

4MS INITIATIVE
POSITIVE LISTS for ORGANIC MATERIALS
Used in Products in contact with Drinking Water

Introduction

An essential element of the regulatory arrangements for control of the hygienic performance of organic Products in contact with Drinking Water (PDW's) is the examination and approval of the substances used for the production of these products. The goal of the 4MS Initiative is to have a Positive List of substances that are permitted for the production of organic materials, which is accepted by all MS's. This is in addition to the substances authorized for use in food contact materials (FCM) according to Regulation (EU) No. 10/2011, as these are included as permissible for use in PDW's.

Candidate substances for this Positive List (the "Core List") are the substances on the existing national Positive Lists in use in France, Germany and the Netherlands, and which had been collated earlier in the "Combined List". The substances on the Combined List can only be transferred to the Core List after they have been reviewed, therefore the Combined List is the list of substances under review.

Core List (list of confirmed substances)

The 4MS Initiative has agreed procedures for the evaluation of organic substances in use in products in its report "Common Approach on Positive Lists for Organic Materials", published in December 2011, and revised in March 2016. The Common Approach sets out the process to be followed for the assessment and acceptance of substances. Substances approved by this procedure are included in the "Core List", which is the 4MS-Positive List of substances that can be used for the production of PDW's.

Substances from the Combined List which have been assessed according to the criteria for approval by one of the MS's, and for which the positive opinion was accepted by the other MS's, have been transferred now onto the Core List. The Core List therefore only contains confirmed substances. In addition, substances from the Combined List for which a favourable EFSA opinion was already available, or for which other adequate information was available, have also been transferred onto the Core List.

The first version of the Core List (list of confirmed substances) is now published, see Annex A.

Combined List (list of substances under review)

The first version of the Combined List was published in 2011. This was a compilation of substances that appeared on the national lists and which did not appear in the Union List of Regulation (EU) No. 10/2011 (referred to as: "FCM-List of 10/2011"). Pigments and colourants currently used in the MS's are not included in the Combined List. The Combined List is now updated and a revised version is now published, see Annex B.

The Combined List, as published in 2011, has been updated by the following actions:

- Substances have been removed from the List that are covered by Reg. EU 10/2011 (even though the name of the substance is not listed 'as such' in the FCM-List) and, therefore, they are already permitted for use in PDW.

This includes substances that are either individual substances that are covered by a group entry on the FCM-List, or they are salts (including double salts and acid salts) of acids, phenols or alcohols listed in the FCM-List, which according to Art.6 §3.a of Reg. (EU) 10/2011 are allowed, as far as these salts consist of aluminium, ammonium, barium, calcium, cobalt, copper, iron, lithium, magnesium, manganese, potassium, sodium, and/or zinc.

- Some substances have been removed from the List because they are not known to be used in certified PDW's, as checked by MS's. These 'obsolete' substances have been transferred to the '**Obsolete List**'.
- Substances for which a favourable EFSA opinion (excepted if the assessment was too old and that new toxicological endpoints have been suspected since the opinion), a positive '4MS opinion' or other adequate information to complete the assessment of this substance was already available, have been transferred to the Core List.
- New substances have been added to the Combined List, because they were added in one of the MS's to the national positive list after the first version of the Combined List was compiled, or they were inadvertently missing from this first version of the list.
- The substances have been classified according to the materials where they are commonly used. In due course deadline dates for submission of the dossier for substances will be added to annexes B and C based on material type. Dossiers can be submitted before deadline dates for any substance once information has been gathered and the 4MS will evaluate the dossier.

Obsolete List (list of obsolete substances)

Some substances from the Combined List that are not known to be used anymore in certified or approved PDW's, have been transferred onto the 'Obsolete List'. This List is found in Annex C. In situations where it appears that a substance has inadvertently been miss-classified as being 'obsolete', then this substance can be returned to the Combined List. Substances that are on the Obsolete List will eventually be deleted.

Actions required by Industry

Should Industry notice substances on the Obsolete List, which they still use in certified or approved products, Industry can inform the relevant MS, making reference to the certificate or approval. The substance will be returned to the Combined List.

For the substances on the Combined-List, Industry is asked to submit dossiers to provide data in accordance with the requirements as stated in the 4MS Common Approach on Positive List for Organic Materials, including relevant migration data into drinking water, to one of the 4MS's. The 4MS will provide the deadline dates for submission of dossiers for material types shortly.

Annex A - Core List (list of confirmed substances)

CORE LIST FOR ORGANIC MATERIALS COMING INTO CONTACT WITH DRINKING WATER - 9 MAY 2017

PM/REF No	CAS No	NAME	Use as additive or PPA	Use as monomer or other starting substance	Material	Technological function	MTC (mg/l)	MTC(T) [mg/l] (Group restriction No)	Restrictions and specification
-	-	monomers and other starting substances according to plastic regulation 10/2011		yes		monomer	1/20 SML		QM/QMA or other limits as in 10/2011
-	-	additives according to plastic regulation 10/2011	yes			additive	1/20 SML		QM/QMA or other limits as in 10/2011
-	-	polymeres according to PL's (i.e. all starting substances have to be listed in the PL's that apply to DWP), with a MW above 1000 Da	yes			polymeric additive	MTC's of all starting substances apply		QM/QMA or other limits as in 10/2011
-	-	amylose	yes		coatings	initiator			
37520	2634-33-5	1,2-benzisothiazol-3(2H)-one	yes		rubber, silicone	antifoaming, biocide in can preservation	0.025		no antimicrobial effects on the surface of the end product
-	7637-07-2	boron trifluoride	yes		plastics, rubber	catalyst		0.10 0.15	MTC(T) expressed as boron; MTC(T) expressed as fluoride
40430	109-63-7	boron trifluoride etherate	yes		plastics	catalyst		0.10 0.15	MTC(T) expressed as boron; MTC(T) expressed as fluoride
40594	75-65-0	tert-butanol	yes		coatings	solvent	0.5		
41200	7789-75-5	calcium fluoride	yes		plastics			0.15	MTC(T) expressed as fluoride
-	8007-24-7	cashew nut shell liquid, distilled (> 90% cardanol)	no	yes	coatings	hardener	0.0025		not for use as reactive diluent
14450/1	-	castor oil fatty acids, dehydrated							
14453	61790-39-4	castor oil fatty acids, hydrogenated		yes	coatings	monomer			
14505	9004-35-7	cellulose acetate		yes	coatings	monomer			
14512	9004-39-1	cellulose acetate propionate		yes	coatings	monomer			
43760	26172-55-4	5-chloro-2-methyl-2H-isothiazol-3-one	yes		coatings, silicone		0.0005		only to be used as in-can preservative; no antimicrobial effects on the surface of the end product
43730	55965-84-9	5-chloro-2-methyl-2H-isothiazol-3-one (CAS 26172-55-4) and 2-methyl-2H-isothiazol-3-one (CAS 2682-20-4), mixture (3:1)	yes		coatings	in can preservation			Restriction = 0.025 mg/dm ² ; only to be used as in-can preservative; no antimicrobial effects on the surface of the end product
-	21679-31-2	chromium(III)acetylacetonate	yes		plastics	adhesion		0.005	MTC(T) expressed as chromium
-	10025-73-7	chromium(III)chloride	yes		plastics	catalyst		0.005	MTC(T) expressed as chromium
-	11118-57-3	chromium oxide	yes		plastics	catalyst		0.005	MTC(T) expressed as chromium
-	7681-65-4	copper(I)iodide	yes					0.05 0.2	MTC(T) expressed as iodine MTC(T) expressed as copper
47080	110-05-4	di-tert-butyl peroxide		yes	plastics, rubber	crosslinker, aids to polymerization, vulcanisation agent	0.0001 0.5 0.015		peroxide tert-butanol methyl tert-butyl ether
66620	75-09-2	dichloromethane	yes		rubber, coatings	solvent			
48030	112-34-5	diethylene glycol monobutyl ether (DEGBE)	yes		coatings, silicone	solvent		0.15	MCT(T) for sum of (di)ethyleneglycol, monoalkyl (C1,C2,C4,C6) ethers and acetic acid, 2-ethoxyethyl ester
49160	127-19-5	dimethylacetamide	yes	no	plastics	solvent	0.0025		
56320	1323-83-7	distearic acid, diester with glycerol	yes		plastics				
53255	100-41-4	ethylbenzene	yes		coatings, silicone	solvent	0.03		
16993	111-76-2	ethyleneglycol monobutyl ether	yes	yes	coatings, silicone	solvent		0.15	MCT(T) for sum of (di)ethyleneglycol, monoalkyl (C1,C2,C4,C6) ethers and acetic acid, 2-ethoxyethyl ester
16999	112-25-4	ethyleneglycol monoethyl ether		yes	coatings	solvent		0.15	MCT(T) for sum of (di)ethyleneglycol, monoalkyl (C1,C2,C4,C6) ethers and acetic acid, 2-ethoxyethyl ester
17175	68938-15-8	fatty acids, coco hydrogenated		yes	coatings	monomer			

CORE LIST FOR ORGANIC MATERIALS COMING INTO CONTACT WITH DRINKING WATER - 9 MAY 2017

PM/REF No	CAS No	NAME	Use as additive or PPA	Use as monomer or other starting substance	Material	Technological function	MTC (mg/l)	MTC(T) [mg/l] (Group restriction No)	Restrictions and specification
18115/57520	31566-31-1	glycerol monostearate	yes	yes	rubber, coatings, silicone	processing aid/additive			
59330	110-54-3	n-hexane (incl. structural isomers up to 40%; cyclohexane <3%)	yes	no		solvent	0.25		MTC does not need to be verified when process temperature > 100 °C
-	1333-74-0	hydrogen	yes		rubber	polymer modifier			
-	93685-81-5 (13475-82-6)	isododecane (main isomer: 2,2',4,6,6'-pentamethylheptane)	yes		plastics	phlegmatizer for organic peroxides	0.0025		
63240	8006-54-0	lanolin (pharmacopeia grade)	yes		coatings				
-	-	methacrylic acid, chromium (III) salt		yes	plastics	aids to polymerization, adhesion promoter for fillers		0.005 0.3	MTC(T) expressed as chromium, MTC(T) expressed as methacrylic acid
21827/66655	78-93-3	methyl ethyl ketone	yes	yes	coatings, silicone	solvent	0.25		
66725	108-10-1	methyl isobutyl ketone (4-methylpentan-2-one)	yes		coatings, silicone	solvent	0.25		
22190	2163-42-0	2-methylpropane-1,3-diol		yes	coatings	monomer	0.25		
-	7782-44-7	oxygen	yes	yes	plastics	catalyst			
23125	103-71-9	phenyl isocyanate		yes	coatings	monomer		ND (<0.0001)	QM= 1 mg/kg. QM and MTC(T) are both expressed as isocyanate moiety
23173	1314-56-3	phosphoric anhydride	yes	yes	coatings	monomer/ catalyst			
79550	9014-85-1	polyethyleneglycol-2,4,7,9-tetramethyl-5-decyn-4,7-diol ether	yes		coatings				Only to be used for sintered PTFE coatings
80160	37349-34-1	polyglyceryl-5 stearate	yes		coatings, silicone				
23680/81280	9002-89-5	polyvinyl alcohol	yes	yes	plastics, rubber	emulsion polymerization aid, thickener, solvent			manufactured by sintering
-	12136-45-7	potassium oxide	yes		plastics	other additive			
24440	9000-59-3	shellac		yes	coatings	monomer			
-	7681-49-4	sodium fluoride	yes		plastics	antioxidant		0.15	MTC(T) expressed as fluor
-	1313-59-3	sodium oxide	yes						
-	-	stone wool (EC-No. 926-099-9)	yes	no	rubber	filler	-		Diameter > 1 µm (average diameter 5-30 µm)
-	7782-99-2	sulfurous acid	yes			additive			
93420	7646-78-8	tin(IV)chloride	yes		coatings				
93540	108-88-3	toluene			rubber, coatings, silicone	dispersive	0.06		the MTC is higher than the odour threshold
25573	16938-22-0	2,2,4-trimethylhexane-1,6 diisocyanate		yes	coatings	monomer		ND (<0.0001)	QM= 1 mg/kg. QM and MTC(T) are both expressed as isocyanate moiety
25574	15646-96-5	2,4,4-trimethylhexane-1,6-diisocyanate		yes		monomer		ND (<0.0001)	QM= 1 mg/kg. QM and MTC(T) are both expressed as isocyanate moiety
95870	-	wheat protein	yes						
26370	1330-20-7	xylene	yes		coatings, silicone	dispersive agent/solvent	0.05		the MTC is higher than the odour threshold
96180	-	zinc dust	yes		coatings	filler		0.25	MTC(T) expressed as zinc
96200	55799-16-1	zinc hydroxyphosphite	yes		coatings			0.25	MTC(T) expressed as zinc
96240	1314-13-2	zinc oxide	yes		rubber			0.25	MTC(T) expressed as zinc

Annex B - Combined List (list of substances under review)

COMBINED LIST FOR ORGANIC MATERIALS COMING INTO CONTACT WITH DRINKING WATER - 9 MAY 2017

PM/ REF No	CAS No	NAME	Use as additive or PPA	Use as monomer or other starting substance	Material	Technological function	MTC (mg/l)	MTC(T) [mg/l] (Group restriction No)	Restrictions and specification	Auth. MS	Deadline for submission of dossier
-	17501-44-9	acetyl acetic acid, zirconium salt	yes		silicone	catalyst hardener			DE: [1]	DE	To be set
-	-	acrylic acid, esters with alcohols, monohydric, aliphatic, saturated, C1-C18		yes	coatings	monomer	0.3		MTC expressed as acrylic acid	NL	To be set
32920	-	adipic acid, esters with alcohols, monohydric, aliphatic, primary, saturated, (C6-C12)	yes	yes	plastics	plasticizer				NL	To be set
-	-	addition products of trivinylcyclohexane and alpha, omega-dihydrogen-polyhydrogenmethylsiloxanes	yes		silicone	monomer			DE: maximum quantities 10 % [1]	DE	To be set
-	-	alkadienes (C3-C8)		yes	coatings	monomer	ND		QM = 1 mg/kg in EP	NL	To be set
-	-	alkoxysilanes with functional groups, e.g. vinyl, methacryl, amino or glycidyl groups,	yes		plastics	adhesion promoters for fillers			DE: max. 0.5 %, based on the filler, or max. 0.3 %, based on the plastic component	DE	To be set
-	-	alkylarylsulfonic acid	yes		plastics	emulgator			DE: max. 3%	DE	To be set
-	-	alkyl(C8-C18)dimethylbenzylammonium chloride	yes		lubricants					DE	To be set
-	-	alkyl(C8-C18)naphthalene sulfonates, sodium salts		yes	plastics	emulsifier		1.5	MTC(T) for the sum of sodium salts of alkyl(C8-C18)benzene sulfonates, alkyl(C8-C18)naphthalene sulfonates, alkyl(C8-C18)sulfates and alkyl(C8-C18)sulfonates	NL	To be set
-	-	alkyl(C1-C8)-silicic acid or orthosilicic acid with aliphatic monohydric alcohols (C2-C4) and the monomethyl ether of ethanediol (methylglycol) and their condensation products, esters of		yes	silicone	crosslinking agent			DE: max. use level 3 % [1]	DE	To be set
-	54326-11-3	aluminium hydroxide benzoate stearate		yes	lubricants	thickener					To be set
34800	-	amide of aliphatic carboxylic acids, C8-C22	yes		silicone	emulgator			DE: max. use level 1.5% [1]	DE	To be set
34960	-	3-aminocrotonic acid, esters with butyleneglycol	yes		coatings					FR	To be set
35040	-	3-aminocrotonic acid, esters with mono- or dihydric alcohols	yes		coatings					FR	To be set
-	1760-24-3	[3-(2-aminoethyl)aminopropyl]trimethoxysilane	yes	yes	plastics, coatings		0.0001			NL	To be set
-	-	aramid fiber	yes		rubber	filler-polymeric additive			DE: limited acceptance	DE	To be set
-	95-33-0	benzothiazyl-2-cyclohexylsulfenamide		yes	rubber	crosslinking agent			DE: limited acceptance and additional requirements for S-cross-linking [2]	DE	To be set
-	4979-32-2	benzothiazyl-2-dicyclohexylsulfenamide		yes	rubber	crosslinking agent			DE: limited acceptance and additional requirements for S-cross-linking [2]	DE	To be set
-	-	benzoylperoxide		yes	silicone	aids to polymerization			DE: no peroxide on product surface [1]	DE	To be set
38600	78-63-7	2,5-bis(tert-butylperoxy)-2,5-dimethylhexane		yes	plastics, rubber, coatings	vulcanisation agent, aids to polymerization	0.0001		DE: no peroxide on product surface, limited acceptance	DE, FR, NL	To be set
38615 38625	25155-25-3 2212-81-9 2781-00-2	1,3-(and/or 1,4)-bis(tert-butylperoxyisopropyl)benzene		yes	plastics, rubber	vulcanisation agent, aids to polymerization	0.0001		DE: no peroxide on product surface, limited acceptance	DE, FR, NL	To be set
-	85-60-9	bis(2-methyl-4-hydroxy-5-tert-butylphenyl)butane	yes		rubber	antioxidant	0.015			NL	To be set
-	101-67-7	bis(4-octylphenyl)amine	yes		rubber	aging protection products	0.0025		DE: limited acceptance and additional requirements for PAA and sec. amines [2]	DE, NL	To be set
-	39817-09-9	bisphenol-F-diglycidylether		yes	coatings	resin	0.0025 0.0025 0.0001 0.006		BFDGE and hydrolysis products Bisphenol F epichlorhydrine 3-monochloro-propane-1,2-diol	DE	To be set
-	7726-95-6	bromine		yes	rubber	monomer			DE: limited acceptance	DE	To be set
40640	98-29-3	4-tert-butylcatechol	yes		coatings, silicone					FR	To be set
-	3457-61-2	tert-butylcumylperoxide	yes		coatings, silicone	aid to polymerization			DE: no peroxide on the product surface [1]	DE, FR	To be set

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-	17540-75-9	4-sec-butyl-2,6-di-tert-butylphenol	yes		plastics, rubber	processing excipient, antioxidant			DE: limited acceptance	DE	To be set
-	88-18-6	2-tert-butylphenol		yes	plastics, coatings		0.0001			NL	To be set
-	25085-50-1	4-tert-butylphenol formaldehyde resin		yes	rubber	crosslinking agent	0.75 0.0025		formaldehyde 4-tert butylphenol; content of oligomers under 1000 Da 25%	DE	To be set
-	23847-08-4	caprolactamdisulfide	yes		rubber	accelerator		0.75	MTC as caprolactam DE:limited acceptance	DE	To be set
42240	-	carbon fibers	yes		rubber	filler			DE: [1]	DE, FR	To be set
14560	126-99-8	2-chloro-1,3-butadiene		yes	rubber	monomer	0.0001		DE: limited acceptance	DE	To be set
14877	2556-36-7	1,4-cyclohexanediiisocyanate		yes	coatings	monomer		ND (<0.0001)	QM= 1 mg/kg. QM and MTC(T) are both expressed as isocyanate moiety	DE	To be set
-	-	cyclic organopolysiloxane with methylgroups, alone or n-alkyl (C2-C32)-group		yes	lubricants	basic oil			DE: [1]	DE	To be set
-	17796-82-6	N-(cyclohexylthio)phthalimide	yes		rubber	accelerator	NL: 0.15		DE: limited acceptance	DE, NL	To be set
13250	101-77-9	4,4'-diaminodiphenylmethane	yes	yes	coatings	monomer	0.0001			DE, FR, NL	To be set
-	9046-10-0	diaminopolypropylene glycol	yes		coatings	hardener	0.0025		MTC expressed as aminoethanol	NL	To be set
-	68953-84-4	N,N'-diaryl-p-phenylenediamine	yes		rubber		0.0001			NL	To be set
46440	94-36-0	dibenzoyl peroxide		yes	plastics, rubber, silicone	aids to polymerization, vulcanisation agent	0.0001		DE: no peroxide on product surface, limited acceptance	DE, FR, NL	To be set
47060	171090-93-0	3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionic acid, esters with linear or branched alcohols (C13-C15)	yes		rubber	antioxidant				DE	To be set
47080	110-05-4	di-tert-butyl peroxide		yes	rubber	aids to polymerization, vulcanisation agent	0.0001			NL	To be set
-	6731-36-8	1,1-di-tert-butylperoxy-3,3,5-trimethylcyclohexane	yes	yes	plastics, rubber	initiator, cross linking agents	0.0001		DE: no peroxide on the product surface, limited acceptance	DE, NL	To be set
-	96-76-4	2,4-di-tert-butylphenol	yes		rubber	processing excipient			DE: limited acceptance	DE	To be set
-	128-39-2	2,6-di-tert-butylphenol			rubber	processing excipient			DE: limited acceptance	DE	To be set
-	-	α,ω -dicarboxylic acids (C6-C12), aliphatic, unbranched		yes						NL	To be set
-	133-14-2	2,4-dichlorobenzoyl peroxide		yes	coatings, silicone	crosslinking agent	0.0001		DE: no peroxide on the product surface, limited acceptance [1]	DE, FR, NL	To be set
15580	1653-19-6	2,3-dichloro-1,3-butadiene		yes	rubber	monomer	0.0001		DE: limited acceptance	DE	To be set
-	80-43-3	dicumyl peroxide		yes	plastics, rubber	aids to polymerization, vulcanisation agent	0.0001		DE: no peroxide on the product surface, limited acceptance	DE, FR, NL	To be set
15730	77-73-6	dicyclopentadiene		yes	rubber	monomer	NL: 0.0025 DE: 0.0001		DE: limited acceptance	DE, NL	To be set
47520	-	dicyclopentadiene-indene-styrene-vinyl-toluene-isobutylene-copolymer, hydrogenated	yes		coatings	additive		2.5		DE	To be set
48050	111-90-0	diethyleneglycol monoethyl ether	yes		coatings	solvent		0.15	MTC(T) for the sum of all of glycolmonoalkylethers	DE	To be set
-	140-01-2	diethylenetriaminepentaacetic acid pentasodium salt	yes		plastics	dispersive agent				NL	To be set
-	1047-16-1	5,12-dihydroquino(2,3-b)acridine-7,14-dione	yes		plastics, coatings	pigment				NL	To be set
49225	124-40-3	dimethylamine	yes		rubber, coatings	monomer	0.003			DE, FR	To be set
49235	108-01-0	dimethylaminoethanol	yes		coatings		0.9			FR	To be set
-	7005-47-2	2-dimethylamino-2-methyl-1-propanol	yes		plastics					FR	To be set
-	-	di(4-methyl-benzoyl)peroxide		yes	rubber, silicone	vulcanisation agent, crosslinking agent			no peroxide on product surface, limited acceptance	DE	To be set

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-	53880-86-7	dimethyldiphenylthiuram disulfide		yes	rubber	crosslinking agent			DE: limited acceptance and additional requirements for S-cross-linking [2]	DE	To be set
-	115-10-6	dimethyl ether	yes		coatings	propellant	<0.001			DE	To be set
-	68-12-2	N,N-dimethylformamide	yes		plastics, coatings	solvent?	0.025			NL	To be set
-	70131-67-8	dimethylsiloxane, hydroxy terminated		yes	rubber, lubricants	basic oil			DE: [1]	DE	To be set
50080	3806-34-6	dioctadecyl pentaerythritol diphosphite	yes		plastics	stabilizer				FR, NL	To be set
-	122-39-4	diphenylamine	yes		plastics, rubber	catalyst			max. use level 0.1%	NL	To be set
-	68411-46-1	diphenylamine, octylated	yes		rubber	anti-ageing			DE: limited acceptance and additional requirements on primary aromatic amines and secondary amines [2]	DE	To be set
51500	102-06-7	N,N-diphenylguanidine		yes	rubber	crosslinking agent			DE: limited acceptance and additional requirement for S-cross-linking [2]	DE	To be set
-	120-78-5	dithiobis(2-benzothiazole) / dibenzothiazyl disulfide		yes	rubber	crosslinking agent		NL: 0.15	MTC(T) for the sum of dithiobis(2-benzothiazole), 2,2'-dibenzothiazyl disulfide, mercaptobenzothiazole, and 2-(4-morpholino)thiobenzothiazole DE: limited acceptance and additional requirements for S-cross-linking [2]	DE, NL	To be set
16920	87057-87-2	2-ethylbutane-1,4-diisocyanate		yes	coatings	monomer		ND (<0.0001)	QM= 1 mg/kg. QM and MTC(T) are both expressed as isocyanate moiety	DE, FR	To be set
16996	110-80-5	ethyleneglycol monoethyl ether	yes	yes	coatings, silicone	monomer, solvent/diluter		0.15	MTC(T) for sum of (di)ethyleneglycol, monoalkyl (C1,C2,C4,C6) ethers and acetic acid, 2-ethoxyethyl ester	DE	To be set
17002	109-86-4	ethyleneglycol monomethyl ether	yes	yes	coatings	solvent/diluter		0.15	MCT(T) for sum of (di)ethyleneglycol, monoalkyl (C1,C2,C4,C6) ethers and acetic acid, 2-ethoxyethyl ester	DE	To be set
54120	149-57-5	2-ethylhexanoic acid	yes		plastics	stabilizer, lubricant	0.0025			DE, FR, NL	To be set
-	17689-77-9	ethyltrisacetoxysilane		yes	silicone	crosslinking agent			DE: [1]	DE	To be set
-	28106-30-1	ethylvinylbenzene	yes		plastics			0.0001	MTC(T) for the sum of ethylvinylbenzene and divinylbenzene (FCM No. 405)	NL	To be set
-	78-27-3	ethynylcyclohexanol	yes		coatings, silicone	solvent			DE: [1]	DE, FR	To be set
-	-	fatty acids (unbranched, saturated and unsaturated, with an even number of carbon atoms, C8-C22, with a maximum content of 2% unsaponifiable matter), as compounds with bis(2-hydroxyethyl)amine	yes	yes	plastics	antistatic, lubricant	1.5			NL	To be set
-	-	fatty acids (unbranched, saturated and unsaturated, with an even number of carbon atoms, C8-C22, with a maximum content of 2% unsaponifiable matter), amides of	yes	yes	plastics, rubber	lubricant, activator				NL	To be set
-	-	fatty acids (unbranched, saturated and unsaturated, with an even number of carbon atoms, C8-C22, with a maximum content of 2% unsaponifiable matter), esterified with alcohols, monohydric, primary, unbranched, saturated, C4-C18, as well as oleyl alcohol	yes	yes	plastics	lubricant				NL	To be set
-	-	fibers, natural and synthetic, with the exception of asbestos	yes		coatings	filler				FR, NL	To be set
13160 22552	9003-36-5	formaldehyde, polymer with 2-(chloromethyl)oxirane and phenol (Novolak glycidyl ether, NOGE) *	yes	yes	coatings	monomer	0.0025 0.0025 0.0001 0.006		NOGE bisphenol F epichlorohydrin 3-monochloro-propane-1,2-diol Only to be used in powder coatings	DE, NL	To be set
54970	9003-08-1	formaldehyde-2,4,6-triamino-1,3,5-triazine, copolymer	yes		coatings				DE: only sintered PTFE	FR	To be set
-	9006-24-0	formaldehyde-xylene, copolymer	yes		rubber	resin				FR	To be set

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-	-	glycerol esters with linear fatty acids saturated or not with an even number of carbon C8-C20 and/or adipic acid, citric acid, oxystearin acid and ricinoleic acid	yes		coatings					FR	To be set
18370	592-45-0	1,4-hexadiene		yes	rubber	monomer		0.0006	MTCtap as sum for 1,4 and 1,5 hexadiene DE:limited acceptance	DE, NL	To be set
18400	592-42-7	1,5-hexadiene		yes	rubber	monomer		0.0006	MTCtap as sum for 1,4 and 1,5 hexadiene; DE:limited acceptance	DE, FR	To be set
-	16096-31-4	1,6 hexanediol diglycidyl ether	yes		coatings		0.0001			FR, NL	To be set
-	-	2-hydroxy-2-sulfonato acetic acid, disodium salt (50-60%), 2-hydroxy-2-sulfonato acetic acid, disodium salt (10-20%) and sodium sulfite (30-40%) (mixture)			plastics	aids to polymerization			max use level of 0.5%	DE	To be set
-	55406-53-6	3-iodo-2-propynylbutylcarbamate	yes		rubber, coatings	accelerator				FR	To be set
62255	75-28-5	isobutane	yes		lubricants					FR	To be set
18970	78-83-1	isobutanol	yes		silicone	solvent			DE: [1]	DE	To be set
-	-	isobutyl titanate	yes		silicone	catalyst			DE: [1]	DE, FR	To be set
64000	3999-01-7	linoleamide	yes		coatings, silicone	catalyst			DE: [1]	DE, FR	To be set
-	149-30-4	2-mercaptobenzothiazole	yes		rubber	accelerator		NL: 0.15	MTC(T) for the sum of dithiobis(2-benzothiazole), 2,2'-dibenzothiazyl disulfide, mercaptobenzothiazole, and 2-(4-morpholino)thiobenzothiazole; DE: limited acceptance and additional requirements to S-crosslinking [2]	DE, FR, NL	To be set
19977	60-24-2	2-mercaptoethanol	yes		plastics, rubber	other add.	0.0025			NL	To be set
-	68440-24-4	mercaptoethyl tallate	yes		plastics		1.5			NL	To be set
-	-	methacrylic acid, esters with alcohols, monohydric, aliphatic saturated, C1-C18		yes	rubber	monomer	0.3		expressed as methacrylic acid	NL	To be set
-	115-19-5	methyl-2-butyn-3-ol-2	yes		coatings, silicone	inhibitor			DE: [1]	DE, FR	To be set
21754	15520-10-2	2-methyl-1,5-diaminopentane		yes	coatings	hardener	0.005			DE	To be set
-	7786-17-6	2,2-methylenebis(4-methyl-6-nonylphenol)	yes		plastics, rubber	antioxidant	0.0001			FR, NL	To be set
21823	598-09-4	methylepichlorhydrin		yes	coatings	monomer	0.0001			DE	To be set
-	96-29-7	methyl ethyl ketone oxime	yes		coatings	blocking agents	NL: 0.12		DE: only for hot curing coatings	DE, NL	To be set
66715	693-98-1	2-methylimidazole	yes		coatings	additive	0.0025			DE	To be set
-	534-26-9	2-methylimidazoline	yes		coatings		0.0001			NL	To be set
22065	34813-62-2	2-methylpentane-1,5-diisocyanate		yes	coatings	monomer		ND (<0.0001)	QM= 1 mg/kg. QM and MTC(T) are both expressed as isocyanate moiety	DE	To be set
-	201687-58-3	methyltin-2-mercaptoethyl tallate	yes		plastics		0.009			NL	To be set
-	4253-34-3	methyltrisacetoxysilane		yes	silicone	crosslinking agent			DE: [1]	DE	To be set
-	-	methyltrisbutanoximosilane		yes	silicone	crosslinking agent			DE: [1]	DE	To be set
-	-	methyltriscyclohexylaminosilane		yes	silicone	crosslinking agent			DE: [1]	DE	To be set
-	-	methyltris-sec.-butylaminosilane		yes	silicone	crosslinking agent			DE: [1]	DE	To be set
-	-	mono- and/or polytitanic acid, butyl ester (butyltitanate, butylpolytitanate), as necessary, with the monoethylether of ethanediol (ethyleneglycol) in the ratio 1:1			silicone	aids to polymerization			DE: [1]	DE	To be set
67280	108-90-7	monochlorobenzene	yes		plastics, coatings		0.001			FR, NL	To be set
-	-	mono-n-octyltin tris(maleic acid half ester), prepared with C1-C18, primary, unbranched, saturated alcohols		yes	plastics	stabilizer, antioxidant		0.06	expressed as tin; sum of mono-n-octyltin-compounds	NL	To be set
-	-	mono-n-octyltin tris[monoalkyl(C1-C18) maleate]	yes		plastics	stabilizer, antioxidant		0.06	expressed as tin; sum of mono-n-octyltin-compounds	NL	To be set
67840	-	montanic esters with ethylene glycol and/or 1,3-butanediol and/or glycerol	yes		plastics					NL	To be set

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PM/REF No	CAS No	NAME	Use as additive or PPA	Use as monomer or other starting substance	Material	Technological function	MTC (mg/l)	MTC(T) [mg/l] (Group restriction No)	Restrictions and specification	Auth. MS	Deadline for submission of dossier
-	26530-20-1	2-octyl-2H-isothiazole-3-one	yes		rubber	preservative				FR	To be set
69848	-	organopolysiloxanes, containing methylgroups on each silicon atom which can be partially replaced by alkenyl(C2-C32)groups, alkyl (C2-C32)groups, hydroxylgroups, hydrogen, disubstituted alkylamines and/or hydroxylated alkylgroups, acetoxy and/or alkoxy groups and their condensation products with polyethyleneglycol and/or polypropyleneglycol, fluorinated alkylgroups, and phenylgroups	yes	yes	coatings, silicone	monomer, polymeric additive				FR	To be set
-	-	organopolysiloxanes, linear and branched, with methyl groups alone and/or n-alkyl(C2-C32)-, and/or phenyl-2, and/or vinyl-, and/or hydroxyl-, and/or alkoxy(C1-C4)-, and/or hydrogen-, and/or carboalkoxyalkyl(-(CH2)2-17-C(O)-O-(CH2)0-17CH3)-, and/or hydroxyalkyl(C1-C3)-groups	yes	yes	silicone	monomer, polymeric additive			DE: [1]	DE	To be set
-	-	organopolysiloxanes, linear or branched, as mentioned PM/REF No. 69848, but in addition with up to max. 5 % hydrogen and/or alkoxy(C2-C4) and/or carboalkoxyalkyl (- (CH2)2-17-C(O)-O-(CH2)0-17CH3)- and/or hydroxyalkyl(C1-C3) groups attached to the silicon atom	yes	yes	silicone	monomer or polymeric additive			DE: [1]	DE	To be set
-	-	organopolysiloxanes, linear or branched and/or cyclic, with methyl groups alone or with n-alkyl(C2-C32), phenyl-2 and/or hydroxyl groups attached to the silicon atom, and their condensation products with polyethylene and/or polypropyleneglycol	yes	yes	silicone	monomer or polymeric additive			DE: [1]	DE	To be set
	68083-14-7 73138-88-2 68440-81-3	organopolysiloxanes, linear or branched with methyl- or phenylgroups		yes	plastics, lubricants	basic oil			DE: [1]	DE	To be set
76721	9016-00-6 63148-62-9 68037-74-1	organopolysiloxanes, linear or branched with methylgroups		yes	plastics, lubricants	basic oil			DE: [1]	DE	To be set
-	-	organopolysiloxanes with vinyl groups attached to the silicon atom	yes	yes	silicone	monomer or polymeric additive			DE: [1]	DE	To be set
71120	8012-95-1 8042-47-5	paraffin oil	yes		plastics, rubber					FR	To be set
-	-	paraffin, solid, including synthetic paraffin		yes	plastics, rubber	lubricant, plasticizer				NL	To be set
-	614-45-9	peroxybenzoic acid, tert-butyl ester	yes		plastics, coatings		0.0001			NL	To be set
-	15520-11-3	peroxycarbonic acid, bis(4-tert-butylcyclohexyl) ester	yes		plastics, coatings	initiator	0.0001		DE: no peroxide on product surface [1]	DE, NL	To be set
-	16111-62-9	peroxycarbonic acid, bis(2-ethylhexyl) ester	yes		plastics	initiator	0.0001		DE: no peroxide on product surface [1]	DE, NL	To be set
-	927-07-1	peroxydivallic acid, tert-butyl ester	yes		plastics		0.0001			NL	To be set
-	3006-82-4	peroxy-2-ethylhexanoic acid, tert-butyl ester	yes		plastics, rubber		0.0001		DE: no peroxide on product surface [1]	DE, NL	To be set
-	7775-27-1	peroxydisulfuric acid, disodium salt	yes		plastics		0.0001			NL	To be set
-	26748-41-4	peroxyneodecanoic acid, tert-butyl ester	yes		plastics		0.0001			NL	To be set
72048	7727-21-1	peroxydisulfuric acid, dipotassium salt	yes		plastics	initiator	0.0001		DE: no peroxide on product surface [1]	DE, NL	To be set
-	-	petroleum hydrocarbon resins (cyclopentadiene type), hydrogenated	yes		rubber	resin, additive	FR: 0.15			DE, FR	To be set
-	64741-56-6	petroleum residues, vacuum distilled	yes		rubber	resin				FR	To be set
-	92062-05-0	petroleum residues, thermal cracked vacuum	yes		rubber	resin				FR	To be set
-	68610-06-0	phenols, butylated, isobutylated or octylated	yes		rubber	antioxidant				FR	To be set

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-	61788-44-1	phenols, styrenated	yes		rubber, coatings	antioxidant			DE: limited acceptance	DE, FR	To be set
-	936-49-2	2-phenylimidazol		yes	coatings	hardener	0.0025			DE	To be set
23060	104-49-4	1,4-phenylene diisocyanate		yes	coatings	hardener		ND (<0.0001)	QM= 1 mg/kg. QM and MTC(T) are both expressed as isocyanate moiety	DE	To be set
-	7774-80-3	phenyl-o-tolyl-phenylenediamine	yes		rubber	protecting agent	0.0001			NL	To be set
73680	126-73-8	phosphoric acid, tributyl ester	yes		rubber	antifoaming				FR	To be set
-	10294-56-1	phosphorous acid	yes		rubber	antioxidant				NL	To be set
-	54771-30-1	phosphorous acid, dinonylphenyl bis(nonylphenyl) ester	yes		plastics	plasticizer	0.3			FR, NL	To be set
74960	84-61-7	phthalic acid, dicyclohexyl ester	yes		plastics	plasticizer, pigment batches	0.3			DE, FR	To be set
-	110-85-0	piperazine	yes		plastics	monomer	0.075		DE: will be deleted in coatings	DE, NL	To be set
-	-	platinum complexes	yes		silicone	catalyst			DE: [1]	DE, FR	To be set
76461	9003-01-4	polyacrylic acid	yes		rubber					FR	To be set
76520	9003-29-6	polybutene	yes	yes	rubber, lubricants	antifoaming, basic oil			DE: [1]	DE, FR	To be set
76530	68937-10-0	polybutene, hydrogenated		yes	lubricants	basic oil			DE: [1]	DE	To be set
-	-	polyalcoyesters of acids, fatty with an even number of carbon (C8-C24)	yes		plastics					FR	To be set
76680	68132-00-3	polycyclopentadiene	yes		plastics	resin				FR	To be set
76685	68037-01-4	poly 1-decene hydrated		yes	lubricants	basic oil			impurities of hydrocarbons with number of Carbon smaller than 30 not more than 1,5 %, free of naphthene, aromatics and PAH	DE	To be set
76690	-	polydienic resin, synthetic		yes						FR	To be set
-	-	polydimethyl siloxanes and polydimethyl silicones, 3-aminopropyl-group terminated, polymers with 1-isocyanato-3-isocyanatomethyl-3,5,5-trimethylcyclohexane	yes	yes	silicone	monomer or polymeric additive			DE: [1] Specific restrictions for 1-isocyanato-3-isocyanatomethyl-3,5,5-trimethylcyclohexane and 1-amino-3-aminomethyl-3,5,5-trimethylcyclohexane according 10/2011	DE	To be set
-	-	polydimethyl siloxanes and polydimethyl silicones, 3-aminopropyl-group terminated, polymers with bis(4-isocyanatocyclohexyl)methane	yes	yes	silicone	monomer or polymeric additive			DE: [1] Specific restrictions for bis(4-isocyanatocyclohexyl)methane and bis(4-aminocyclohexyl)methane according to 10/2011	DE	To be set
-	-	polyethylene glycol ethers of monohydric aliphatic alcohols (C12-C20) and of alkylphenols (C2-C9)	yes		silicone				DE: [1]	DE	To be set
-	- / 9002-98-6	polyethyleneamine and polyethyleneimine	yes		coatings					FR	To be set
-	-	polyethylene aminostearamide ethylsulfate	yes		coatings					FR	To be set
-	28208-80-2	poly(ethylene-co-acrylic acid), zinc salt		yes	plastics					FR	To be set
77360	9005-07-6	polyethyleneglycol dioleate	yes		coatings	additive				DE	To be set
-	-	polyethylene oxide (8-14), esterified with lauric acid, oleic acid, ricinoleic acid and/or stearic acid		yes						NL	To be set
-	-	polyethylene oxide, molecular weight > 200 (pEO)	yes		plastics	lubricants, other add.				NL	To be set
-	-	polyethylene oxide(4-14)ether of octyl- and/or nonylphenol	yes		plastics, rubber	emulgator	0.25			NL	To be set
-	-	polyethylene oxide(4-14)ethers of monohydric, primary, unbranched, saturated C12-C18 alcohols	yes		plastics	plasticizer	0.25			NL	To be set
80360	9003-27-4	polyisobutene	yes	yes	rubber, lubricants	polymeric additive, basic oils			composition according CR (EU) No. 10/2011, molecular weight >1000Da	DE, FR	To be set
-	-	polypropylene oxide, esterified with lauric acid, oleic acid, ricinoleic acid and/or stearic acid								NL	To be set
-	-	polysaccharides	yes		rubber	thickener				FR	To be set
-	-	poly(styrene-co-maleic anhydride)	yes		plastics					FR	To be set
-	9003-53-6	polystyrene (with pentane as expansion agent)	yes		rubber	resin				FR	To be set
81120	-	polyterpenes	yes		lubricants					DE, FR	To be set

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81160	9002-84-2	polytetrafluoroethylene	yes		lubricants, coatings	polymeric additive	0.0025		MTC for the residual TFE	DE	To be set
-	-	polyvinyl alcohols, partially acetylated with < 20% acetyl groups and a K-value of > 40	yes	yes	coatings, silicone	emulgator				DE, FR	To be set
81325	25498-06-0	polyvinyl cyclohexane	yes		rubber	coagulating agent				FR	To be set
-	-	poly(vinyl methyl ether)	yes		plastics					FR	To be set
81870	35674-65-8	N,N'-1,3-propanediyl bis (N'-octadecylurea)	yes		coatings	defoamer		0.025		DE	To be set
-	108-32-7	propylene carbonate	yes		lubricants	additive				DE	To be set
83530	71011-24-0	quaternary ammonium compounds, benzyl(hydrogenated tallow alkyl)dimethyl, chlorides, compounds with bentonite	yes		lubricants	thickener				DE	To be set
83560	68953-58-2	quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	yes		lubricants	thickener				DE	To be set
-	-	reticulated cationic polyalkyleneamine a) epichlorhydric polyamide resin made from diaminopropylmethylamine and epichlorhydrin; b) epichlorhydric polyamide resin made from epichlorhydrin, adipic acid, caprolactam, diethylene triamine and/or ethylene diamine; c) epichlorhydric polyamide resin made from adipic acid, diethylene triamine and epichlorhydrin or a melt of epichlorhydrin and ammoniac; d) epichlorhydric polyamide-polyamide resin made from epichlorhydrin, dimethyladipate and diethylene triamine; e) epichlorhydric polyamide-polyamide resin made from epichlorhydrin, adipamide and diaminopropylmethylamine	yes		plastics					FR	To be set
85120	122-62-3	sebacic acid, bis(2-ethylhexyl) ester	yes		plastics	PA				FR	To be set
85280	52829-07-9	sebacic acid, bis(2,2,6,6-tetramethyl-4-piperidyl) ester	yes		plastics, lubricants	lubricant	0.3			FR, NL	To be set
-	-	sebacic acid, reaction product with stearylamine, neutralised with calciumhydroxide	yes	yes	lubricants	thickener				DE	To be set
24445	-	silanols, with at least one hydroxyl group and one or more methyl, vinyl or phenyl groups on every silicon atom		yes	rubber	monomers	0.0001			NL	To be set
69885	68988-56-7	silicium dioxide, reaction product with trimethylchlorosilane and isopropyl alcohol		yes	lubricants	thickener			DE: [1]		To be set
-	-	silicone	yes		rubber	polymeric additive			DE: [1]	DE	To be set
-	9006-65-9	silicone oils (organopolysiloxanes with methyl and/or phenyl groups)	yes	yes	rubber, coatings, lubricants	polymeric additive, basic oils			DE: [1]	DE, FR	To be set
86440	-	sodium aluminate	yes		coatings					FR	To be set
61340	149-44-0	sodium hydroxymethanesulphinate	yes		plastics				max use level of 0.07%	DE	To be set
-	1561-92-8	sodium methallyl sulfonate	yes		plastics		0.25			NL	To be set
-	-	solvents (boiling point < 150°C) if eliminated in final product	yes		coatings	solvent				FR	To be set
-	-	solvents in factory made products	yes				0.0001			DE	To be set
-	-	sorbitol esters with linear fatty acids, saturated or not, with an even number of carbon C8-C20	yes	yes	coatings		0.0001			FR	To be set
-	-	stearic acid mono or di esters with ethanediol and/or ether bis(2-hydroxyethyl) and/or triethyleneglycol	yes		plastics	stabilizer				FR	To be set
-	-	stearoyl-palmitoyl-benzoyl-methane		yes	plastics					FR	To be set
-	68442-68-2	styrene, reaction product with diphenylamine	yes		rubber	stabilizer	0.0025		DE: limited acceptance and additional requirements for PAA and sec. Amines [2]	DE, NL	To be set
-	126-33-0	sulfolane	yes		plastics	solvent	0.0025			NL	To be set
-	7446-09-5	sulfur dioxide	yes		rubber	monomer				FR	To be set
-	61790-38-3	tallow acid, hydrogenated	yes		rubber	accelerator					To be set

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-	10591-85-2	tetrabenzylthiuram disulfide	yes		rubber	accelerator			DE: limited acceptance and additional requirements for S cross-linking [2]	DE, FR	To be set
-	5593-70-4	tetra-n-butyl titanate	yes		rubber, silicone	accelerator			DE: [1]	DE, FR	To be set
-	112484-41-0	tetraethylbutylphenol-formaldehydesin hydrobrominated	yes		rubber	crosslinking agent			DE: limited acceptance	DE	To be set
92400	97-77-8	tetraethylthiuram disulfide	yes		plastics, rubber	expanding agent/accelerator		NL: 0.05	MTC(T) for the sum of tetra(alkyl/aryl)thiuram disulfides and tetramethylthiuram monosulfide DE: limited acceptance and additional requirements for S cross-linking [2]	DE, FR, NL	To be set
-	811-97-2	1,1,1,2 -tetrafluoroethane	yes		plastics	expanding agent			max. use level 2.2 %	FR	To be set
-	3064-73-1	tetraisobutylthiuramdisulfide	yes		rubber			0.05	MTC(T) for the sum of tetra(alkyl/aryl)thiuram disulfides and tetramethylthiuram monosulfide		To be set
92480	38613-77-3	tetrakis(2,4-di-tert-butylphenyl)-2,4'-biphenylene diphosponite	yes		plastics, rubber	antifoaming	0.9			NL	To be set
92685	126-86-3	2,4,7,9-tetramethyl-5-decyne-4,7-diol	yes		rubber	accelerator			max. use level 0.1 %	FR	To be set
-	26678-93-3	tetramethylbutylphenol-formaldehydesin	yes		rubber	crosslinking agent			DE: limited acceptance	DE	To be set
92720	137-26-8	tetramethylthiuram disulfide	yes		rubber	accelerator		NL: 0.05	MTC(T) for the sum of tetra(alkyl/aryl)thiuram disulfides and tetramethylthiuram monosulfide DE: limited acceptance and additional requirements for S cross-linking [2]	DE, FR, NL	To be set
-	97-74-5	tetramethylthiuram monosulfide	yes		rubber	accelerator		NL: 0.05	MTC(T) for the sum of tetra(alkyl/aryl)thiuram disulfides and tetramethylthiuram monosulfide	FR, NL	To be set
-	-	titanic acid, esters with isobutanol, n-butanol and the enolate of ethylacetoacetate	yes		silicone	catalyst			DE: [1]	DE	To be set
25208	26471-62-5	toluene diisocyanate		yes	coatings	monomer	0.06	ND (<0.0001)	QM= 1 mg/kg. QM and MTC(T) are both expressed as isocyanate moiety	DE, FR	To be set
-	104-15-4	p-toluenesulfonic acid	yes		rubber	accelerator	0.0005			FR	To be set
-	93-69-6	o-tolylbiguanidine	yes		rubber	accelerator	0.0001			FR, NL	To be set
25390	101-37-1	triallyl cyanurate	yes		rubber	activator	NL: 0.0001		DE: limited acceptance [1]	DE, NL	To be set
25405	1025-15-6	triallyl isocyanurate	yes		rubber	activator	NL: 0.0001		DE: limited acceptance	DE, NL	To be set
25445	28807-72-9	tricyclododecane diisocyanate		yes	coatings	hardener		ND (<0.0001)	QM= 1 mg/kg. QM and MTC(T) are both expressed as isocyanate moiety	DE	To be set
-	90-72-2	2,4,6-tri(dimethylaminomethyl)phenol	yes		rubber, coatings	activator	0.0001			NL	To be set
-	78-40-0	triethyl phosphate	yes		plastics, coatings		0.375			NL	To be set
-	26780-96-1	2,2,4-trimethyl-1,2-dihydrochinolin (polymerized)	yes		rubber	aging protection products			DE: limited acceptance	DE	To be set
-	-	trivinyl cyclohexane and α,ω -dihydrogenpolyhydrogenmethyldimethyl-siloxanes, addition products of urea-formaldehyde condensation products	yes	yes	silicon rubber	monomer or polymeric additive			DE: max. use level 10 % [1]	DE	To be set
-	-	urea-formaldehyde condensation products	yes		plastics, coatings	macromolecular agent, polymer, resin, adhesive, hvaroscopic agent			intermediate according coating guideline	DE, NL	To be set
-	-	vinyl esters of monohydric, saturated, aliphatic carboxylic acids, C2-C20		yes	plastics	monomer	0.0025			NL	To be set
-	3048-64-4	vinylbornene		yes	rubber	monomer	0.0025		DE: limited acceptance	DE, FR, NL	To be set
26230	88-12-0	vinylpyrrolidone	yes		plastics	lubricant				DE, NL	To be set
-	14726-36-4	zinc dibenzylthiocarbamate	yes		rubber	accelerator		NL: 0.05	MTC(T) for the sum of all listed zinc-(alkyl/aryl)dithiocarbamates DE: limited acceptance	DE, FR, NL	To be set

COMBINED LIST FOR ORGANIC MATERIALS COMING INTO CONTACT WITH DRINKING WATER - 9 MAY 2017

PM/REF No	CAS No	NAME	Use as additive or PPA	Use as monomer or other starting substance	Material	Technological function	MTC (mg/l)	MTC(T) [mg/l] (Group restriction No)	Restrictions and specification	Auth. MS	Deadline for submission of dossier
-	136-23-2	zinc dibutyldithiocarbamate	yes		rubber	accelerator		NL: 0.05	MTC(T) for the sum of all listed zinc-(alkyl/aryl)dithiocarbamates DE: limited acceptance and additional requirements for S cross-linking [2]	DE, FR, NL	To be set
96170	14324-55-1	zinc diethyldithiocarbamate	yes		rubber	accelerator		NL: 0.05	MTC(T) for the sum of all listed zinc-(alkyl/aryl)dithiocarbamates	FR, NL	To be set
-	137-30-4	zinc dimethyldithiocarbamate	yes		rubber	accelerator		0.05	MTC(T) for the sum of all listed zinc-(alkyl/aryl)dithiocarbamates	NL	To be set
-	136-53-8	zinc-di-2-ethylhexanoate	yes		silicone	hardener			QM = 1.5 % DE: [1]	DE, NL	To be set
-	84604-96-6	zinc diisononyldithiocarbamate	yes		rubber	cross-linking			DE: limited acceptance and additional requirements for S cross-linking [2]	DE	To be set
-	53801-45-9	zirconium oxide	yes		plastics, rubber	stabilizer, antioxidant, drying agent	NL: 0.1		MTC is expressed as zirconium	FR, NL	To be set

[1] BfR Recommendations may have additional requirements. When the UBA-Guidelines get mandatory evaluation criteria no reference to BfR-Recommendations could be set. Therefore the substances will be checked and the requirements will be set in the mandatory evaluation criteria.

[2]

additional requirements in DE:		Parameter	Restriction
rubber		formaldehyde	MTC _{tap} = 750 µg/l
		sum of Primary Aromatic Amines (PAA) (a.o. aniline, o-toluidine)	MTC _{tap} = ND (DL = 2 µg/l)
		sum of secondary amines1	MTC _{tap} = 250 µg/l
s-crosslinking		2-mercaptobenzothiazole	QM = 400 µg/kg
		N-nitrosamines 2	MTC _{tap} = 0.3 mg/l
coatings (polyurethanes, polyamides and epoxy coatings)		PAA	MTC _{tap} = ND (DL= 0.1 µg/l)
plastics		PAA	MTC _{tap} = ND (DL= 0.1 µg/l)

Annex C - Obsolete List (list of obsolete substances)

OBSOLETE LIST FOR ORGANIC MATERIALS COMING INTO CONTACT WITH DRINKING WATER - 9 MAY 2017

PM/ REF No	CAS No	NAME	Use as additive or PPA	Use as monomer or other starting substance	Material	Technological function	MTC (mg/l)	MTC(T) [mg/l] (Group restriction No)	Restrictions and specification	Auth. MS	Deadline for submission of dossier
-	3179-56-4	acetyl cyclohexylsulfonyle peroxide	yes		plastics	initiator	0.0001		no peroxid on the product surface	NL, D	To be set
-	25551-14-8	1,1'-azobis(1-cyclohexanecarbonitrile)	yes		plastics	initiator			max. 0.2 %	NL, D	To be set
-	78-67-1	2,2'-azobis(isobutyronitrile)	yes		plastics	initiator				NL	To be set
-	2167-23-9	2,2-bis(tert-butylperoxy)butane	yes		plastics	aids to polymerization				D	To be set
-	1068-27-5	2,5-bis(tert-butylperoxy)-2,5-dimethyl-3-hexyne		yes	plastics	aids to polymerization	0.0001			NL, D	To be set
38625	2781-00-2	1,4-bis(tert-butylperoxyisopropyl)benzene	yes		plastics	visc. contr. agent	0.0001			NL	To be set
40630	2782-40-3	N-butylbenzamide	yes							Fr	To be set
-	136-51-6	calcium bis(2-ethylhexanoate) (= calcium octoate)	yes		plastics					Fr	To be set
14587	1204-28-0	4-(chloroformyl)phthalic anhydride		yes	coatings	monomer	0.0025		QMA =0.05 mg/dm ² ; only for PTFE sintered	Fr	To be set
-	2568-90-3	dibutoxymethane (butylal)	yes		plastics					NL	To be set
-	87-97-8	2,6-di-tert-butyl-4-(methoxymethyl)phenol	yes		rubber	protecting agent	0.0001			NL	To be set
-	1067-33-0	dibutyltin diacetate	yes		coatings, silicone	catalyst				Fr	To be set
-	77-58-7	dibutyltin dilaurate	yes		coatings, silicone	catalyst				Fr	To be set
-	4253-22-9	dibutyltin sulfide	yes				0.002		expressed as tin	NL	To be set
-	1717-00-6	1,1-dichloro-1-fluoroethane	yes		plastics, coatings	expanding agent				Fr	To be set
-	68479-98-1	diethylmethylbenzenediamine	yes							Fr	To be set
-	109-31-9	dihexyl azelate	yes							Fr	To be set
48560	36265-41-5	dihydro-1,4-dimethyl-2,6-dicarbododecyloxy-3,5-pyridine	yes		plastics	stabilizer				Fr	To be set
49040	1115-01-1	9,10-dihydroxystearic acid, methyl ester	yes		plastics	lubricant				Fr	To be set
-	109-87-5	dimethoxymethane	yes		plastics	monomer				NL, D	To be set
49120	3271-22-5	2,4-dimethoxy-6-(1-pyrenyl)-1,3,5-triazine	yes		plastics	azurant				NL	To be set
-	-	dimethyldialkyl(C16 and/or C18)ammoniumacetate	yes		plastics					NL	To be set
75840	117-84-0	di-n-octyl phthalate	yes		plastics, rubber, coatings	plasticizer	0.11			NL	To be set
-	2432-87-3	di-n-octyl sebacate	yes		plastics, rubber	plasticizer	0.0001			NL	To be set
-	-	N,N'-dioleoyl diaminoethane	yes							Fr	To be set
-	5518-18-3	N,N'-dipalmitoyl diaminoethane	yes		coatings					Fr	To be set
-	971-15-3	di-N-pentamethylenethiuram hexasulfide			rubber			0.05	MTC(T) in this specific case means that the restriction shall not be exceeded by the sum of the migration levels of all di-N-pentamethylenethiuram sulfides	NL	To be set
-	120-54-7	di-N-pentamethylenethiuram tetrasulfide			rubber			0.05	MTC(T) in this specific case means that the restriction shall not be exceeded by the sum of the migration levels of all di-N-pentamethylenethiuram sulfides	NL	To be set
-	-	N,N'-distearoyl diaminoethane	yes		coatings					Fr	To be set
-	151-41-7	dodecylsulfate	yes		coatings, silicone					Fr	To be set
53040	35001-52-6	2-ethoxy-5-tert-butyl-2'-ethyloxalic acid bisanilide	yes		plastics					Fr	To be set
-	75-04-7	ethylamine	yes		plastics	catalyst				NL, D	To be set
-	143-06-6	hexamethylenediamine carbamate	yes		rubber	accelerator				Fr	To be set
-	1191-25-9	6-hydroxyhexanoic acid	yes					0.0025	MTC(T) in this specific case means that the restriction shall not be exceeded by the sum of the migration levels of 6-hydroxyhexanoic acid and caprolacton (FCM No 342)	NL	To be set
-	59118-78-4	2-mercaptoethyl oleate	yes		plastics	stabilizer, antioxidant	1.5			NL	To be set
-	96-45-7	2-mercaptoimidazoline	yes		rubber	accelerator	0.0025			NL	To be set
-	96-53-7	2-mercaptothiazoline	yes		rubber	accelerator	0.0001			NL, Fr	To be set
66000		3'-methoxy-4'-hydroxyphenyl-2-indole	yes		plastics	stabilizer				Fr	To be set
-	4088-22-6	N-methyldioctadecylamine	yes							NL	To be set
-	694-91-7	5-methylenebicyclo[2.2.1]hept-2-ene	yes	yes	rubber, coatings	monomer	0.0025			NL	To be set
22333	79-11-8	monochloroacetic acid		yes	coatings		0.0025			Fr	To be set
-	-	monoethanolamine laurylsulfate	yes		coatings					Fr	To be set

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-	102-77-2	morpholiniothio-2-benzothiazole	yes		rubber	accelerator		0.15	MTC(T) in this specific case means that the restriction shall not be exceeded by the sum of the migrations levels of dithiobis(2-benzothiazole), 2,2'-dibenzothiazyl disulfide, mercaptobenzothiazole, and 2-(4-morpholino)thiobenzothiazole	NL	To be set
-	-	myristyl polyethylene glycol (3-8) ether with oxyacetic acid		yes	plastics	antistatic				NL	To be set
67900	8030-30-6	naphtha	yes		plastics					Fr	To be set
-	9084-06-4	naphtalene sulfonic acid-formaldehyde condensation product, sodium salt	yes		plastics	emulgator PTFE		0.0001	only sintered products	NL, D	To be set
69120	142-77-8	oleic acid, butyl ester	yes		plastics					NL	To be set
-	1912-84-1	oleic acid, tin(II) salt	yes		plastics		0.0025			NL	To be set
-	-	2-heptadecyl-4,4-bis (methylenestearate) oxazoline	yes		coatings					Fr	To be set
70080	80-51-3	4,4'-oxybis(benzene sulfonyl hydrazide)	yes		plastics	blowing agent				Fr	To be set
70320	629-54-9	palmitamide	yes		coatings, silicone	catalyst				Fr	To be set
71710	98-77-1	pentamethylenedithiocarbamic acid, piperidine salt	yes		rubber	accelerator				Fr	To be set
-	13878-54-1	pentamethylenedithiocarbamic acid, zinc salt	yes		rubber	accelerator				Fr	To be set
-	79-21-0	peracetic acid	yes			initiator				Fr	To be set
-	107-71-1	peroxyacetic acid, tert-butyl ester	yes		plastics	initiator	0.0001			NL, D	To be set
-	1561-49-5	peroxycarbonic acid, dicyclohexyl ester	yes		plastics	initiator	0.0001			NL, D	To be set
-	26322-14-5	peroxycarbonic acid, dihexadecyl ester	yes		plastics	initiator	0.0001			NL, D	To be set
-	105-64-6	peroxycarbonic acid, diisopropyl ester	yes		plastics	initiator	0.0001			NL, D	To be set
-	53220-22-7	peroxycarbonic acid, ditetradecyl ester	yes		plastics	initiator	0.0001			NL, D	To be set
-	13122-18-4	peroxy(3,5,5-trimethylhexanoic acid), tert-butyl ester	yes		plastics	initiator	0.0001			NL, D	To be set
72105	-	phenols and/or cresols-styrene and/or alpha-methylstyrene and/or C3-C12 olefins, copolymers	yes		rubber		0.0001			NL,	To be set
-	-	N-phenyl-N'-isohexyl-p-phenylenediamine	yes	yes	rubber	protecting agent	0.0001			NL	To be set
72400	132-27-4	2-phenylphenol, sodium salt	yes		rubber	preservative			QM = 0.02%	Fr	To be set
72560	7144-65-2	3-(2-phenyl)phenoxy-1,2-epoxypropane	yes		plastics					Fr	To be set
74000	78-42-2	phosphoric acid, tris(2-ethylhexyl) ester	yes		plastics	filler / pigments batches				Fr, D	To be set
74800	-	phthalic acid, di-heptyl/nonyl ester	yes		rubber	plasticizer				Fr	To be set
75040	-	phthalic acid, diesters of hexadecanol and/or octadecanol	yes							Fr	To be set
75200	3648-61-1	phthalic acid, diheptylic ester	yes		plastics	plasticizer				Fr	To be set
-	68410-23-1 83487-96-1	polyaminoamide	yes		rubber, coatings	macromolecular agent	0.0001			NL	To be set
-	-	polyethylene oxide desorbitan monolaurate	yes		coatings	emulgator				NL	To be set
23710	63148-65-2	polyvinyl butyral	yes		plastics					Fr	To be set
-	11137-59-0	potassium aluminate	yes		rubber	buffering agent				Fr	To be set
-	74-98-6	propane	yes		plastics	pol.contr. agent				NL	To be set
-	-	reaction products of styrene and/or methylstyrene and/or alkenes (C3-C12) with phenol and/or methylphenol	yes		coatings	anchorage agent	0.0025			NL	To be set
83650	9008-34-8	resin acids and rosin acids, manganese salts	yes		coatings		0.03			Fr	To be set
83760	-	ricinoleic acid, amyl ester	yes		plastics					Fr	To be set
83760	-	ricinoleic acid, butyl ester	yes		plastics					Fr	To be set
83760	-	ricinoleic acid, ethyl ester	yes		plastics					Fr	To be set
-	-	rosin, dimerised, esters	yes		plastics					Fr	To be set
-	-	rosin, hydrogenated, esters	yes		plastics, rubber	plasticizer				Fr	To be set
86080	10101-52-7	silicic acid, zirconium salt	yes		plastics	lubricant, fillers				Fr, D	To be set
-	10026-04-7	silicon tetrachloride	yes		plastics	catalyst				NL, D	To be set
-	-	soybean oil, modified with sulfur	yes		plastics	lubricant				NL	To be set
89520	8045-34-9	stearic acid, esters with pentaerythritol	yes		plastics					Fr	To be set
89600	111-61-5	stearic acid, ethyl ester	yes		plastics					Fr	To be set
90000	646-13-9	stearic acid, isobutyl ester	yes		plastics					Fr	To be set
90480	6382-13-4	stearic acid, pentyl ester	yes		coatings					Fr	To be set
24560	111-63-7	stearic acid, vinyl ester		yes	plastics	monomer				D	To be set

PM/REF No	CAS No	NAME	Use as additive or PPA	Use as monomer or other starting substance	Material	Technological function	MTC (mg/l)	MTC(T) [mg/l] (Group restriction No)	Restrictions and specification	Auth. MS	Deadline for submission of dossier
-	-	styrene (2 mol) condensed with 1 mol of a mixture of phenol and o-, m- and p-cresols; Brookfield viscosity of the end product at 25°C between 1400 and 1700 cP	yes		plastics	polymeric additive	0.0001			NL	To be set
-	1634-02-2	tetrabutylthiuram disulfide	yes		rubber	accelerator		0.05	MTC(T) in this specific case means that the restriction shall not be exceeded by the sum of the migrations levels of tetrabutylthiuram disulfide, tetraethylthiuram disulfide, tetramethylthiuram disulfide and tetramethylthiuram monosulfide	NL	To be set
92960	111-17-1	thiodipropionic acid	yes		plastics, coatings	antioxidant				NL, Fr	To be set
-	11130-18-0	titanium chloride	yes		plastics	catalyst				NL	To be set
-	7550-45-0	titanium tetrachloride	yes		plastics	other add.				NL	To be set
93790	102-82-9	tributylamine	yes		plastics	residue of catalyst	0.0001			NL, D	To be set
-	106-10-5	triethyleneglycol dioctanoate	yes							Fr	To be set
-	10380-08-2	triphosphoric acid	yes				0.0005			NL, Fr	To be set
-	7718-98-1	vanadium chloride	yes		plastics	catalyst		0.0025	MTC(T) expressed as vanadium	NL	To be set
-	11099-11-9	vanadium oxide	yes		plastics	catalyst		0.0025	MTC(T) expressed as vanadium	NL, D	To be set
72060	89-03-8	vasaline, pharmaceutical quality		yes	rubber	plasticizer				NL	To be set
26290	25013-15-4	vinyltoluene		yes	plastics	monomer/ additive				D	To be set
26215	100-69-6	2-vinylpyridine		yes	rubber	monomer				Fr	To be set
-	14634-93-6	zinc ethylphenyldithiocarbamate	yes		rubber	accelerator		0.05	MTC(T) in this specific case means that the restriction shall not be exceeded by the sum of all listed zinc-(alkyl/aryl) dithiocarbamates	NL	To be set