

Manufacturing Restricted Substances List (MRSL)

Version 4.0 - Status December 2018



This MRSL builds the basis for REWE Group's Detox Program. It defines the hazardous chemicals which need to be phased out till 2020. For all chemicals limit values for products, waste water, sludge and input chemicals have been defined. These limit values have not yet been tested and compared extensively for each of the hazardous substances groups. Additionally different accredited laboratories may use different technologies and methods for testing, which could lead to different results. Therefore research is required and more knowledge has to be gained before the limit values determined in this MRSL can become mandatory for the supply chains. REWE Group will work closely with accredited laboratories as well as the chemical industry to drive forward the research and will support their suppliers with auditing and training. Always the best available analytical testing method for sludge, waste water or input chemical formulation must be applied at the time of test performing.

Substances	CAS number	Limit values				Methodes			Timelines*
		Products: single substances mg/kg	Waste water after treatment µg/l	Sludge from waste water treatmentm g mg/kg	Input Chemicals mg/kg	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	
1. Alkylphenols (AP) and Alkylphenoethoxylates (APEO)									
APs									
4-(1,1,3,3-Tetramethylbutyl)-phenol	140-66-9	No intentional use	1	0,2	250	With Reference To DIN EN ISO 18857 And followed by Liquid Chromatography – Mass Spectrometry (LC-MS) Analysis. NPEO(1+2): GC/MS	With Reference To DIN EN ISO 18857 And followed by Liquid Chromatography – Mass Spectrometry (LC-MS) Analysis. NPEO(1+2): GC/MS	Solvent extraction DIN EN ISO 18857 LC/MS mod, resp. NPEO(1+2): GC/MS	Banned 31.12.2016
OctylPhenol	27193-28-8		1	0,2					
4-Octylphenol	1806-26-4		1	0,2					
4-Nonylphenol	25154-52-3		1	0,2	250				
Nonylphenol	104-40-5		1	0,2					
Nonylphenol	90481-04-2		1	0,2					
4-Nonylphenol (branched)	84852-15-3		1	0,2					
Nonylphenol	1173019-62-9		1	0,2					
Isononylphenol	11066-49-2		1	0,2					
APEOs									
Nonylphenol Ethoxylates NPEO (1-2)	various	No intentional use	1	0,2	500	With Reference To DIN EN ISO 18857 And followed by Liquid Chromatography – Mass Spectrometry (LC-MS) Analysis. NPEO(1+2): GC/MS	With Reference To DIN EN ISO 18857 And followed by Liquid Chromatography – Mass Spectrometry (LC-MS) Analysis. NPEO(1+2): GC/MS	Solvent extraction DIN EN ISO 18857 LC/MS mod, resp. NPEO(1+2): GC/MS	Banned 31.12.2016
Nonylphenol Ethoxylates NPEO (3-18)	various		1	0,2					
(Nonylphenoxy)-polyethylenoxid	9016-45-9		1	0,2					
4-Nonylphenol, ethoxylated	26027-38-3		1	0,2					
(NPEs 3-18) Poly(oxy-1,2-ethanediyl),	68412-54-4		1	0,2					
4-Nonylphenol, branched, ethoxylated	127087-87-0		1	0,2					
Unbekanntes Farbmittel 94 (Isononylphenol-ethoxylate, SIN list)	37205-87-1		1	0,2					
Octylphenol Ethoxylates OPEO (1-2)	various		1	0,2	500				
Octylphenol Ethoxylates OPEO (3-18)	various		1	0,2					
(OPEs 3-18) alpha-[4-(1,1,3,3-Tetramethylbutyl)phenyl]-w-hydroxypoly(oxy-1,2-ethandiyl)	9002-93-1		1	0,2					
4-tert-Octylphenoethoxylate	9036-19-5	1	0,2						
4-tert-Octylphenoethoxylate	68987-90-6	1	0,2						

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Substances	CAS number	Limit values				Methodes			Timelines*
		Products: single substances mg/kg	Waste water after treatment µg/l	Sludge from waste water treatmentm g mg/kg	Input Chemicals mg/kg	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	
2. Phthalates									
Di-Butyl Phthalate (DBP)	84-74-2	No intentional use	1	0,3	Sum 250	Toluene Extraction And followed by Gas Chromatography- Mass Spectrometry (GC-MS) Analysis resp. LC/MS. Extraction with toluene at pH6, GC/MS*	Toluene Extraction And followed by Gas Chromatography- Mass Spectrometry (GC-MS) Analysis resp. LC/MS.	Extraction with toluene, GC-MS resp. LC/MS.	Banned for the product group Apparels 31.12.2018 Banned for home textiles and shoes 31.12.2019
Di(2-Ethyl Hexyl) Phthalate(DEHP)	117-81-7		1	0,3					
Benzyl Butyl Phthalate (BBP)	85-68-7		1	0,3					
Di-Iso-Nonyl Phthalate (DINP)	28553-12-0, 68515-48-0		1	0,3					
Di-N-Octyl Phthalate (DNOP)	117-84-0		1	0,3					
Di-Iso-Decyl Phthalate (DIDP)	68515-49-1, 26761-40-0		1	0,3					
Di-Iso-Butyl Phthalate (DIBP)	84-69-5		1	0,3					
Di-N-Hexyl Phthalate (DNHP)	84-75-3		1	0,3					
Bis (2-methoxyethyl) Phthalate (DMEP)	117-82-8		1	0,3					
DHNUP	68515-42-4		1	0,3					
DIHP	71888-89-6		1	0,3					
DPP	131-18-0		tbd	tbd					
1,2-Benzenedicarboxylic acid, dihexylester, branched and linear	84777-06-0		tbd	tbd					
DIPP Diisopentylphthalat	605-50-5		tbd	tbd					
nPIPP N-Pentyl-isopentylphthalat	776297-69-9		tbd	tbd					
1,2-Benzenedicarboxylic acid, dihexylester, branched and linear	68515-50-4		tbd	tbd					
Diethyl phthalate (DEP)	84-66-2		tbd	tbd					
Di-n-propyl phthalate (DPRP)	131-16-8	tbd	tbd						
Di-cyclohexyl phthalate (DCHP)	84-61-7	tbd	tbd						
Di-iso-octyl phthalate (DIOP)	27554-26-3	tbd	tbd						

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Substances	CAS number	Limit values				Methodes			Timelines*				
		Products: single substances mg/kg	Waste water after treatment µg/l	Sludge from waste water treatmentm g mg/kg	Input Chemicals mg/kg	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge					
3. Brominated and Chlorinated Flame Retardants													
Polybrominated biphenyls (PBBs):	59536-65-1 various					tbd	tbd	tbd					
Monobromo biphenyls (MonoBB)		No intentional use	0,05	0,03	Sum 250	By Toluene Extraction And Followed By Liquid Chromatography - Mass Spectrometry (LC-MS) And Gas Chromatography - Mass Spectrometry (GC-MS) Analysis	By Toluene Extraction And Followed By Liquid Chromatography - Mass Spectrometry (LC-MS) And Gas Chromatography - Mass Spectrometry (GC-MS) Analysis	Extraction with toluene, GC-MS resp. LC/MS					
Dibromo biphenyls (DiBB)	-		0,05	0,03									
Tribromo biphenyls (TriBB)	-		0,05	0,03									
Tetrabromo biphenyls (TetraBB)	-		0,05	0,03									
Pentabromo biphenyls (PentaBB)	-		0,05	0,03									
Hexabromo biphenyls (HexaBB)	-		0,05	0,03									
Heptabromo biphenyls (HeptaBB)	-		0,05	0,03									
Octabromo biphenyls (OctaBB)	-		0,05	0,03									
Nonabromo biphenyls (NonaBB)	-		0,05	0,03									
Decabromo biphenyl (DecaBB)	13654-09-6		0,05	0,03									
Polybrominated diphenyl ethers (PBDEs):	various					tbd	tbd	tbd					
Monobromo diphenyl ethers (MonoBDE)	-	No intentional use	0,05	0,03	Sum 250	By Toluene Extraction And Followed By Liquid Chromatography - Mass Spectrometry (LC-MS) And Gas Chromatography - Mass Spectrometry (GC-MS) Analysis	By Toluene Extraction And Followed By Liquid Chromatography - Mass Spectrometry (LC-MS) And Gas Chromatography - Mass Spectrometry (GC-MS) Analysis	Extraction with toluene, GC-MS resp. LC/MS	Banned 31.12.2017				
Dibromo diphenyl ethers (DiBDE)	-		0,05	0,03									
Tribromo diphenyl ethers (TriBDE)	-		0,05	0,03									
Tetrabromo diphenyl ethers (TetraBDE)	40088-47-9		0,05	0,03									
Pentabromo diphenyl ethers (PentaBDE)	32534-81-9		0,05	0,03									
Hexabromo diphenyl ethers (HexaBDE)	36483-60-0		0,05	0,03									
Heptabromo diphenyl ethers (HeptaBDE)	68928-80-3		0,05	0,03									
Octabromo diphenyl ethers (OctaBDE)	32536-52-0		0,05	0,03									
Nonabromo diphenyl ethers (NonaBDE)	63936-56-1		0,05	0,03									
Decabromo diphenyl ether (DecaBDE)	1163-19-5		0,05	0,03									
Tris(2,3-Dibromopropyl)-Phosphate	126-72-7		0,05	0,25	250	By Toluene Extraction And Followed By Liquid Chromatography - Mass Spectrometry (LC-MS) And Gas Chromatography - Mass Spectrometry (GC-MS) Analysis	By Toluene Extraction And Followed By Liquid Chromatography - Mass Spectrometry (LC-MS) And Gas Chromatography - Mass Spectrometry (GC-MS) Analysis	Extraction with toluene, GC-MS resp. LC/MS					
Tris(2-Chloroethyl)Phosphate (TCEP)	115-96-8		0,05	0,25	250								
Hexabromocyclododecane (HBCDD)	25637-99-4,	No intentional use	0,05	0,25	250								
	134237-50-6,												
	134237-51-7,												
	134237-52-8,												
3194-55-6													
Tetrabromo-bisphenol A (TBBPA)	79-94-7		0,05	0,25	250					tbd	tbd	tbd	
2,2-bis(bromomethyl)-1,3-propanediol	3296-90-0		tbd	tbd	250								

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Substances	CAS number	Limit values				Methodes			Timelines*
		Products: single substances mg/kg	Waste water after treatment µg/l	Sludge from waste water treatmentm g mg/kg	Input Chemicals mg/kg	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	
Subgroup: Other Flame Retardants									
TEPA	545-55-1	No intentional use	0,5	0,25	250	tbd	tbd	tbd	Banned 31.12.2017
BIS	5412-25-9		0,5	0,25	250	Not tested	tbd	tbd	
Tri-o-cresyl phosphate	78-30-8		0,5	0,25	tbd		tbd	tbd	
Tris(1,3-dichloro-2-propyl)phosphate (TDCPP)	13674-87-8		0,5	0,25	250	tbd	tbd	tbd	
Sodium tetraborate, Boric acid disodium salt	215-540-4,1303-96-4 1303-43-4 12179-04-3		0,5	0,25	tbd	Not tested	tbd	tbd	Phase Out
Boron trioxide	1303-86-2		0,5	0,25	tbd		tbd	tbd	
Boric acid	11113-50-1, 10043-35-3		0,5	0,25	tbd		tbd	tbd	
Antimony trioxide	1309-64-4		0,5	0,25	tbd		tbd	tbd	
4. Amines (associated with Azo dyes)									
4-Aminodiphenyl	92-67-1	No intentional use, control of contamination	0,01	0,01	150	With Reference To EN 14362:1&3 And followed By Gas Chromatographic – Mass Spectrometric (GC-MS) And High Performance Liquid Chromatographic	With Reference To EN 14362:1&3 And followed By Gas Chromatographic – Mass Spectrometric (GC-MS) And High Performance Liquid Chromatographic (HPLC) Analysis	EN 14362 modified GC/MS resp. HPLC	Banned 31.12.2019
Benzidine	92-87-5				150				
4-Chloro-o-Toluidine	95-69-2				150				
2-Naphthylamine	91-59-8				150				
o-Aminoazotoluene	97-56-3				150				
2-Amino-4-Nitrotoluene	99-55-8				150				
p-Chloroaniline	106-47-8				150				
2,4-Diaminoanisole	615-05-4				150				
4,4'-Diaminodiphenylmethane	101-77-9				150				
3,3'-Dichlorobenzidine	91-94-1				150				
3,3'-Dimethoxybenzidine	119-90-4				150				
3,3'-Dimethylbenzidine	119-93-7				150				
3,3'-Dimethyl- 4, 4' diaminodiphenylmethane	838-88-0				150				
p-Cresidine	120-71-8				150				
4,4'-Methylene-Bis(2-Chloroaniline)	101-14-4				150				
4,4'-Oxydianiline	101-80-4				150				
4,4'-Thiodianiline	139-65-1				150				
o-Toluidine	95-53-4				150				
2,4-Tolylenediamine	95-80-7				150				
2,4,5-Trimethylaniline	137-17-7				150				
o-Anisidine	90-04-0	150							
p-Aminoazobenzene	60-09-3	150							
2,4-Xylidine	95-68-1	150							
2,6-Xylidine	87-62-7	150							

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Substances	CAS number	Limit values				Methodes			Timelines*
		Products: single substances mg/kg	Waste water after treatment µg/l	Sludge from waste water treatmentm g mg/kg	Input Chemicals mg/kg	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	
Subgroup: Carcinogenic dyes									
C.I Acid Red 26	3761-53-3	No intentional use	lowest dl	lowest dl	250	Not tested	tbd	tbd	Banned 31.12.2019
C.I. Basic Red 9	569-61-9		lowest dl	lowest dl	250		tbd	tbd	
C.I. Basic Violet 14	632-99-5		lowest dl	lowest dl	250		tbd	tbd	
C.I Direct Blue 6	2602-46-2		lowest dl	lowest dl	250		tbd	tbd	
C.I Direct Red 28	573-58-0		lowest dl	lowest dl	250		tbd	tbd	
C.I Direct Black 38	1937-37-7		lowest dl	lowest dl	250		tbd	tbd	
C.I Disperse Blue 1	2475-45-8		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Yellow 3	2832-40-8		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Orange 11	82-28-0		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Yellow 23	6250-23-3		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Orange 149	85136-74-9		lowest dl	lowest dl	250		tbd	tbd	
C.I. Solvent Yellow 1	60-09-3		lowest dl	lowest dl	250		tbd	tbd	
C.I. Solvent Yellow 2	60-11-7 EN71-9		lowest dl	lowest dl	250		tbd	tbd	
C.I. Solvent Yellow 3	97-56-3		lowest dl	lowest dl	250		tbd	tbd	
C.I. Solvent Yellow 14	842-07-9		lowest dl	lowest dl	250		tbd	tbd	
C.I. Basic Blue 26	2580-56-5		lowest dl	lowest dl	250		tbd	tbd	
C.I. Basic Violet 1	8004-87-3 EN71-9		lowest dl	lowest dl	250		tbd	tbd	
C.I. Direct Brown 95	16071-86-6		lowest dl	lowest dl	250		tbd	tbd	
C.I. Direct Blue 15	2429-74-5		lowest dl	lowest dl	250		tbd	tbd	
C.I. Direct Blue 218	28407-37-6		lowest dl	lowest dl	250		tbd	tbd	
C.I Acid Red 114	6459-94-5	lowest dl	lowest dl	250	tbd	tbd			
C.I Acid Violet 49	1694-09-3	lowest dl	lowest dl	250	tbd	tbd			

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Substances	CAS number	Limit values				Methodes			Timelines*
		Products: single substances mg/kg	Waste water after treatment µg/l	Sludge from waste water treatmentm g mg/kg	Input Chemicals mg/kg	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	
Subgroup: Allergenic Disperse dyes									
C.I. Disperse Blue 1	2475-45-8	No intentional use	lowest dl	lowest dl	250	Not tested	tbd	tbd	Banned 31.12.2019
C.I. Disperse Blue 3	2475-46-9		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Blue 7	3179-90-6		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Blue 26	3860-63-7		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Blue 35	12222-75-2, 56524-77-7		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Blue 102	12222-97-8		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Blue 106	12223-01-7		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Blue 124	61951-51-7		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Brown 1	23355-64-8		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Orange 1	2581-69-3		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Orange 3	730-40-5		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Orange 37/76	13301-61-6		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Red 1	2872-52-8		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Red 11	2872-48-2		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Red 17	3179-89-3		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Yellow 1	119-15-3		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Yellow 3	2832-40-8		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Yellow 9	6373-73-5		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Yellow 39	12236-29-2		lowest dl	lowest dl	250		tbd	tbd	
C.I. Disperse Yellow 49	54824-37-2	lowest dl	lowest dl	250	tbd	tbd			
Subgroup: Navy Blue Colourant									
Component 1 (Navy blue)	118685-33-9	No intentional use	0,1	0,1	250	tbd	tbd	tbd	Banned 31.12.2019
Component 2 (Navy blue)	Not Allocated		0,1	0,1	250	tbd	tbd	tbd	
Subgroup: Dyes carcinogenic or equivalent concern									
Basic Green 4 (malachite green chlorite)	569-64-2	No intentional use	0,1	0,1	250	tbd	tbd	tbd	Banned 31.12.2019
Basic Green 4 (malachite green oxalate)	18015-76-4		0,1	0,1	250	tbd	tbd	tbd	
Basic Green 4 (malachite green)	10309-95-2		0,1	0,1	250	tbd	tbd	tbd	

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Substances	CAS number	Limit values				Methodes			Timelines*
		Products: single substances mg/kg	Waste water after treatment µg/l	Sludge from waste water treatmentmg g mg/kg	Input Chemicals mg/kg	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	
5. Organotin compounds									
MBT (Monobutyltin)	78763-54-9, 1118-46-3	No intentional use	0,01	0,01	5	With Reference To DIN EN17353 And followed by Gas Chromatography-Mass Spectrometry (GC-MS) Analysis.	With Reference To DIN EN17353 And followed by Gas Chromatography-Mass Spectrometry (GC-MS) Analysis.	Solvent extraction, derivatisation with tetraethylborate, GC/MS.	Banned for the product group Apparels 31.12.2018 Banned for home textiles and shoes 31.12.2019
DBT (Dibutyltin)	1002-53-5		0,01	0,01	20				
TBT (Tributyltin)	56573-85-4, 36643-28-4		0,01	0,01	5				
TPhT (Triphenyltin)	892-20-6, 668-34-8		0,01	0,01	5				
DOT (Dioctyltin)	94410-05-6, 15231-44-4		0,01	0,01	5				
MOT (Monooctyltin)	15231-57-9		0,01	0,01	5				
DPhT (Diphenyltin)	1011-95-6, 6381-06-2		0,01	0,01	5				
TeBT (Tetrabutyltin)	1461-25-2		0,01	0,01	5				
TCyHT (Tricyclohexyltin)	6056-50-4		0,01	0,01	tbd				
TPT (Tripropyltin)	761-44-4		0,01	0,01	tbd				
TeET (Tetraethyltin)	597-64-8		0,01	0,01	tbd				
TBTO	56-35-9		lowest dl	lowest dl	tbd				
DBTC	683-18-1		lowest dl	lowest dl	tbd				
DBB	75113-37-0	lowest dl	lowest dl	tbd					

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Substances	CAS number	Limit values				Methodes			Timelines*
		Products: single substances mg/kg	Waste water after treatment µg/l	Sludge from waste water treatmentm g mg/kg	Input Chemicals mg/kg	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	
6. PFCs (Perfluorocarbon / Polyfluorinated Compounds)									
PFOA	335-67-1	No intentional use	0,01	0,001	Sum 2	CEN/TS 15968:2010 - modified	C EN/TS 15968:2010. LC/MS analysis - modified	Solvent extraction CEN/TS 15968:2010. LC/MS analysis - modified	Banned 31.12.2016
PFNA	375-95-1		0,01	0,001	tbd				
PFBS	375-73-5 or		0,01	0,001	tbd				
	59933-66-3								
PFOS	1763-23-1		0,01	0,001	Sum 2				
4:2 FTOH	2043-47-2		0,1	0,01	tbd				
6:2 FTOH	647-42-7		0,1	0,01	tbd				
8:2 FTOH	678-39-7		0,1	0,01	tbd				
10:2 FTOH	865-86-1		0,1	0,01	tbd				
POSF	307-35-7		0,1	0,01	tbd				
PFHxS	355-46-4		0,01	0,001	tbd				
PFHxA	307-24-4		0,01	0,001	tbd				
PFOSA	754-91-6		0,1	0,01	tbd				
N-Me-FOSA	31506-32-8		0,1	0,01	tbd				
N-Et-FOSA	4151-50-2		0,1	0,01	tbd				
N-Me-FOSE alcohol	24448-09-7		0,1	0,01	tbd				
N-Et-FOSE alcohol	1691-99-2		0,1	0,01	tbd				
PFBA	375-22-4		0,01	0,001	tbd				
PFPeA	2706-90-3		0,01	0,001	tbd				
PFHpA	375-85-9		0,01	0,001	tbd				
PFDA	335-76-2		0,01	0,001	tbd				
PFUnA	2058-94-8		0,01	0,001	tbd				
PFDoA	307-55-1		0,01	0,001	tbd				
PFTTrA	72629-94-8		0,01	0,001	tbd				
PfteA	376-06-7	0,01	0,001	tbd					
PFHpS	375-92-8	0,01	0,001	tbd					
PFDS	335-77-3	0,01	0,001	tbd					
6:2 FTA	17527-29-6	0,1	0,01	tbd					
8:2 FTA	27905-45-9	0,1	0,01	tbd					
10:2 FTA	17741-60-5	0,1	0,01	tbd					
PF-3,7-DMOA	172155-07-6	0,01	0,001	tbd					
HPFHpA	1546-95-8	0,01	0,001	tbd					
4HPFUnA	34598-33-9	0,01	0,001	tbd					
1H, 1H, 2H, 2H-PFOS	27619-97-2	0,01	0,001	tbd					

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Substances	CAS number	Limit values				Methodes			Timelines*
		Products: single substances mg/kg	Waste water after treatment µg/l	Sludge from waste water treatmentm g mg/kg	Input Chemicals mg/kg	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	
7. Chlorobenzenes, Chlorotoluenes									
Chlorobenzene	108-90-7	No intentional use	lowest dl	lowest dl	tbd	tbd	tbd	tbd	Banned 31.12.2019
Dichlorobenzenes	various		lowest dl	lowest dl	tbd	Liquid extraction GCMS analysis	Liquid extraction GCMS analysis	Solvent extraction GCMS analysis	
1,2-Dichlorobenzene	95-50-1		0,02	0,01	1000				
1,3-Dichlorobenzene	541-73-1		0,02	0,01	Sum 200				
1,4-Dichlorobenzene	106-46-7		0,02	0,01					
Trichlorobenzenes	various		0,02	0,01					
1,2,3-Trichlorobenzene	87-61-6		0,02	0,01					
1,2,4-trichlorobenzene	120-82-1		0,02	0,01					
1,3,5-Trichlorobenzene	108-70-3		0,02	0,01					
Tetrachlorobenzene	12408-10-5		0,02	0,01					
1,2,3,4-tetrachlorobenzene	634-66-2		0,02	0,01					
1,2,3,5-tetrachlorobenzene	634-90-2		0,02	0,01					
1,2,4,5-tetrachlorobenzene	95-94-3		0,02	0,01					
Pentachlorobenzene	608-93-5		0,02	0,01					
Hexachlorobenzene	118-74-1		0,02	0,01					
Chlorotoluenes									
2-chlorotoluene	95-49-8	No intentional use	lowest dl	lowest dl	Sum 200	tbd	tbd	tbd	Banned 31.12.2019
3-chlorotoluene	108-41-8		lowest dl	lowest dl		tbd	tbd	tbd	
4-chlorotoluene	106-43-4		lowest dl	lowest dl		tbd	tbd	tbd	
2,3-dichlorotoluene	32768-54-0		lowest dl	lowest dl		tbd	tbd	tbd	
2,4-dichlorotoluene	95-73-8		lowest dl	lowest dl		tbd	tbd	tbd	
2,5-dichlorotoluene	19398-61-9		lowest dl	lowest dl		tbd	tbd	tbd	
2,6-dichlorotoluene	118-69-4		lowest dl	lowest dl		tbd	tbd	tbd	
3,4-dichlorotoluene	95-75-0		lowest dl	lowest dl		tbd	tbd	tbd	
2,3,6-trichlorotoluene	2077-46-5		lowest dl	lowest dl		tbd	tbd	tbd	
2,4,5-trichlorotoluene	6639-30-1		lowest dl	lowest dl		tbd	tbd	tbd	
Benzotrichloride	98-07-7		lowest dl	lowest dl		tbd	tbd	tbd	
alfa, 2,4-trichlorotoluene	94-99-5		lowest dl	lowest dl		tbd	tbd	tbd	
alfa,2,6-trichlorotoluene	2014-83-7		lowest dl	lowest dl		tbd	tbd	tbd	
alfa,3,4-trichlorotoluene	102-47-6		lowest dl	lowest dl		tbd	tbd	tbd	
alpha, alpha, 2,6- tetrachlorotoluene	81-19-6		lowest dl	lowest dl		tbd	tbd	tbd	
alpha, alpha, alpha, 2,- tetrachlorotoluene	2136-89-2		lowest dl	lowest dl		tbd	tbd	tbd	
alpha, alpha, alpha, 4- tetrachlorotoluene	5216-25-1		lowest dl	lowest dl		tbd	tbd	tbd	
2,3,4,5,6-pentachlorotoluene	877-11-2		lowest dl	lowest dl		tbd	tbd	tbd	
Benzyl chloride; α-chlorotoluene	100-44-7		lowest dl	lowest dl		tbd	tbd	tbd	
α,α-Dichlorotoluene (Benzal chloride)	98-87-3		lowest dl	lowest dl		tbd	tbd	tbd	

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Substances	CAS number	Limit values				Methodes			Timelines*
		Products: single substances mg/kg	Waste water after treatment µg/l	Sludge from waste water treatmentm g mg/kg	Input Chemicals mg/kg	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	
8. Chlorinated solvents									
Dichloromethane	75-09-2	No intentional use	1	0,3	5	By Headspace Gas Chromatography Mass Spectrometric (HS – GC/MS) Analysis	By Headspace Gas Chromatography Mass Spectrometric (HS – GC/MS) Analysis	GC-MS Headspace analysis.	Phase out
Chloroform	67-66-3		1	0,3	tbd				
Tetrachloromethane	56-23-5		1	0,3	tbd				
1,1,2-Trichloroethane	79-00-5		1	0,3	tbd				
1,1-Dichloroethane	75-34-3		1	0,3	tbd				
1,2-Dichloroethane	107-06-2		1	0,3	5				
Trichloroethylene	79-01-6		1	0,3	40				
Perchloroethylene	127-18-4		1	0,3	5				
1,1,1-trichloroethane	71-55-6		1	0,3	tbd				
1,1,1,2-Tetrachloroethane	630-20-6		1	0,3	tbd				
1,1,2,2-Tetrachloroethane	79-34-5		1	0,3	tbd				
Pentachloroethane	76-01-7		1	0,3	tbd				
1,1-Dichloroethylene	75-35-4		1	0,3	tbd				
Other VOCs									
Methyl-ethyl ketone	78-93-3	No intentional use	lowest dl	0,1	10	tbd	tbd	tbd	Phase out
Benzene	71-43-2		lowest dl	0,1	50	tbd	tbd	tbd	Phase out
Toluene	108-88-3		lowest dl	0,1	tbd	tbd	tbd	tbd	Phase out
Ethylbenzene	100-41-4		lowest dl	0,1	tbd	tbd	tbd	tbd	Phase out
Xylene	1330-20-7 (all isomers)		lowest dl	0,1	500	tbd	tbd	tbd	Phase out
Styrene	100-42-5		lowest dl	0,1	tbd	tbd	tbd	tbd	Verification
Cyclohexanone	108-94-1		lowest dl	2	tbd	tbd	tbd	tbd	Verification
2-ethoxyethylacetate	111-15-9		lowest dl	10	tbd	tbd	tbd	tbd	Phase out
1,2,3-trichloropropane	96-18-4		lowest dl	10	tbd	tbd	tbd	tbd	Phase out
Acetophenone	98-86-2		lowest dl	0,1	tbd	tbd	tbd	tbd	Verification
N,N-dimethylformamide	68-12-2		lowest dl	0,1	tbd	tbd	tbd	tbd	Verification
1-methyl-2-pyrrolidone	872-50-4		lowest dl	50	tbd	tbd	tbd	tbd	Verification
2-phenyl-2-propanole	617-94-7		lowest dl	0,1	tbd	tbd	tbd	tbd	Verification
N,N-dimethylacetamide	127-19-5		lowest dl	20	tbd	tbd	tbd	tbd	Verification
o-Cresol	95-48-7		lowest dl	lowest dl	500	tbd	tbd	tbd	Phase out
p-Cresol	106-44-5		lowest dl	lowest dl	500	tbd	tbd	tbd	Phase out
m-Cresol	108-39-4		lowest dl	lowest dl	500	tbd	tbd	tbd	Phase out
Formaldehyde	50-00-0	Based on REWE authorisation in special cases, child limit ≤ 16, Adult < 75	lowest dl	lowest dl	tbd	tbd	tbd	tbd	Verification

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Substances	CAS number	Limit values				Methodes			Timelines*
		Products: single substances mg/kg	Waste water after treatment µg/l	Sludge from waste water treatmentm g mg/kg	Input Chemicals mg/kg	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	
9. Chlorophenols									
Pentachlorophenols (PCP)	87-86-5	No intentional use	0,5	0,025	Sum 20	Extraction / Derivation followed by GC-MS analysis	Liquid extraction, derivatisation, with acetic anhydride, GC-MS analysis.	Solvent extraction, derivatisation, with acetic anhydride, GCMS analysis.	Banned 31.12.2017
Tetrachlorophenols (TeCP)	25167-83-3			0,025					
2,3,4,5-Tetrachlorophenol	4901-51-3			0,025					
2,3,4,6-Tetrachlorophenol	58-90-2			0,025					
2,3,5,6-tetrachlorophenol	935-95-5			0,025					
Trichlorophenol (TriCP)	25167-82-2			0,025					
2,4,6-trichlorophenol	88-06-2			0,025					
2,3,4-trichlorophenol	15950-66-0			0,025					
2,3,5-trichlorophenol	933-78-8			0,025					
2,3,6-trichlorophenol	933-75-5			0,025					
2,4,5-trichlorophenol	95-95-4			0,025					
3,4,5-trichlorophenol	609-19-8			0,025					
Dichlorophenols (DiCP)	25167-81-1			0,025					
2,3-dichlorophenol	576-24-9			0,025					
2,4-dichlorophenol	120-83-2			0,025					
2,5-dichlorophenol	583-78-8			0,025					
2,6-dichlorophenol	87-65-0			0,025					
3, 4-dichlorophenol	95-77-2			0,025					
3, 5-dichlorophenol	591-35-5			0,025					
Mono Chlorophenol	various			0,025					
10. Short Chain Chlorinated Paraffins									
SCCP C10-13	85535-84-8	No intentional use	0,4	0,03	50	Extraction with toluene, GC-MS resp. LC/MS analysis	Liquid extraction with toluene, GC-MS resp. LC/MS analysis	Solvent extraction with toluene, GC-MS resp. LC/MS analysis	Banned 31.12.2017 for the product group Apparels Banned for home textiles and shoes 31.12.2019

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Substances	CAS number	Limit values				Methodes			Timelines*			
		Products: single substances mg/kg	Waste water after treatment µg/l	Sludge from waste water treatmentm g mg/kg	Input Chemicals mg/kg	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge				
11. Heavy metals												
Mercury(Hg): Extractable in products. Total in chemicals, waste water and sludge	7439-97-6	No intentional use	0,05	0,006	4 (25 for pigments)	Digestion, ICP analysis	Digestion, ICP analysis	Digestion, ICP analysis	Phase out			
Total and extractable hexavalent Chromium(Cr-VI)	18540-29-9		tbd	1	10				Banned 31.12.2017			
Arsenic(As) : Extractable in products. Total in chemicals, waste water and sludge	7440-38-2		1	1	50				Phase out			
Total Cadmium(Cd)	7440-43-9		0,1	1	20 (50 for pigments)				Phase out			
Total Lead(Pb)	7439-92-1		1	1	100				Phase out			
Chromium(Cr): Extractable in products. Total in chemicals, waste water and sludge	7440-47-3	Residual traces are only accepted for colorants complying with ETAD concentration limits	1	1	100				tbd	tbd	tbd	Phase out
Nickel(Ni) : Extractable in products. Total in chemicals, waste water and sludge	7440-02-0		1	1	200				Verification			
Copper(Cu): Extractable in products. Total in chemicals, waste water and sludge	7440-50-8		1	1	250				Verification			
Zinc(Zn): Extractable in products. Total in chemicals, waste water and sludge	7440-66-6		1	4	1500				Verification			
Manganese(Mn): Extractable in products. Total in chemicals, waste water and sludge	7439-96-5		1	1	1000				Verification			
Antimony (Sb): Extractable in products. Total in chemicals, waste water and sludge	7440-36-0		1	1	50	Verification						
Cobalt (Co): Extractable in products. Total in chemicals, waste water and sludge	7440-48-4		tbd	≤ 4 (≤ 1 for children)	500	tbd	tbd	tbd	Verification			
Silver	7440-22-4		No intentional use	tbd	tbd	100	tbd	tbd	tbd	Phase out		
Bisphenols												
Bisphenol A (BPA)	80-05-7	No intentional use	tbd	tbd	tbd	tbd	tbd	tbd	Banned 31.12.2019			
Glycols												
Bis-(2-methoxyethyl) ether	111-96-6	No intentional use	tbd	20	50	tbd	tbd	tbd	Phase out			
2-ethoxyethanol	110-80-5		tbd	tbd	50	tbd	tbd	tbd				
2-ethoxyethyl acetate	111-15-9		tbd	10	50	tbd	tbd	tbd				
Ethylene glycol dimethyl ether	110-71-4		tbd	tbd	50	tbd	tbd	tbd				
2-methoxyethanol	109-86-4		tbd	tbd	50	tbd	tbd	tbd				
2-methoxyethylacetate	110-49-6		tbd	tbd	50	tbd	tbd	tbd				
2-methoxypropylacetate	70657-70-4		tbd	tbd	50	tbd	tbd	tbd				
Triethylene glycol dimethyl ether, glycol ether Glycol: triglyme (TEGDME)	112-49-2		tbd	tbd	50	tbd	tbd	tbd				
o-Phenylphenol (OPP)	90-43-7		No intentional use	lowest dl	lowest dl	tbd	tbd	tbd		tbd	Verification	

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Substances	CAS number	Limit values				Methodes			Timelines*
		Products: single substances mg/kg	Waste water after treatment µg/l	Sludge from waste water treatmentm g mg/kg	Input Chemicals mg/kg	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	
BIOCIDES									
Subgroup: Biocides / Predominante usage in textiles									
Dimethyl fumarate (DMF)	624-49-7	No intentional use	lowest dl	lowest dl	tbd	tbd	tbd	tbd	Banned 31.12.2018
Subgroup: Pesticides / Predominante usage in agriculture									
Aldrin	309-00-2	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Captafol	2425-06-1	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Chlordane	57-74-9	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
DDT	50-29-3	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
o,p'-DDT	789-02-6	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Dieldrin	60-57-1	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Endrin	72-20-8	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Heptachlor	76-44-8	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
α-Hexachlorocyclohexane	319-84-6	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
β-Hexachlorocyclohexane	319-85-7	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
δ-Hexachlorocyclohexane	319-86-8	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
2,4,5- T	93-76-5	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
2,4-D	94-75-7	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
chlordimeform	6164-98-3	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Ethyl-4,4'-dichlorobenzilate	510-15-6	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Dinoseb	88-85-7	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
monocrotophos	6923-22-4	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Toxaphene	8001-35-2	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
methamidophos	10265-92-6	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
methyl parathion	298-00-0	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
parathion	56-38-2	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
phosphamidon	13171-21-6	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
lindane	58-89-9	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
DDD	53-19-0	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
DDD (Dichlorodiphenyl- dichloroethane)	72-54-8	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
diazinon	333-41-5	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
propetanfos	31218-83-4	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
chlorfenvinphos	470-90-6	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
diclorofention	97-17-6	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
clorpyrofos	5598-15-2	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	

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Substances	CAS number	Limit values				Methodes			Timelines*
		Products: single substances mg/kg	Waste water after treatment µg/l	Sludge from waste water treatmentm g mg/kg	Input Chemicals mg/kg	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	
fenchlorphos	299-84-3	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	Banned 31.12.2019
diflubenzurone	35367-38-5	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
triflumurone	64628-44-0	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
cypermethrin	52315-07-8	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
deltamethrin	52918-63-5	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
fenvalerate	51630-58-1	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
cyhalothrin	91465-08-6	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
flumethrin	69770-45-2	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Azinophosmethyl	86-50-0	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Azinophosethyl	2642-71-9	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Bromophos-ehthyl	4824-78-6	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Carbaryl	63-25-2	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Coumaphos	56-72-4	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Cyfluthrin	68359-37-5	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
DEF	78-48-8	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
DDE	3424-82-6, 72-55-9	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Dichlorprop	120-36-2	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Dicrotophos	141-66-2	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Dimethoate	60-51-5	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Endosulfan, α-	959-98-8	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Endosulfan, β-	33213-65-9	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Esfenvalerate	66230-04-4	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Heptachloroepoxide	1024-57-3	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Isodrine	465-73-6	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Kelevane	4234-79-1	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Kepone	143-50-0	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Malathion	121-75-5	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
MCPA	94-74-6	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
MCPB	94-81-5	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Mecoprop	93-65-2	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Mirex	2385-85-5	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Methoxychlor	72-43-5	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Perthane	72-56-0	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Phosdrin/Mevinphos	7786-34-7	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Profenophos	41198-08-7	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Quinalphos	13593-03-8	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Strobane	8001-50-1	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Telodrine	297-78-9	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	
Trifluralin	1582-09-8	1	lowesst dl	lowest dl	1	tbd	tbd	tbd	

Manufacturing Restricted Substances List (MRSL)

Version 4.0 - Status December 2018



This MRSL builds the basis for REWE Group's Detox Program. It defines the hazardous chemicals which need to be phased out till 2020. For all chemicals limit values for products, waste water, sludge and input chemicals have been defined. These limit values have not yet been tested and compared extensively for each of the hazardous substances groups. Additionally different accredited laboratories may use different technologies and methods for testing, which could lead to different results. Therefore research is required and more knowledge has to be gained before the limit values determined in this MRSL can become mandatory for the supply chains. REWE Group will work closely with accredited laboratories as well as the chemical industry to drive forward the research and will support their suppliers with auditing and training. Always the best available analytical testing method for sludge, waste water or input chemical formulation must be applied at the time of test performing.

Substances	CAS number	Limit values				Methodes			Timelines*	
		Products: single substances mg/kg	Waste water after treatment µg/l	Sludge from waste water treatmentm g mg/kg	Input Chemicals mg/kg	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge		
Nitrosamines										
N-Nitrosodimethylamine (NDMA)	62-75-9	No intentional use and prevention of nitrosamines formation during production	tbd	lowest dl	tbd	tbd	tbd	tbd	Banned 31.12.2018	
N-Nitrosodiethylamine (NDEA)	55-18-5		tbd	lowest dl	tbd	tbd	tbd	tbd		
N-Nitrosodi-n-propylamine (NDPA)	621-64-7		tbd	lowest dl	tbd	tbd	tbd	tbd		
N-Nitrosodi-n-butylamine (NDBA)	924-16-3		tbd	lowest dl	tbd	tbd	tbd	tbd		
N-Nitrosopiperidine (NPIP)	100-75-4		tbd	lowest dl	tbd	tbd	tbd	tbd		
N-Nitrosopyrrolidine (NPYR)	930-55-2		tbd	lowest dl	tbd	tbd	tbd	tbd		
N-Nitrosomorpholine (NMOR)	59-89-2		tbd	lowest dl	tbd	tbd	tbd	tbd		
N-nitroso N-methyl N-phenylamine (NMPPhA)	614-00-6		tbd	lowest dl	tbd	tbd	tbd	tbd		
N-nitroso-N-ethyl-N-phenylamine (NEPhA)	612-64-6		tbd	lowest dl	tbd	tbd	tbd	tbd		
Polycyclic Aromatic Hydrocarbons PAHs										
Benzo-[a]-pyrene (BaP)	50-32-8	No intentional use	tbd	lowest dl	20	tbd	tbd	tbd	Phase out	
Benzo-[e]-pyrene (BeP)	192-97-2		tbd	lowest dl	Sum 200	tbd	tbd	tbd		
Benzo-[a]-anthracene (BaA)	56-55-3		tbd	lowest dl		tbd	tbd	tbd		
Chrysene (CHR)	218-01-9		tbd	lowest dl		tbd	tbd	tbd		
Benzo-[b]-fluoranthene (BbFA)	205-99-2		tbd	lowest dl		tbd	tbd	tbd		
Benzo-[j]-fluoranthene (BjFA)	205-82-3		tbd	lowest dl		tbd	tbd	tbd		
Benzo-[k]-fluoranthene (BkFA)	207-08-9		tbd	lowest dl		tbd	tbd	tbd		
Dibenzo-[a,h]-anthracene (DBA _h A)	53-70-3		tbd	lowest dl		tbd	tbd	tbd		
Anthracene	120-12-7		tbd	lowest dl		tbd	tbd	tbd		
Pyrene	129-00-0		tbd	lowest dl		tbd	tbd	tbd		
Benzo[g,h,i]perylene	191-24-2		tbd	lowest dl		tbd	tbd	tbd		
Indeno[1,2,3-cd]pyrene	193-39-5		tbd	lowest dl		tbd	tbd	tbd		
Flouranthene	206-44-0		tbd	lowest dl		tbd	tbd	tbd		
Acenaphthylene	208-96-8		tbd	lowest dl		tbd	tbd	tbd		
Acenaphthene	83-32-9		tbd	lowest dl		tbd	tbd	tbd		
Phenathrene	85-01-8		tbd	lowest dl		tbd	tbd	tbd		
Fluorene	86-73-7		tbd	lowest dl		tbd	tbd	tbd		
Naphtalene	91-20-3		lowest dl	lowest dl		tbd	tbd	tbd		
Dibenzo[a,i]pyrene	189-55-9		1	10		10	Solvent extraction GC/MS	US EPA 8270 DIN 38407-39 Solvent extraction GC/MS		US EPA 8270 DIN 38407-39 Solvent extraction GC/MS
Dibenzo[a,h]pyrene	189-64-0		1	10		10				
Dibenzo[a,l]pyrene	191-30-0	1	10	10						
*DEFINITION										
banned, date xx.xx.xxxx	Banned substances will not be used in the production of REWE Groups private label products after the indicated date.									
phase out	Phase out of chemical is ongoing. Timeline for a ban has to be defined.									
verification	All substances under verification will be screened by REWE Group. Based on the result of the screening REWE Group will decide whether these chemicals remain on the MRSL as hazardous characteristics apply and chemicals are used in textile production. If chemicals are identified as hazardous a timeline for a ban will be defined.									
IMPORTANT NOTE	REWE Group would like to notify that not all legally restricted substances are explicitly specified in the MRSL, please always check the statutory laws and regulations for legal compliance. In order to avoid regrettable substitution with substances already on watch lists, please check prior to substitution the CoRAP list of ECHA https://echa.europa.eu/de/information-on-chemicals/evaluation/community-rolling-action-plan/corap-list-of-substances									