeable use of the supplied part or material.

When the result is not in compliance with the Regulation it shall be determined whether the source of the non-compliance is a plastic part subject to the Regulation or a part made from another material not subject to the Regulation on the basis of documentary evidence or analytical testing. Without prejudice to Article 3 of Regulation (EU) No 1935/2004, non-compliance to the Regulation shall only be established if the migration originates from a plastic part.]

If the testing conditions representative for the worst foreseeable conditions of intended use of the material or article, are not technically feasible in food simulant D2, migration tests shall be done using ethanol 95 % and isooctane. In addition a migration test shall be done using food simulant E if the temperature under the worst foreseeable conditions of intended use exceeds 100 °C. The test that results in the highest specific migration shall be used to establish compliance with this Regulation.]

TABLE 1

### [F2Selection of test time]

Contact time in worst foreseeable use	[F2Time to be selected for testing]
$t \le 5 \text{ min}$	5 min
$5 \min < t \le 0.5 \text{ hour}$	0,5 hour
$0.5 \text{ hours} < t \le 1 \text{ hour}$	1 hour
1 hour $\leq t \leq 2$ hours	2 hours
2 hours $< t \le 6$ hours	6 hours
6 hours < t ≤ 24 hours	24 hours

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$1 \text{ day} < t \le 3 \text{ days}$	3 days
$3 \text{ days} < t \le 30 \text{ days}$	10 days
Above 30 days	See specific conditions

# J<sup>F2</sup>TABLE 2

# Selection of test temperature

Worst foreseeable contact temperature	Contact temperature to be selected for testing
T ≤ 5 °C	5 °C
5 °C < T ≤ 20 °C	20 °C
20 °C < T ≤ 40 °C	40 °C
40 °C < T ≤ 70 °C	70 °C
70 °C < T ≤ 100 °C	100 °C or reflux temperature
100 °C < T ≤ 121 °C	121 °Cª
121 °C < T ≤ 130 °C	130 °Ca
130 °C < T ≤ 150 °C	150 °Ca
150 °C < T < 175 °C	175 °C <sup>a</sup>
175 °C < T ≤ 200 °C	200 °C <sup>a</sup>
T > 200 °C	225 °C <sup>a</sup>

a This temperature shall be used only for food simulants D2 and E. For applications heated under pressure, migration testing under pressure at the relevant temperature may be performed. For food simulants A, B, C or D1 the test may be replaced by a test at 100 °C or at reflux temperature for duration of four times the time selected according to the conditions in Table 1.]

## [F22.1.4. Specific conditions for contact times above 30 days at room temperature and below

For contact times above 30 days (long term) at room temperature and below, the specimen shall be tested in accelerated test conditions at elevated temperature for a maximum of 10 days at  $60 \, {}^{\circ}\text{C}^{(2)}$ 

- (a) Testing for 10 days at 20 °C shall cover all storage times at frozen condition. This test can include the freezing and defrosting processes if labelling or other instructions ensure that 20 °C is not exceeded and the total time above 15 °C does not exceed 1 day in total during the foreseeable intended use of the material or article.
- (b) Testing for 10 days at 40 °C shall cover all storage times at refrigerated and frozen conditions including hot-fill conditions and/or heating up to 70 °C  $\leq$  T  $\leq$  100 °C for maximum t = 120/2^((T-70)/10) minutes.
- (c) Testing for 10 days at 50 °C shall cover all storage times of up to 6 months at room temperature, including hot-fill conditions and/or heating up to 70 °C  $\leq$  T  $\leq$  100 °C for maximum t = 120/2^((T-70)/10) minutes.

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- (d) Testing for 10 days at 60 °C shall cover storage above 6 months at room temperature and below, including hot-fill conditions and/or heating up to 70 °C  $\leq$  T  $\leq$  100 °C for maximum t = 120/2^((T-70)/10) minutes.
- (e) For storage at room temperature the testing conditions can be reduced to 10 days at 40 °C if it is shown by scientific evidence that migration of the respective substance in the polymer has reached equilibration under this test condition.
- (f) For worst foreseeable conditions of intended use not covered by the test conditions set out in points (a) to (e), the testing time and temperature conditions shall be based on the following formula:

t2 = t1 \* Exp (9627 \* (1/T2 - 1/T1))

t1 is the contact time

t2 is the testing time

T1 is the contact temperature in Kelvin. For room temperature storage this is set at 298K (25 °C). For refrigerated conditions it is set at 278K (5 °C). For frozen storage it is set at 258 K (– 15 °C).

T2 is the testing temperature in Kelvin.]

## 2.1.5. Specific conditions for combinations of contact times and temperature

[F2]If a material or article is intended for different applications covering different combinations of contact time and temperature the testing shall be restricted to the test conditions which are recognised to be the most severe on the basis of scientific evidence.]

If the material or article is intended for a food contact application where it is successively subject to a combination of two or more times and temperatures, the migration test shall be carried out subjecting the test specimen successively to all the applicable worst foreseeable conditions appropriate to the sample, using the same portion of food simulant.

# [F122.1.6. Repeated use materials and articles

If the material or article is intended to come into repeated contact with foods, the migration test(s) shall be carried out three times on a single sample using another portion of food simulant on each occasion. The specific migration in the second test shall not exceed the level observed in the first test, and the specific migration in the third test shall not exceed the level observed in the second test.

Compliance of the material or article shall than be verified on the basis of the level of the migration found in the third test and on the basis of the stability of the material or article from the first to the third migration test. The stability of the material shall be considered insufficient if migration is observed above the level of detection in any of the three migration tests, and increases from the first migration test to the third migration test. In case of insufficient stability, compliance of the material shall not be established even in case the specific migration limit is not exceeded in any of the three tests.

However, if there is conclusive scientific proof that the level of the migration decreases in the second and third tests and if the migration limits are not exceeded on the first test, no further test is necessary.

Irrespective of the above rules, a material or article shall never be considered to comply with this Regulation if in the first test a substance that is prohibited from migrating or from being released in detectable quantities under Article 11(4) is detected.]

## 2.1.7. Analysis of migrating substances

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At the end of the prescribed contact time, the specific migration is analysed in the food or food simulant using an analytical method in accordance with the requirements of Article 11 of Regulation (EC) No 882/2004.

### 2.1.8. Verification of compliance by residual content per food contact surface area (QMA)

For substances which are unstable in food simulant or food or for which no adequate analytical method is available it is indicated in Annex I that verification of compliance shall be undertaken by verification of residual content per 6 dm<sup>2</sup> of contact surface. For materials and articles between 500 ml and 10 l the real contact surface is applied. For materials and articles below 500 ml and above 10 l as well as for articles for which it is impractical to calculate the real contact surface the contact surface is assumed to be 6 dm<sup>2</sup> per kg food.

# 2.2. Screening approaches

[F2To screen if a material or article complies with the migration limits any of the following approaches can be applied which are considered at least as severe as the verification method described in section 2.1.]

# 2.2.1. Replacing specific migration by overall migration

To screen for specific migration of non-volatile substances, determination of overall migration under test conditions at least as severe as for specific migration can be applied.

#### 2.2.2. Residual content

To screen for specific migration the migration potential can be calculated based on the residual content of the substance in the material or article assuming complete migration.

# [F22.2.3. Migration modelling

To screen for specific migration, the migration potential can be calculated based on the residual content of the substance in the material or article applying generally recognised diffusion models based on scientific evidence that are constructed in a way that must never underestimate real levels of migration.]

# [F22.2.4. Food simulant substitutes

To screen for specific migration, food simulants can be replaced by substitute food simulants if it is based on scientific evidence that the substitute food simulants result in migration that is at least as severe as migration that would be obtained using the food simulants specified in Section 2.1.2.]

# [F202.2.5. Single test for successive combinations of time and temperature

If the material or article is intended for a food contact application where it is successively subject to two or more time and temperature combinations, a single migration contact test time can be defined based on the highest contact test temperature from Section 2.1.3 and/or 2.1.4 by using the equation as described in point (f) of Section 2.1.4. The reasoning justifying that the resulting single test is at least as severe as the combined time and temperature combinations shall be documented in the supporting documentation provided for in Article 16.]

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#### **CHAPTER 3**

## **Testing for overall migration**

Overall migration testing shall be performed under the standardised testing conditions set out in this chapter.

### 3.1. Standardised testing conditions

The overall migration test for materials and articles intended for the food contact conditions described in column 3 of Table 3 shall be performed for the time specified and at the temperature specified in column 2. For test OM5 the test can be performed either for 2 hours at 100 °C (food simulant D2) or at reflux (food simulant A, B, C, D1) or for 1 hour at 121 °C. The food simulant shall be chosen in accordance with Annex III.

If it is found that carrying out the tests under the contact conditions specified in Table 3 causes physical or other changes in the test specimen which do not occur under worst foreseeable conditions of use of the material or article under examination, the migration tests shall be carried out under the worst foreseeable conditions of use in which these physical or other changes do not take place.

# **I**<sup>F12</sup>TABLE 3

Standardised conditions for testing the overall migration

Column 1	Column 2	Column 3
Test number	Contact time in days [d] or hours [h] at Contact temperature in [°C] for testing	Intended food contact conditions
OM0	30 min at 40 °C	Any food contact at cold or ambient temperatures and for a short duration ( $\leq 30$ minutes).
OM1	10 d at 20 °C	Any food contact at frozen and refrigerated conditions
OM2	10 d at 40 °C	Any long-term storage at room temperature or below, including when packaged under hot-fill conditions, and/or heating up to a temperature T where 70 °C $\leq$ T $\leq$ 100 °C for a maximum of t = 120/2^((T-70)/10) minutes.
OM3	2 h at 70 °C	Any food contact conditions that include hot-fill and/or heating up to a temperature T where 70 °C $\leq$ T $\leq$ 100 °C for maximum of t = 120/2^((T-70)/10) minutes, which are not followed by

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		long-term room temperature or refrigerated storage.
OM4	1 h at 100 °C or at reflux	High temperature applications for all types of food at temperature up to 100 °C.
OM5	2 h at 100 °C or at reflux or alternatively 1 h at 121 °C	High temperature applications up to 121 °C.
OM6	4 h at 100 °C or at reflux	Any food contact conditions at a temperature exceeding 40 °C, and with foods for which point 4 of Annex III assigns simulants A, B, C or D1.
OM7	2 h at 175 °C	High temperature applications with fatty foods exceeding the conditions of OM5.

Test OM 7 covers also food contact conditions described for OM0, OM1, OM2, OM3, OM4, OM5. It represents the worst case conditions for fatty food simulants in contact with non-polyolefins. In case it is technically not feasible to perform OM 7 with food simulant D2 the test can be replaced as set out in paragraph 3.2.

Test OM 6 covers also food contact conditions described for OM0, OM1, OM2, OM3, OM4 and OM5. It represents worst case conditions for food simulants A, B and C in contact with non-polyolefins.

Test OM 5 covers also food contact conditions described for OM0, OM1, OM2, OM3, OM4. It represents the worst case conditions for all food simulants in contact with polyolefins.

Test OM 2 covers also food contact conditions described for OM0, OM1 and OM3.]

## [F23.2. Substitute overall migration tests for tests with food simulant D2

[F12] If it is not technically feasible to perform one or more of the tests OM0 to OM6 in food simulant D2, migration tests shall be done using ethanol 95 % and isooctane. In addition a test shall be done using food simulant E in case the worst foreseeable conditions of use exceed 100 °C. The test that results in the highest overall migration shall be used to establish compliance with the Regulation.

In case it is technically not feasible to perform OM7 with food simulant D2, either test OM8 or test OM9 shall be selected as a replacement test by selecting the most appropriate of these two tests on the basis of the intended and the foreseeable use of the material or article that is being tested. Subsequently, a migration test shall be done at each of the two test conditions specified for the selected test, using a new test sample for each test condition. The test condition that results in the higher overall migration shall be used to establish compliance with the Regulation.

Test number Test conditions	Intended food contact conditions	Covers the intended food contact conditions described in
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OM8	Food simulant E for 2 hours at 175 °C and food simulant D2 for 2 hours at 100 °C	High temperature applications only	OM1, OM3, OM4, OM5 and OM6
OM9	Food simulant E for 2 hours at 175 °C and food simulant D2 for 10 days at 40 °C	High temperature applications including long term storage at room temperature	OM1, OM2, OM3, OM4, OM5 and OM6]

## [F23.3. Verification of compliance

## 3.3.1. Single use articles and materials

At the end of the prescribed contact time, to verify compliance the overall migration is analysed in the food simulant using an analytical method in accordance with the requirements of Article 11 of Regulation (EC) No 882/2004.

# [F123.3.2. Repeated use articles and materials

The applicable overall migration test shall be carried out three times on a single sample using another portion of food simulant on each occasion. The migration shall be determined using an analytical method in accordance with the requirements of Article 34 of Regulation (EU) 2017/625 of the European Parliament and of the Council<sup>(3)</sup>. The overall migration in the second test shall be lower than in the first test, and the overall migration in the third test shall be lower than in the second test. Compliance with the overall migration limit shall be verified on the basis of the level of the overall migration found in the third test.

If it is not technically feasible to test the same sample three times, such as when testing in vegetable oil, the overall migration test can be carried out by testing different samples for three different periods of time lasting one, two and three times the applicable contact test time. The difference between the third and the second test results shall be considered to represent the overall migration. Compliance shall be verified on the basis of this difference, which shall not exceed the overall migration limit. In addition, the difference between the second and the first test results shall be lower than the first test results and the difference between the third and the second test results shall be lower than the difference between the second and the first test results.

By derogation from the first paragraph, if, on the basis of scientific evidence, it is established that for the material or article being tested the overall migration decreases in the second and third tests and if the overall migration limit is not exceeded in the first test, the first test alone shall be sufficient.]

### 3.4. Screening approaches

[F2To screen if a material or article complies with the migration limits, any of the following approaches can be applied which are considered at least as severe as the verification method described in Sections 3.1 and 3.2.]

# 3.4.1. Residual content

To screen for overall migration the migration potential can be calculated based on the residual content of migratable substances determined in a complete extraction of the material or article.

# [F23.4.2] Food simulant substitutes

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To screen for overall migration, food simulants can be replaced if based on scientific evidence the substitute food simulants result in migration that is at least as severe as migration that would be obtained using the food simulants specified in Annex III.]

#### **CHAPTER 4**

## Correction factors applied when comparing migration test results with migration limits

4.1. Correction of specific migration in foods containing more than 20 % fat by the Fat Reduction Factor (FRF)

For lipophilic substances for which in Annex I it is indicated in column 7 that the FRF is applicable the specific migration can be corrected by the FRF. The FRF is determined according to the formula FRF =  $(g \text{ fat in food/kg of food)/200} = (\% \text{ fat} \times 5)/100$ .

The FRF shall be applied according to the following rules.

The migration test results shall be divided by the FRF before comparing with the migration limits.

The correction by the FRF is not applicable in the following cases:

- (a) when the material or article is or is intended to be brought in contact with food intended for infants and young children as defined by Directives 2006/141/EC and 2006/125/EC;
- (b) for materials and articles for which it is impracticable to estimate the relationship between the surface area and the quantity of food in contact therewith, for example due to their shape or use, and the migration is calculated using the conventional surface area/volume conversion factor of 6 dm<sup>2</sup>/kg.

[F2The specific migration in food or food simulant shall not exceed 60 mg/kg food before application of the FRF.]

[F20]When testing is performed in food simulant D2 or E and when the test results are corrected in application of the correction factor laid down in Table 2 of Annex III this correction may be applied in combination with the FRF by multiplying both factors. The combined correction factor shall not exceed 5, unless the correction factor laid down in Table 2 of Annex III exceeds 5.]

<sup>13</sup> 4.2.	Correction of migration into food simulant D2
<sup>F3</sup> 4.3.	Combination of correction factors 4.1 and 4.2.

#### ANNEX VI

Correlation tables

Directive 2002/72/EC	This Regulation

Annex	Annex V
Annex	Annex III
Directive 97/48/EC	This Regulation
Annex	Annex V
Annex	Annex III
Article 1	Article 18
Article 1	Article 12
Article 1	Article 11
Directive 93/8/EEC	This Regulation
Annex I	Annex V
Article 8(5) and Annex VIa	Annex IV
Annex II (2), Annex III (2) and Annex V, Part A	Annex II
Annex I, Annex II, Annex IV, Annex IVa, Annex V Part B, and Annex VI	Annex I
Annex II (3) and Annex III (3)	Article 19
Article 8	Article 18
Article 7 and Annex I (5a)	Article 17
Article 9(3)	Article 16
Article 9(1) and (2)	Article 15
Article 7a	Article 13
Article 2	Article 12
Article 5a(1) and Annex I (8)	Article 11
Article 6	Article 10
Article 3(1) and Article 4(1)	Article 9
Annex II (4) and Annex III (4)	Article 8
Article 4a(3) and (6)	Article 7
Article 4(2), Article 4a(1) and (4), Article 4d, Annex II (2) and (3) and Annex III (2) and (3)	Article 6
Article 3(1), Article 4(1) and Article 5	Article 5
Article 1a	Article 3
Article 1(2), (3) and (4)	Article 2
Article 1(1)	Article 1

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- (1) J<sup>F12</sup>Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396, 30.12.2006, p. 1).;]
- (2) [F2When testing at these accelerated test conditions the test specimen shall not undergo any physical or other changes compared to the real conditions of use, including a phase transition of the material.]
- (3) [F2]F12Regulation (EU) 2017/625 of the European Parliament and of the Council of 15 March 2017 on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products, amending Regulations (EC) No 999/2001, (EC) No 396/2005, (EC) No 1069/2009, (EC) No 1107/2009, (EU) No 1151/2012, (EU) No 652/2014, (EU) 2016/429 and (EU) 2016/2031 of the European Parliament and of the Council, Council Regulations (EC) No 1/2005 and (EC) No 1099/2009 and Council Directives 98/58/EC, 1999/74/EC, 2007/43/EC, 2008/119/EC and 2008/120/EC, and repealing Regulations (EC) No 854/2004 and (EC) No 882/2004 of the European Parliament and of the Council, Council Directives 89/608/EEC, 89/662/EEC, 90/425/EEC, 91/496/EEC, 96/23/EC, 96/93/EC and 97/78/EC and Council Decision 92/438/EEC (Official Controls Regulation) (OJ L 95, 7.4.2017, p. 1).]

#### **Textual Amendments**

- **F2** Substituted by Commission Regulation (EU) 2016/1416 of 24 August 2016 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).
- **F12** Substituted by Commission Regulation (EU) 2020/1245 of 2 September 2020 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food (Text with EEA relevance).

# **Changes to legislation:**

There are currently no known outstanding effects for the Commission Regulation (EU) No 10/2011.