TCHIBO Manufacturing Restricted Substances List (MRSL V4.0)

Responsible handling of chemicals (including purchase, use and disposal) must be implemented at any steps of supply chains.

***** Detection limits have not been tested and compared extensively yet for each of the hazardous substances groups. 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. Tchibo has committed to phase out discharges and losses of hazardous chemicals from the production and the products until 2020. Phase out means step by step elimination "not detectable to the limits of the best current technology". To systematically phase out hazardous chemicals, the current laboratory and analytical technologies must be reproducible and comparable for each media or material which is subject to analysis.
Background levels (anthropogenic or natural) as well as best current technologies derived from waste water legal requirements will be considered in the revisions of this document.

****** Detection limits have not been tested and compared extensively yet for each of the hazardous substances groups in chemical inputs by the international chemical industry. 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. Tchibo will engage in stakeholder initiatives to gain knowledge on the appearance of traces of hazardous substances in chemicals, analytical methods and detection limits for chemical formulations. Target of this engagement is the phase out of hazardous chemicals until 2020 by the international chemical industry.

******* Detection limits have not been tested and compared extensively yet for each of the hazardous substances groups. 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. Detection limits of hazardous chemicals tested by accredited laboratories may vary between different labs and/or standards for certain materials. Additionally, methods might not be developed yet. Best current laboratory and analytical technologies must be reproducible and comparable for each product or material which is subject to analysis. Tchibo will work closely together with the accredited laboratories to work towards reproducible and comparable results according to best current technologies.

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEO): including all isomers (No intentional use)									
Nonylphenol (NP) mixed isomers		various	1 µg/l	0.2 mg/kg	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	extraction with Ethanol or THF/Acetononitril / AP: GC-MS und LC-DAD analysis APEO: LC-MS analysis	banned
	Nonylphenol	104-40-5							banned
		11066-49-2							banned
	4-Nonylphenol (branched)	25154-52-3							banned
		84852-15-3							banned
		1173019-62-9							banned
	Nonylphenol (mixed isomers)	90481-04-2							banned
Octylphenol (OP), mixed isomers		various	1 µg/l	0.2 mg/kg					banned
	4-(1,1,3,3-Tetramethylbutyl)phenol	140-66-9							banned
	OctylPhenol	27193-28-8							banned
	4-Octylphenol	1806-26-4							banned
Nonylphenol ethoxylates (NPEO), NP1EO, NP2EO [*1] n_{3-18} [*2]		various	1 µg/l	0.2 mg/kg					banned
	Nonylphenol ethoxylated	9016-45-9							banned
	4-Nonylphenol, ethoxylated	26027-38-3							banned
	Nonylphenol ethoxylated	68412-54-4							banned
	Nonylphenol ethoxylated	127087-87-0							banned
	Nonylphenol ethoxylated	37205-87-1							banned
Octylphenol ethoxylates (OPEO) OP1EO, OP2EO [*1] n_{3-18} [*2]		various	1 µg/l	0.2 mg/kg					banned
		9002-93-1							banned
	4-tert-Octylphenolethoxylate	9036-19-5							banned
	4-tert-Octylphenolethoxylate	68987-90-6							banned

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
Chlorobenzenes - Other isomers of mono-, di-, tri-, tetra-, penta- and hexa- chlorobenzene (No intentional use)									
Dichlorobenzene	1,2-dichlorobenzene	95-50-1	0.02 µg/l	0.01 mg/kg	Liquid extraction GCMS analysis	Liquid extraction GCMS analysis	Solvent extraction GCMS analysis	extraction with Dichloromethane, GC-MS analysis acc. to DIN 54232	banned
	1,3-Dichlorobenzene	541-73-1							banned
	1,4-Dichlorobenzene	106-46-7							banned
Tetrachlorobenzene	Tetrachlorobenzene (all isomers)	12408-10-5							banned
	1,2,3,4-Tetrachlorobenzene	634-66-2							banned
	1,2,3,5-Tetrachlorobenzene	634-90-2							banned
	1,2,4,5-Tetrachlorobenzene	95-94-3							banned
Pentachlorobenzene		608-93-5							banned
Hexachlorobenzene		118-74-1							banned
Trichlorobenzene	Trichlorobenzene (all isomers)	12002-48-1							banned
	1,2,4-Trichlorobenzene	120-82-1							banned
	1,2,3-Trichlorobenzene	87-61-6							banned
	1,3,5-Trichlorobenzene	108-70-3							banned
Chlorobenzene		108-90-7	tbd	tbd	tbd	tbd	tbd		banned
Chlorotoluenes - Mono-, di-, tri-, tetra- and penta- chlorotoluene (No intentional use)									
Chlorotoluenes	2-chlorotoluene	95-49-8	tbd	tbd	tbd	tbd	tbd	extraction with Dichloromethane, GC-MS analysis acc. to DIN 54232	banned
	3-chlorotoluene	108-41-8	tbd	tbd	tbd	tbd	tbd		banned
	4-chlorotoluene	106-43-4	tbd	tbd	tbd	tbd	tbd		banned
Dichlorotoluene	2,3-dichlorotoluene	32768-54-0	tbd	tbd	tbd	tbd	tbd		banned
	2,4-dichlorotoluene	95-73-8	tbd	tbd	tbd	tbd	tbd		banned
	2,5-dichlorotoluene	19398-61-9	tbd	tbd	tbd	tbd	tbd		banned
	2,7-dichlorotoluene	118-69-4	tbd	tbd	tbd	tbd	tbd		banned
	3,4-dichlorotoluene	95-75-0	tbd	tbd	tbd	tbd	tbd		banned
Trichlorotoluene	2,3,6-trichlorotoluene	2077-46-5	tbd	tbd	tbd	tbd	tbd		banned
	2,4,5-trichlorotoluene	6639-30-1	tbd	tbd	tbd	tbd	tbd		banned
	alfa, 2,4-trichlorotoluene	98-07-7	tbd	tbd	tbd	tbd	tbd		banned
	alfa,2,6-trichlorotoluene	94-99-5	tbd	tbd	tbd	tbd	tbd		banned
	alfa,3,4-trichlorotoluene	2014-83-7	tbd	tbd	tbd	tbd	tbd		banned
Benzotrichloride		102-47-6	tbd	tbd	tbd	tbd	tbd		banned
Tetrachlorotoluene	alpha, alpha, 2,6-tetrachlorotoluene	81-19-6	tbd	tbd	tbd	tbd	tbd		banned
	alpha, alpha, alpha, 2,-tetrachlorotoluene	2136-89-2	tbd	tbd	tbd	tbd	tbd		banned
	alpha, alpha, alpha, 4,-tetrachlorotoluene	5216-25-1	tbd	tbd	tbd	tbd	tbd		banned
Pentachlorotoluene	2,3,4,5,6-pentachlorotoluene	877-11-2	tbd	tbd	tbd	tbd	tbd		banned
	Benzyl chloride; α-chlorotoluene	100-44-7	tbd	tbd	tbd	tbd	tbd		banned
	α,α-Dichlorotoluene (Benzal chloride)	98-87-3	tbd	tbd	tbd	tbd	tbd		banned

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
Chlorophenols - Mono-, di-, tri-, tetra- and penta- chlorophenols (No intentional use)									
Pentachlorophenols		87-86-5	0.5 µg/l	0.025 mg/kg	Extraction / Derivation followed by GC-MS analysis	Liquid extraction, derivatisation, with acetic anhydride, GC-MS analysis.	Solvent extraction, derivatisation, with acetic anhydride, GCMS analysis.	Modified § 64 LFGB BVL 82.02-08 with KOH extraction, analysis: GC-ECD / GC-MS	banned
Tetrachlorophenols	Tetrachlorophenols (TeCP)	25167-83-3							banned
	2,3,4,5-Tetrachlorophenol	4901-51-3							banned
	2,3,4,6-Tetrachlorophenol	58-90-2							banned
	2,3,5,6-Tetrachlorophenol	935-95-5							banned
Trichlorophenols	Trichlorophenols (TrCP)	25167-82-2							banned
	2,4,6-trichlorophenol	88-06-2							banned
	2,3,4-trichlorophenol	15950-66-0							banned
	2,3,5-trichlorophenol	933-78-8							banned
	2,3,6-trichlorophenol	933-75-5							banned
	2,4,5-trichlorophenol	95-95-4							banned
	3,4,5-trichlorophenol	609-19-8							banned
Dichlorophenols	Dichlorophenols (DiCP)	25167-81-1							banned
	2,3-dichlorophenol	576-24-9							banned
	2,4-dichlorophenol	120-83-2							banned
	2,5-dichlorophenol	583-78-8							banned
	2,6-Dichlorophenol	87-65-0							banned
	3,4-dichlorophenol	95-77-2							banned
	3,5-dichlorophenol	591-35-5							banned
Monochlorphenols	2-Chlorophenol	95-57-8							banned
	3-chlorophenol	108-43-0							banned
	4-chlorophenol	106-48-9							banned

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
Dyes and Pigments - Azo (Forming Restricted Amines) and further organic impurities (The following substance group is not expected to be used intentionally in the production of textiles. Tchibo will engage in stakeholder initiatives towards the reduction/ phase out of contaminations of the substances in productions.) To avoid the use of colourants in production, which are known to release carcinogenic aromatic amines, suppliers shall forward the IFOP list (2001) to their chemical suppliers as guidance. (http://www.tegewa.de/uploads/media/Azodyes_pursuant_to_TRGS_614_TEGEWA.pdf). A recommendation for threshold limits for further relevant organic impurities like PCB, Dioxins and Furans is given in the "ETAD recommendation for threshold limits on impurities in dyes (2014) ". http://etad.com/en/publications.html									
Legally restricted amines	4-Aminodiphenyl	92-67-1	0.01 µg/l	0.01 mg/kg	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	§64 LFGB B 82.02-2, EN 14362-1; LL: ISO 17234-1	banned
	Benzidine	92-87-5							banned
	4-Chlor-o-toluidine/ 4-chloro-o-toluidinium chloride	95-69-2/ 3165-93-3							banned
	2-Naphthylamine/ 2-Naphthylammoniumacetate	91-59-8/ 553-00-4							banned
	o-Aminoazotoluene (Solvent Yellow 3)	97-56-3							banned
	2-Amino-4-nitrotoluene / 5-nitro-o-toluidine	99-55-8							banned
	p-Chloroaniline / 4-chloroaniline	106-47-8							banned
	2,4-Diaminoanisole / 4-methoxy-m-phenylenediamine/4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate	615-05-4/ 39156-41-7							banned
	4,4`-Diaminodiphenylmethane / 4,4'-methylenedianiline	101-77-9							banned
	3,3`-Dichlororbenzidine	91-94-1							banned
	3,3`-Dimethylbenzidine	119-93-7							banned
	3,3`-Dimethyl-4,4`-diaminodiphenylmethane / 4,4'-methylendi-o-toluidine	838-88-0							banned
	p-Cresidine / 6-methoxy-m-toluidine	120-71-8							banned
	4,4`Methylen-bis-(2-chloroaniline)	101-14-4							banned
	4,4`-Oxydianiline	101-80-4							banned
	4,4`-Thiodianiline	139-65-1							banned
	o- Toluidine	95-53-4							banned
	2,4-Toluylendiamine / 5-nitro-o-toluidine / 4-methyl-m-phenylenediamine	95-80-7							banned
	2,4,5-Trimethylaniline/ 2,4,5-trimethylaniline hydrochloride	137-17-7/ 21436-97-5							banned
	o-Ansidine (2-Methoxyaniline)	90-04-0							banned
	2,4-Xylidine (2,4-Dimethylaniline)	95-68-1							banned
	4-aminoazobenzene (Aminoazobenzene/ Solvent Yellow 1)	60-09-3							banned
	2,6-Xylidine (2,6-Dimethylaniline)	87-62-7							banned
	3,3'-Dimethoxylbenzine	119-90-4							banned
	Aniline	62-53-3	tbd	tbd	tbd	tbd	tbd		banned
	2-nitroanisole	91-23-6	tbd	tbd	tbd	tbd	tbd		banned
	2-nitronaphthalene	581-89-5	tbd	tbd	tbd	tbd	tbd		banned
	Azobenzene	103-33-3	tbd	tbd	tbd	tbd	tbd		banned
	Michler's base (N,N,N',N'-tetramethyl-4,4'-methylendianiline)	101-61-1	tbd	tbd	tbd	tbd	tbd		banned
	N-(2-Naphthyl)anilin	135-88-6	tbd	tbd	tbd	tbd	tbd		banned

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
	Anthraquinone	84-65-1	tbd	tbd	tbd	tbd	tbd	§64 LFGB B 82.02-2, EN 14362-1; LL: ISO 17234-1	banned
	anthraquinone, 1-hydroxy	129-43-1	tbd	tbd	tbd	tbd	tbd		banned
	benzophenone, 4,4'-bis (dimethylamino)- [Michler's ketone]	90-94-8	tbd	tbd	tbd	tbd	tbd		banned
	Quinoline	91-22-5	tbd	tbd	tbd	tbd	tbd		banned
Dyes - Navy Blue Colourant (No intentional use)									
	Component 1 (Navy blue)	118685-33-9	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Component 2 (Navy blue)	Not Allocated	tbd	tbd	tbd	tbd	tbd	tbd	banned
Dyes and Pigments - Carcinogenic or Equivalent Concern + Disperse sensitizing dyestuffs (No intentional use) - Part 1									
	Acid Red 26	3761-53-3	tbd	tbd	tbd	tbd	tbd	§64 LFGB B 82.02-10, DIN 54231, analysis: HPLC-DAD-MS	banned
	Basic Red 9	569-61-9	tbd	tbd	tbd	tbd	tbd		banned
	Basic Violet 14	632-99-5	tbd	tbd	tbd	tbd	tbd		banned
	Direct Black 38	1937-37-7	tbd	tbd	tbd	tbd	tbd		banned
	Direct Blue 6	2602-46-2	tbd	tbd	tbd	tbd	tbd		banned
	Direct Red 28	573-58-0	tbd	tbd	tbd	tbd	tbd		banned
	Basic Blue 26 (with Michler's Ketone >0,1%)	2580-56-5	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Blue 1	2475-45-8	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Orange 11	82-28-0	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Yellow 3	2832-40-8	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Blue 3	2475-46-9	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Blue 7	3179-90-6	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Blue 26	3860-63-7	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Blue 35	12222-75-2 / 56524-77-7	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Blue 102	12222-97-8	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Blue 106	12223-01-7	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Blue 124	61951-51-7	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Brown 1	23355-64-8	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Orange 1	2581-69-3	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Orange 3	730-40-5	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Orange 37/76/59	13301-61-6	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Red 1	2872-52-8	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Red 11	2872-48-2	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Red 17	3179-89-3	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Yellow 1	119-15-3	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Yellow 9	6373-73-5	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Yellow 39	12236-29-2	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Yellow 49	54824-37-2	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Yellow 23	6250-23-3	tbd	tbd	tbd	tbd	tbd		banned
	Solvent Yellow 2	60-11-7 (EN 71-9)	tbd	tbd	tbd	tbd	tbd		banned
	Solvent Yellow 14	842-07-9	tbd	tbd	tbd	tbd	tbd		banned
	Direct Brown 95	16071-86-6	tbd	tbd	tbd	tbd	tbd		banned
	Basic Violet 1	8004-87-3 (EN 71-9)	tbd	tbd	tbd	tbd	tbd		banned
	Direct Blue 15	2429-74-5	tbd	tbd	tbd	tbd	tbd		banned
	Direct Blue 218	28407-37-6	tbd	tbd	tbd	tbd	tbd		banned
	Acid Red 114	6459-94-5	tbd	tbd	tbd	tbd	tbd		banned
	Acid Violet 49	1694-09-3	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Orange 149	85136-74-9	tbd	tbd	tbd	tbd	tbd		banned

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
Dyes and Pigments - Carcinogenic or Equivalent Concern + Disperse sensitizing dyestuffs (No intentional use) - Part 2									
	Basic Green 4 (malachite green chlorite)	569-64-2	tbd	tbd	tbd	tbd	tbd	§64 LFGB B 82.02-10, DIN 54231, analysis: HPLC-DAD-MS	banned
	Basic Green 4 (malachite green oxalate)	18015-76-4/ 2437-29-8	tbd	tbd	tbd	tbd	tbd		banned
	Basic Green 4 (malachite green)	10309-95-2	tbd	tbd	tbd	tbd	tbd		banned
	Basic Green 4 leuco base	129-73-7	tbd	tbd	tbd	tbd	tbd		banned
	Pigment Yellow 34	1344-37-2	tbd	tbd	tbd	tbd	tbd		banned
	Pigment Red 104	12656-85-8	tbd	tbd	tbd	tbd	tbd		banned
	Pigment Black 25	68186-89-0	tbd	tbd	tbd	tbd	tbd		banned
	Pigment Yellow 157	68610-24-2	tbd	tbd	tbd	tbd	tbd		banned
	Acid Orange 24	1320-07-6	tbd	tbd	tbd	tbd	tbd		banned
	Basic Violet 3 (> 0.1% Michlers Ketone)	548-62-9 / 603-48-5 / 14426-25-6	tbd	tbd	tbd	tbd	tbd		banned
	Direct Black 91	6739-62-4	tbd	tbd	tbd	tbd	tbd		banned
	Direct Blue 76	16143-79-6	tbd	tbd	tbd	tbd	tbd		banned
	Solvent Blue 4	6786-83-0	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Blue 291	83929-84-4 / 56548-64-2	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Red 15	116-85-8	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Violet 93	52697-38-8	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Yellow 54	7576-65-0	tbd	tbd	tbd	tbd	tbd		banned
	Disperse Yellow 64	10319-14-9 / 12223-86-8	tbd	tbd	tbd	tbd	tbd		banned
	Rhodamin B	81-88-9	tbd	tbd	tbd	tbd	tbd		banned
	Pigment Brown 22	29398-96-7	tbd	tbd	tbd	tbd	tbd		banned
	Pigment Red 53/ D&C Red No. 8	2092-56-0	tbd	tbd	tbd	tbd	tbd		verification [1, 2]
	Pigment Red 168	4378-61-4	tbd	tbd	tbd	tbd	tbd		verification [1, 2]
	Auramine hydrochloride/ Basic Yellow 2	2465-27-2	tbd	tbd	tbd	tbd	tbd		banned
	(methylenebis(4,1-phenylenazo(1-(3-(dimethylamino)propyl)-1,2-dihydro-6-hydroxy-4-methyl-2-oxopyridine-5,3-diyl)))-1,1'-dipyridinium dichloride dihydrochloride	118658-99-4	tbd	tbd	tbd	tbd	tbd		banned
	Pigment Rot 53:1 (C.I. 15585:1); D&C Red No. 9/ 5-Chloro-2-((2-hydroxy-1-naphthalenyl)azo)-4-methylbenzenesulfoni- c acid, barium salt(2:1)	5160-02-1	tbd	tbd	tbd	tbd	tbd		verification [1, 2]
Dyes and Pigments – Restrictions due to contamination risk (Chemical Input control mandatory. Banned if hazardous contaminations are contained, such as e.g. PAH)									
	Carbon black/ Pigment Black 7	1333-86-4	tbd	tbd	tbd	tbd	tbd	tbd	verification (4)

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
Flame Retardants (No Intentional use)									
	Polybrominated diphenyl ethers (PBDE) others		tbd	tbd	tbd	tbd	tbd	tbd	banned
	Tris(2-chloroethyl)phosphate	115-96-8	0.05 µg/l	0.03 mg/kg	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	tbd	banned
	Decabromodiphenyl ether	1163-19-5						tbd	banned
	Tris(2,3,-dibromopropyl)-phosphate	126-72-7						tbd	banned
	Pentabromodiphenyl ether	32534-81-9						tbd	banned
	Octabromodiphenyl ether	32536-52-0						tbd	banned
	Tetrabromobisphenol A	79-94-7						tbd	banned
	Monobromo diphenyl ethers	not explicitly mentioned						tbd	banned
	Dibromo diphenyl ethers	not explicitly mentioned						tbd	banned
	Tribromo diphenyl ethers	not explicitly mentioned						tbd	banned
	Tetrabromo diphenyl ethers	40088-47-9						tbd	banned
	Hexabromo diphenyl ethers	36483-60-0						tbd	banned
	Heptabromo diphenyl ethers	68928-80-3						tbd	banned
	Nonabromo diphenyl ethers	63936-56-1						tbd	banned
	Monobromo biphenyls	not explicitly mentioned						tbd	banned
	Dibromo biphenyls	not explicitly mentioned						tbd	banned
	Tribromo biphenyls	not explicitly mentioned						tbd	banned
	Tetrabromo biphenyls	not explicitly mentioned						tbd	banned
	Pentabromo biphenyls	not explicitly mentioned						tbd	banned
	Hexabromo biphenyls	not explicitly mentioned						tbd	banned
	Heptabromo biphenyls	not explicitly mentioned						tbd	banned
	Octabromo biphenyls	not explicitly mentioned						tbd	banned
	Nonabromo biphenyls	not explicitly mentioned						tbd	banned
	Decabromo biphenyl	13654-09-6						tbd	banned
	Hexabromcyclododecan (alpha, beta, gamma)	25637-99-4 / 134237-50-6 / 134237-51-7 / 134237-52-8 / 3194-55-6						tbd	banned
	Polybromobiphenyls / Polybrominated biphenyls	59536-65-1	tbd	0.03 mg/kg	tbd	tbd	tbd	tbd	banned
	Tris(1-chloro-2-propyl) phosphate (TCPP)	13674-84-5	tbd	tbd	tbd	tbd	tbd	tbd	banned

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
	Sodium tetraborate	1303-96-4 / 1303-43-4 / 12179-04-3 / 215-540-4	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Boron trioxide	1303-86-2	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Boric acid	10043-35-3 / 11113-50-1	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Antimony trioxide	1309-64-4	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Antimony pentoxide	1314-60-9	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Tri-o-cresyl phosphate	78-30-8	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Bis(2,3-dibromopropyl)phosphate	5412-25-9	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Tris(1-aziridinyl)phosphine oxide	545-55-1	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Hexabromocyclodecane	3194-55-6	tbd	tbd	tbd	tbd	tbd	tbd	banned
	2,2-bis(bromomethyl)-1,3-propanediol	3296-90-0	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Tris(1,3-dichloro-isopropyl) phosphate	13674-87-8	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Trixylyl phosphate	25155-23-1	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Tetrabromobisphenol A bis (2,3-dibromopropylether)	21850-44-2	tbd	tbd	tbd	tbd	tbd	tbd	banned
	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus"™) covering any of its individual anti- and syn-isomers or any combination thereof	13560-89-9 135821-74-8 135821-03-3	tbd	tbd	tbd	tbd	tbd	tbd	banned
Chlorinated Paraffins (No intentional use)									
	Short-Chain chlorinated Paraffins (C10-13)	85535-84-8	0.4 µg/l	0.03 mg/kg	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	In accordance to EN ISO 18219: 60 min. ultrasonic bath. Extraction with n-Hexane at 60°C. GS-MS Analysis	banned
	Middle-Chain chlorinated Paraffins (C14-17)	85535-85-9	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Long-Chain chlorinated Paraffins (C18-28)	85535-86-0	tbd	tbd	tbd	tbd	tbd	tbd	banned
Glycols (No intentional use)									
	Bis(2-methoxyethyl)-ether	111-96-6	tbd	20.0 ppm	tbd	tbd	tbd	tbd	banned
	2-ethoxyethanol	110-80-5	tbd	tbd	tbd	tbd	tbd	tbd	banned
	2-ethoxyethyl acetate	111-15-9	tbd	10.0 ppm	tbd	tbd	tbd	tbd	banned
	Ethylene glycol dimethyl ether	110-71-4	tbd	tbd	tbd	tbd	tbd	tbd	banned
	2-metoxyethanol	109-86-4	tbd	tbd	tbd	tbd	tbd	tbd	banned
	2-metoxyethyacetate	110-49-6	tbd	tbd	tbd	tbd	tbd	tbd	banned
	2-methoxypropylacetate	70657-70-4	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Triethylene glycol dimethyl ether, glycol ether Glycol; triglyme (TEGDME)	112-49-2	tbd	tbd	tbd	tbd	tbd	tbd	banned
	2-(2-methoxyethoxy)-ethanol	111-77-3	tbd	tbd	tbd	tbd	tbd	tbd	banned
	2-methoxypropanol	1589-47-5	tbd	tbd	tbd	tbd	tbd	tbd	banned
	glycol ether 1,2-diethoxyethane	629-14-1	tbd	tbd	tbd	tbd	tbd	tbd	banned
	glycol ether Ethylene glycol	107-21-1	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2]

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
Solvents - Halogenated solvents (No intentional use)									
	1,2-Dichloroethane	107-06-2	1 µg/l	0.3 mg/kg	By Headspace Gas Chromatography Mass Spectrometric (HS – GC/MS) Analysis	By Headspace Gas Chromatography Mass Spectrometric (HS – GC/MS) Analysis	GC-MS Headspace analysis.	tbd	banned
	Methylene chloride / Dichloromethane	75-09-2						tbd	banned
	Trichloroethylene	79-01-6						tbd	banned
	Tertrachloroethylene	127-18-4						tbd	banned
	Chloroform (Trichlormethan)	67-66-3						tbd	banned
	Tetrachloromethane (Carbon tetrachloride)	56-23-5						tbd	banned
	1,1-Dichloroethane	75-34-3						tbd	banned
	1,1,1-trichloroethane	71-55-6						tbd	banned
	1,1,1,2-Tetrachloroethane	630-20-6						tbd	banned
	1,1,2,2-Tetrachloroethane	79-34-5						tbd	banned
	Pentachloroethane	76-01-7						tbd	banned
	1,1-Dichloroethylene	75-35-4						tbd	banned
	1,1,2-Trichloroethane	79-00-5						tbd	banned
	1,2,3-trichloropropane	96-18-4	tbd	10.0 ppm	tbd	tbd	tbd	tbd	banned
	1,2-dibromoethane	106-93-4	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2, 3)
	1-bromopropane; n-propyl bromide	106-94-5	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2, 3)
	Bromoethane	74-96-4	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2, 3)
	2-bromopropane	75-26-3	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2, 3)
Solvents - Other solvents including petroleum destillates (No intentional use)									
Aromatic solvents	Benzene	71-43-2	tbd	0.1 ppm	tbd	tbd	tbd	Headspace GC, 45 min/120°C	banned
	o,-p,-m-Xylene	1330-20-7 (all isomers) 95-47-6 / 106-42-3 / 108-38-3	tbd	0.1 ppm	tbd	tbd	tbd	Headspace GC, 45 min/120°C	banned
	Ethylbenzene	100-41-4	tbd	0.1 ppm	tbd	tbd	tbd	tbd	banned
	Toluene	108-88-3	tbd	0.1 ppm	tbd	tbd	tbd	Headspace GC, 45 min/120°C	banned
	Distillate aromatic extract	64742-04-7	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Benzin 140 - 300 (A complex combination of hydrocarbons, It consists predominantly of aliphatic, alicyclic and aromatic hydrocarbons.)	8002-05-9	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Aromatic naphtha, type 1	64742-95-6	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Aromatic petroleum derivative solvent	68477-31-6	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Coal Tar oil (Composed primarily of naphthalene, alkylnaphthalenes, phenolic compounds, and aromatic nitrogen bases.)	65996-82-9/ 65996-83-0	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Bitumen	64742-93-4	tbd	tbd	tbd	tbd	tbd	tbd	banned
	o-Phenylphenol	90-43-7	tbd	adult limit <100ppm, child limit 50ppm	tbd	tbd	tbd	tbd	verification [1, 2]
	o-Phenylphenate, sodium	132-27-4	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2]
	1,4-Dioxane	123-91-1	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2]
	hexamethylphosphoramide (HEMPA)	680-31-9	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2]

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
	Methanol	67-56-1	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2]
	Ethanol	64-17-5	tbd	tbd	tbd	tbd	tbd	tbd	verification [2]
	Methyl isobutyl ketone	108-10-1	tbd	tbd	tbd	tbd	tbd	Headspace GC, 45 min/120°C	verification [1, 2]
	N-methyl-2-pyrrolidone	872-50-4	tbd	50.0 ppm	tbd	tbd	tbd	Headspace GC, 45 min/120°C	verification [1, 2]
	N-methylformamide	123-39-7	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2]
	N,N-Dimethylformamide	68-12-2	tbd	0.1 ppm	tbd	tbd	tbd	Headspace GC, 45 min/120°C	verification [1, 2, 4]
	Formamide	75-12-7	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2]
	N,N-dimethylacetamide	127-19-5	tbd	20.0 ppm	tbd	tbd	tbd	tbd	verification [1, 2]
	N-methylacetamide	79-16-3	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2]
	Methyl-ethyl ketone	78-93-3	tbd	0.1 ppm	tbd	tbd	tbd	tbd	verification [1, 2, 3]
	Cyclohexanone	108-94-1	tbd	2.0 ppm	tbd	tbd	tbd	tbd	verification [1, 2, 3]
	Acetophenone	98-86-2	tbd	0.1 ppm	tbd	tbd	tbd	tbd	verification [1, 2, 3]
	2-phenyl-2-propanole	617-94-7	tbd	0.1 ppm	tbd	tbd	tbd	tbd	verification [1, 2, 3]
Solvents - Petroleum distilates with restrictions due to contamination risk (Chemical Input Control mandatory). Banned if hazardous contaminations are contained, such as e.g. PAH, aromatic hydrocarbons.									
	Extracts (petroleum), light naphthenic distillate solvent	64742-03-6	tbd	tbd	tbd	tbd	tbd	tbd	verification (4)
	Extracts (petroleum), light paraffinic distillate solvent	64742-05-8	tbd	tbd	tbd	tbd	tbd	tbd	verification (4)
	Extracts (petroleum), heavy naphthenic distillate solvent	64742-11-6	tbd	tbd	tbd	tbd	tbd	tbd	verification (4)
	Distillates (petroleum), chemically neutralized middle	64742-30-9	tbd	tbd	tbd	tbd	tbd	tbd	verification (4)
	Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	tbd	tbd	tbd	tbd	tbd	tbd	verification (4)
	Naphtha Low boiling point naphtha	8030-30-6	tbd	tbd	tbd	tbd	tbd	tbd	verification (4)
	Pitch	61789-60-4	tbd	tbd	tbd	tbd	tbd	tbd	verification (4)
	Naphtha (petroleum), heavy straight-run	64741-41-9	tbd	tbd	tbd	tbd	tbd	tbd	verification (4)
	Naphtha (petroleum), hydrotreated light	64742-49-0	tbd	tbd	tbd	tbd	tbd	tbd	verification (4)
	Distillates (petroleum), hydrotreated heavy naphthenic Baseoil - unspecified	64742-52-5	tbd	tbd	tbd	tbd	tbd	tbd	verification (4)
	Distillates (petroleum), hydrotreated heavy paraffinic (mineral oil)	64742-54-7	tbd	tbd	tbd	tbd	tbd	tbd	verification (4)
	Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	tbd	tbd	tbd	tbd	tbd	tbd	verification (4)
	Distillates (petroleum), solvent-refined light paraffinic	64741-89-5	tbd	tbd	tbd	tbd	tbd	tbd	verification (4)
	Petrolatum	8009-03-8	tbd	tbd	tbd	tbd	tbd	tbd	verification (4)

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
Polycyclic Aromatic Hydrocarbons (PAHs) (No intentional use)									
	Benzo[a]pyrene	50-32-8	tbd	tbd	tbd	tbd	tbd	AfPS GS 2014, extraction with organic solvent, analysis: GC-MS	banned
	Benzo[e]pyrene	192-97-2	tbd	tbd	tbd	tbd	tbd		banned
	Benzo[j]fluoranthene	205-82-3	tbd	tbd	tbd	tbd	tbd		banned
	Benzo[b]fluoranthene	205-99-2	tbd	tbd	tbd	tbd	tbd		banned
	Benzo[k]fluoranthene	207-08-9	tbd	tbd	tbd	tbd	tbd		banned
	Chrysene	218-01-9	tbd	tbd	tbd	tbd	tbd		banned
	Dibenzo[a,h]anthracene	53-70-3	tbd	tbd	tbd	tbd	tbd		banned
	Benzo[a]anthrancene	56-55-3	tbd	tbd	tbd	tbd	tbd		banned
	Anthracene	120-12-7	tbd	tbd	tbd	tbd	tbd		banned
	Pyrene	129-00-0	tbd	tbd	tbd	tbd	tbd		banned
	Benzo[g,h,i]perylene	191-24-2	tbd	tbd	tbd	tbd	tbd		banned
	Indeno[1,2,3-cd]pyrene	193-39-5	tbd	tbd	tbd	tbd	tbd		banned
	Flouranthene	206-44-0	tbd	tbd	tbd	tbd	tbd		banned
	Acenaphtylene	208-96-8	tbd	tbd	tbd	tbd	tbd		banned
	Acenaphtene	83-32-9	tbd	tbd	tbd	tbd	tbd		banned
	Phenathrene	85-01-8	tbd	tbd	tbd	tbd	tbd		banned
	Fluorene	86-73-7	tbd	tbd	tbd	tbd	tbd		banned
	Naphthalene	91-20-3	tbd	0.1 ppm	tbd	tbd	tbd		banned
	Cyclopenta[c,d]pyrene	27208-37-3	tbd	tbd	tbd	tbd	tbd		banned
	Dibenzo[a,e]pyrene	192-65-4	tbd	tbd	tbd	tbd	tbd		banned
	Dibenzo[a,h]pyrene	189-64-0	tbd	tbd	tbd	tbd	tbd		banned
	Dibenzo[a,i]pyrene	189-55-9	tbd	tbd	tbd	tbd	tbd		banned
	Dibenzo[a,l]pyrene	191-30-0	tbd	tbd	tbd	tbd	tbd		banned
	1-Methylpyrene	2381-21-7	tbd	tbd	tbd	tbd	tbd		banned
	Polycyclic Aromatic Compounds (PACs)	130498-29-2	tbd	tbd	tbd	tbd	tbd		banned
	9,10-Benzophenanthren	217-59-4	tbd	tbd	tbd	tbd	tbd		banned
	Coal tar pitch	65996-93-2	tbd	tbd	tbd	tbd	tbd		banned
	Anthracene oil	90640-80-5	tbd	tbd	tbd	tbd	tbd		banned
	Anthracene oil, anthracene paste	90640-81-6	tbd	tbd	tbd	tbd	tbd		banned
	Anthracene oil, anthracenelow	90640-82-7	tbd	tbd	tbd	tbd	tbd		banned
	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	tbd	tbd	tbd	tbd	tbd		banned
	Anthracene oil, anthracene paste, distn. Lights	91995-17-4	tbd	tbd	tbd	tbd	tbd		banned

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
Organotin Compounds (DBT, Mono-, di- and tri-methyltin derivatives, Mono-, di- and tri-butyltin derivatives; Mono-, di- and tri-phenyltin derivatives; Mono-, di- and tri-octyltin derivatives (multiple CAS No) (No intentional use)									
	Dibutyltin (DBT)	1002-53-5	0.01 µg/l	0.01 mg/kg	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.	extraction with Ethanol / Diethyldithiocarbamate and derivisation according to DIN EN ISO 17353	banned
	Monobutyltin (MBT)	1118-46-3 / 78763-54-9							banned
	Monooctyltin (MOT)	15231-57-9 / 15231-44-4							banned
	Dioctyltin (DOT)	94410-05-6 / 15231-44-4							banned
	Tetrabutyltin (TebT)	1461-25-2							banned
	Tributyltin (TBT)	56573-85-4 / 36643-28-4							banned
	Triphenyltin (TPhT)	892-20-6 / 668-34-8							banned
	Diphentyltin (DPhT)	1011-95-6 / 6381-06-2							banned
	Tetraethyltin (TeET)	597-64-8							banned
	Tricyclohexyltin (TCyHT)	6056-50-4							banned
	Tripropyltin (TPT)	668-34-8							banned
	Bis(tri-n-butyltin)oxide (TBTO)	56-35-9	tbd	tbd	tbd	tbd	tbd		banned
	Dibutyltin hydrogen borate (DBB)	75113-37-0	tbd	tbd	tbd	tbd	tbd		banned
	Dibutyltin dichloride (DBTC)	683-18-1	tbd	tbd	tbd	tbd	tbd		banned
Perfluorinated and Polyfluorinated Chemicals and their salts (PFCs) (No intentional use)									
	PFOS	1763-23-1 / 45298-90-6	0.01 µg/l	0.001 mg/kg	CEN/TS 15968:2010 - modified	C EN/TS 15968:2010. LC/MS analysis - modified	Solvent extraction CEN/TS 15968:2010. LC/MS analysis - modified	ultrasonic extraction with Methanol, LC-MS analysis	banned
	PFOA	335-67-1							banned
	PFNA	375-95-1							banned
	PFPeA	2706-90-3							banned
	PFBS	375-73-5 / 59933-66-3							banned
	PFHxS (for complete list of CAS numbers see SVHC candidate list)	355-46-4							banned
	PFHxA	307-24-4							banned
	PFBA	375-22-4							banned
	PFHpA	375-85-9							banned
	PFDA	335-76-2							banned
	PFUnA / Henicosafluoroundecanoic acid (PFUdA)	2058-94-8							banned
	PFDoA	307-55-1							banned
	PFTrA / Pentacosafluorotridecanoic acid (PFTrDA)	72629-94-8							banned
	PFteA / Heptacosafluorotetradecanoic acid (PFTeDA)	376-06-7							banned
	PFHpS	375-92-8							banned
	PFDS	335-77-3							banned
	PF-3,7-DMOA	172155-07-6							banned
	HPFHpA	1546-95-8							banned
	4HPFUnA	34598-33-9							banned
	1H, 1H, 2H, 2H-PFOS	27619-97-2							banned

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
	4:2 FTOH(**)	2043-47-2	0.1 µg/l	0.01 mg/kg	CEN/TS 15968:2010 - modified	CEN/TS 15968:2010. LC/MS analysis - modified	Solvent extraction CEN/TS 15968:2010. LC/MS analysis - modified	ultrasonic extraction with Methanol, LC-MS analysis	banned
	6:2 FTOH(**)	647-42-7							banned
	8:2 FTOH(**)	678-39-7							banned
	10:2 FTOH(**)	865-86-1							banned
	POSF/ PFOSF(**)	307-35-7							banned
	PFOSA	754-91-6							banned
	N-Me-FOSA	31506-32-8							banned
	N-Et-FOSA	4151-50-2							banned
	N-Me-FOSE alcohol	24448-09-7							banned
	N-Et-FOSE alcohol	1691-99-2							banned
	6:2 FTA(**)	17527-29-6							banned
	8:2 FTA(**)	27905-45-9							banned
	10:2 FTA(**)	17741-60-5							banned
	Ammonium nonadecafluorodecanoate	3108-42-7	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts Decanoic acid, nonadecafluoro-, sodium salt	3830-45-3 335-76-2 3108-42-7	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Sodium salts of perfluorononan-1-oic-acid	21049-39-8	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Ammonium salts of perfluorononan-1-oic-acid	4149-60-4	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	tbd	tbd	tbd	tbd	tbd	tbd	banned
Phthalates - including all other esters of ortho-phthalic acid									
	Di-pentylphthalate (n-, iso-, or mixed)	131-18-0 / 605-50-5 / 776297-69-9 / 84777-06-0	tbd	tbd	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.	DIN EN ISO 14389	banned
	Di-iso-nonylphthalate (DINP)	28553-12-0 / 68515-48-0	1 µg/l	0.3 mg/kg					banned
	Di-n-octylphthalate (DNOP)	117-84-0							banned
	Di-(2-ethylhexyl)-phthalate (DEHP)	117-81-7							banned
	Di-iso-decylphthalate (DIDP)	26761-40-0 / 68515-49-1							banned
	Butylbenzylphthalate (BBP)	85-68-7							banned
	Dibutylphthalate (DBP)	84-74-2							banned
	Di-iso-butylphthalate (DIBP)	84-69-5							banned
	1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6							banned
	1,2-benzenedicarboxylic acid, di-C7-11-branched linearalkyl and linear alkyl esters (DHNUP)	68515-42-4							banned
	Di-n-hexylphthalate (DnHP)	84-75-3							banned
	Di-(2-methoxyethyl)-phthalate, Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8							banned

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
	Dinonyl phthalate (DNP)	84-76-4	tbd	tbd	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.	tbd	DIN EN ISO 14389	banned
	Diethyl phthalate (DEP)	84-66-2	tbd	tbd			tbd		banned
	Di-n-propyl phthalate (DPRP)	131-16-8	tbd	tbd			tbd		banned
	Di-cyclohexyl phthalate (DCHP)	84-61-7	tbd	tbd			tbd		banned
	Di-iso-octyl phthalate (DIOP)	27554-26-3	tbd	tbd			tbd		banned
	Di-cyclohexylphthalate, DCHP	84-61-7	tbd	tbd			tbd		banned
	Di-hexylphthalate, branched and linear, DHxP	68515-50-4	tbd	tbd			tbd		banned
	Di-iso-hexylphtalate, DIHxP	71850-09-4	tbd	tbd			tbd		banned
	1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters, 1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters	68515-51-5, 68648-93-1	tbd	tbd			tbd		banned
Heavy metals and Inorganic compounds Listed compounds are banned from intentional use in textile manufacturing/finishing. Additionally, residual traces of metals in dyestuff and pigment mixtures are expected to comply with the Ecological and Toxicological Association of Dyes and Organic Pigments Manufacturers (ETAD) concentration limits (http://www.etad.com/). Tchibo further will engage in stakeholder initiatives towards the reduction/ banned of the metals and their compounds in production.									
	Chromium VI (Cr VI)	18540-29-9	tbd	1 mg/kg	Digestion, ICP analysis	Digestion, ICP analysis	Digestion, ICP analysis	Extractable heavy metals: DIN EN ISO 16711-2 only relevant for leather: DIN EN ISO 17075	banned
	Chromium (Cr)	7440-47-3	1 µg/l	1 mg/kg				Extractable heavy metals: DIN EN ISO 16711-2 only relevant for leather: DIN EN ISO 17072-2	verification [1, 3, 4]
	Chromium (Cr)	7440-47-3	1 µg/l	declaration of non-use for leather tanning				Extractable heavy metals: DIN EN ISO 16711-2 only relevant for leather: DIN EN ISO 17072-2	banned
	Lead (Pb)	7439-92-1	1 µg/l	1 mg/kg				Extractable heavy metals: DIN EN ISO 16711-2 Total element content: ASTM E 1645, ASTM E 1613, analysis: ICP-MS	banned
	Cadmium (Cd)	7440-43-9	0.1 µg/l	1 mg/kg				Extractable heavy metals: DIN EN ISO 16711-2 Total element content: Acc to DIN EN 1122, analysis: ICP / MS	banned
	Arsenic (As)	7440-38-2	1 µg/l	1 mg/kg				Extractable heavy metals: DIN EN ISO 16711-2	banned
	Mercury (Hg)	7439-97-6	0.05 µg/l	0.006 mg/kg					banned
	Nickel (Ni)	7440-02-0	1 µg/l	1 mg/kg					verification [1, 3, 4]

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
	Copper (Cu)	7440-50-8	1 µg/l	1 mg/kg	Digestion, ICP analysis	Digestion, ICP analysis	Digestion, ICP analysis	Extractable heavy metals: DIN EN ISO 16711-2	verification (1, 2, 3, 4)
	Zinc (Zn)	7440-66-6	1 µg/l	4 mg/kg					verification (1, 2, 3, 4)
	Manganese (Mn)	7439-96-5	1 µg/l	1 mg/kg					verification (1, 2, 3, 4)
	Antimony (Sb)	7440-36-0	1 µg/l	1 mg/kg					verification (1, 3, 4)
	Cobalt (Co)	7440-48-4	tbd	≤ 4 ppm (≤ 1 ppm for children)	tbd	tbd	tbd	tbd	verification (1, 2, 3, 4)
	Vanadium pentoxide	1314-62-1	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 3, 4)
	Silver (Ag)	7440-22-4	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 3, 4)
	Potassium bromate	7758-01-2	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 3)
	Perboric acid compounds perboric acid, sodium salt	10332-33-9 / 10486-00-7 / 11138-47-9 / 12040-72-1/ 13517-20-9 / 15120-21-5 / 37244-98-7	tbd	tbd	tbd	tbd	tbd	tbd	verification (1)
	Boric acid	10043-35-3 / 1303-86-2	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	Boric acid, disodium salt	12179-04-3 / 1303-96-4 / 1330-43-4 / 12267-73-1 / 13840-56-7	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	Borate, zinc salt	1332-07-6	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	Sodium peroxometaborate	7632-04-4	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	Disodium octaborate	12008-41-2	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	Beryllium & beryllium oxide (BE)	7440-41-7 / 1304-56-9	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	Cyanide	not explicitly mentioned	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
Fibrous minerals - Asbestos and Erionite (No intentional use)									
	Actinolite	77536-66-4	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Amosite	12172-73-5	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Anthrophyllite	77536-67-5	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Chrysotile	12001-29-5	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Crocidolite	12001-28-4	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Tremolite	77536-68-6	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Erionite	12510-42-8	tbd	tbd	tbd	tbd	tbd	tbd	banned
Respirable particulate matter (PM_{10}) (particulates of respirable size are relevant for airborne emmissions/ air pollution)									
	Aluminium oxide	1344-28-1	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	Silica	14464-46-1 / 14808-60-7 / 7631-86-9	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	Titanium dioxide	13463-67-7 / 1317-70-0 / 1317-80-7	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
Biocides									
	Triclosan	3380-34-5	tbd	declaration of non-use as biocidal finishing on the product	tbd	tbd	tbd	tbd	banned
	Dimethyl fumarate (DMFu)	624-49-7	tbd		tbd	tbd	tbd	tbd	banned
	Halogenated and non-halogenated Isothiazolinone-derivatives	several	tbd		tbd	tbd	tbd	tbd	banned
	o-Phenylphenol	90-43-7	tbd		tbd	tbd	tbd	tbd	banned
	Silver chloride/ Silver	7783-90-6/ 7440-22-4	tbd		tbd	tbd	tbd	tbd	banned
	Permethrin	2645-53-1	tbd		tbd	tbd	tbd	tbd	banned
	Deltamethrin	52918-63-5	tbd		tbd	tbd	tbd	tbd	banned
	2-Chloroacetamide	79-07-2	tbd		tbd	tbd	tbd	tbd	banned
	Dichlorophene [2,2'-Methylenbis(4-chlorophenol)]	97-23-4	tbd		tbd	tbd	tbd	tbd	banned
Additional substances - possible usage in textile and rubber production									
	o-Cresol	95-48-7	tbd	tbd	tbd	tbd	tbd	tbd	banned
	p-Cresol	106-44-5	tbd	tbd	tbd	tbd	tbd	tbd	banned
	m-Cresol	108-39-4	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Formaldehyde	50-00-0	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2, 3, 4)
	Nitrilotriacetic acid	139-13-9	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	2-(2-aminoethylamino)ethanol (AEEA)	111-41-1	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2, 3, 4)
	Diethanolamine	111-42-2	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2, 3, 4)
	Thiourea	62-56-6	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2, 3, 4)
	Cycloheximide	66-81-9	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2, 3, 4)
	Metam sodium	137-42-8	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2, 3, 4)
	chlorinated ether Bis(chloromethyl)ether	542-88-1	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2, 3, 4)
	Triglycidylisocyanurate (TGIC)	2451-62-9	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2, 3, 4)
	tert-butyl, benzotriazole-phenols 2-(2H-Bensotriazol-2-yl)-4,6-bis(1,1-dimetylpropyl)phenol	25973-55-1	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	2-(2H-Benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol	36437-37-3	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol	3864-99-1	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	tert-butyl, benzotriazole-phenols 2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)- phenol	3147-75-9	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
	tert-butyl, benzotriazole-phenols 2-(2´-Hydroxy-3,5´-di-tert.butylphenyl)-benzotriazole	3846-71-7	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	3-(4-methylbenzylidene) camphor	36861-47-9	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	Hydrazine	302-01-2, 7803-57-8	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	4,4'-Methylenbis(N-(1-ethylpropyl)benzolamin)	5285-60-9	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	Carbon disulfide	75-15-0	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	Ethylene thiourea	96-45-7	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	N-(1,4-Dimethylpentyl)-N'-phenyl-benzen-1,4-diamin	3081-01-4	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	Carbendazim (N-2-benzimidazolecarbamic acid methyl ester)	10605-21-7	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	musk xylene	81-15-2	tbd	tbd	tbd	tbd	tbd	tbd	banned
	Phenolphthalein	77-09-8	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	Potassium Permanganate	7722-64-7	tbd	declaration of non-use for denim garment finishing	tbd	tbd	tbd	tbd	banned
	Sodium Chlorite/ Hypochlorite	7758-19-2/ 7681-52-9	tbd	declaration of non-use for denim garment finishing	tbd	tbd	tbd	tbd	banned
Antioxidants - possible usage in textile and rubber production									
	2,4,6-tri(t-utyl)Phenol	732-26-3	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	2,6-di-tert-butyl-4-(1-methylpropyl)-hydroxybenzene	17540-75-9	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	2,6-di-tert-butyl-4-(methylthioacetic acid, 2-ethylhexylester)-hydroxybenzene	80387-97-9	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	6,6'-di-tert-butyl-4,4'-thiodi-m-cresol	96-69-5	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	Butylated hydroxyanisole (BHA)	25013-16-5	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
	Hydroquinone (1,4-Dihydroxybenzene)	123-31-9	tbd	tbd	tbd	tbd	tbd	tbd	verification (1, 2)
Nitrosamines (relevant for rubber/ latex production. Appropiate chemical inputs must be used/ process control must be installed to avoid formation)									
	N-Nitrosodiethylamin	55-18-5	tbd	tbd	tbd	tbd	tbd	tbd	banned
	N-Nitrosodipropylamin	621-64-7	tbd	tbd	tbd	tbd	tbd	tbd	banned
	N-Nitrosodibutylamin	924-16-3	tbd	tbd	tbd	tbd	tbd	tbd	banned
	N-Nitrosomorpholin	59-89-2	tbd	tbd	tbd	tbd	tbd	tbd	banned
	N-Nitrosopiperidin	100-75-4	tbd	tbd	tbd	tbd	tbd	tbd	banned
	N-Nitrosomethylphenylamin	614-00-6	tbd	tbd	tbd	tbd	tbd	tbd	banned
	N-Nitrosoethylphenylamin	612-64-6	tbd	tbd	tbd	tbd	tbd	tbd	banned
	N-Nitrosopyrrolidine (NPYR)	930-55-2	tbd	tbd	tbd	tbd	tbd	tbd	banned
	N-Nitrosodimethylamine	62-75-9	tbd	tbd	tbd	tbd	tbd	tbd	banned
	N-Nitrosodiisopropylamin	601-77-4	tbd	tbd	tbd	tbd	tbd	tbd	banned
	N-Nitrosodiisobutylamin	997-95-5	tbd	tbd	tbd	tbd	tbd	tbd	banned
	N-Nitrosodiisononylamin (N-Nitroso-N,N-di(3,5,5-trimethyl-hexyl)amin)	1207995-62-7	tbd	tbd	tbd	tbd	tbd	tbd	banned
	N-Nitrosodibenzylamin	5336-53-8	tbd	tbd	tbd	tbd	tbd	tbd	banned
	N-Nitrosomethylethylamine	10595-95-6	tbd	tbd	tbd	tbd	tbd	tbd	banned

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
	N-Methyl-N'-nitro-N-nitrosoguanidine	70-25-7	tbd	tbd	tbd	tbd	tbd	tbd	banned
	N-Nitrosodiphenylamine	86-30-6	tbd	tbd	tbd	tbd	tbd	tbd	banned
	p-Nitrosodiphenylamine	156-10-5 not an N-nitroso	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2, 3]
	N-Nitrosodiethanolamine	1116-54-7	tbd	tbd	tbd	tbd	tbd	tbd	banned
Basic raw materials/Fine chemical intermediates/unwanted by-products. The following substance groups are not expected to be used intentionally in the production of textiles. They are expected to be used/ occur in closed systems during the synthesis of chemicals/ textile fibres and/or materials (e.g. Polyurethane) used in apparel and footwear. Traces occurring in textile mills cannot be excluded, as analytical evidence is not available for several reasons (e.g. analytical method not established/ substance highly reactive and analysation not possible). Tchibo will engage in stakeholder initiatives to gain knowledge about the appearance of the substances in textile processing and work with chemical suppliers and textile producers towards the reduction/ phase out of the substances.									
Dinitrotoluene									
	2,4-dinitrotoluene	121-14-2	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Dinitrotoluene (isomer mixture)	25321-14-6	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	2,3-dinitrotoluene	602-01-7	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	2,6-Dinitrotoluene	606-20-2	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	3,4-dinitrotoluene	610-39-9	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	3,5-dinitrotoluene	618-85-9	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	2,5-dinitrotoluene	619-15-8	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
Epoxy intermediate									
	Epichlorohydrin	106-89-8	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Phenyl glycidyl ether; 2,3-epoxypropyl phenyl ether; 1,2-epoxy-3-phenoxypropane	122-60-1	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	2,2'-bioxirane [1,2:3,4-diepoxybutane]	1464-53-5	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	2,3-epoxypropyltrimethylammonium chloride; EPTAC; Oxiranemethanaminium, N,N,N-trimethyl chloride; Glycydyltrimethylammonium Chloride	3033-77-0	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	R-1-chloro-2,3-epoxypropane	51594-55-9	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Glycidol [2,3-epoxy-1-propanol]	556-52-5	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	R-2,3-epoxy-1-propanol	57044-25-4	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	1,3,5-tris-[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione	59653-74-6	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Oxiranemethanol, 4-methylbenzene-sulfonate, (S)-	70987-78-9	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Ethylene oxide; oxirane	75-21-8	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Propylene oxide; 1,2-epoxypropane; methyloxirane	75-56-9	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Styrene oxide; (epoxyethyl)benzene; phenyloxirane	96-09-3	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
Monomers									
	1,3-Butadiene	106-99-0	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Acetaldehyde	75-07-0	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Acrylonitrile	107-13-1	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Aziridine [Ethyleneimine]	151-56-4	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
	Aziridine, 2-methyl	75-55-8	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Chloroprene (stabilized); 2-chlorobuta-1,3-diene	126-99-8	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Dimethylsulfamoylchloride	13360-57-1	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Ethyl acrylate	140-88-5	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Isobutyl nitrite	542-56-3	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Isoprene	78-79-5	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Methylcarbamate	598-55-0	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	N-Vinyl-2-pyrrolidinone	88-12-0	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Propane sultone [1,3-propanesultone; 1,2-oxathiolane 2,2-dioxide]	1120-71-4	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Urethane (Ethyl carbamate)	51-79-6	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Vinyl bromide	593-60-2	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Vinyl chloride	75-01-4	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Acrylamide	79-06-1	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	N-Methylolacrylamide	924-42-5	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Styrene	100-42-5	tbd	0.1 ppm	tbd	tbd	tbd	tbd	verification [3]
Others: Dye/ Fine Chemical intermediates and raw materials used for rubber/ technical polymer production - Part 1									
	1-(2-amino-5-chlorophenyl)-2,2,2-trifluoro-1,1-ethanediol, hydrochloride, containing < 0.1 % 4-chloroaniline	(EC No 203-401-0) 214353-17-0	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	2-butyryl-3-hydroxy-5-thiocyclohexan-3-yl-cyclohex-2-en-1-one	94723-86-1	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	2-Nitropropane	79-46-9	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	2-nitrotoluene	88-72-2	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	4-Nitrobiphenyl	92-93-3	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	5-Nitroacenaphthene	602-87-9	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	7-methoxy-6-(3-morpholin-4-yl-propoxy)-3H-quinazolin-4-one Containing ≥ 0.5 % formamide	(EC No 200-842-0) 199327-61-2	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	chloro-N,N-dimethylformiminium chloride	3724-43-4	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Diazoaminobenzene	136-35-6	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	hydrazobenzene	122-66-7	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	methoxyacetic acid	625-45-6	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Furan	110-00-9	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Phenylhydrazine	100-63-0	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	phenylhydrazine hydrochloride	27140-08-5 / 59-88-1	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	phenylhydrazinium sulphate (2:1)	52033-74-6	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Pyridine	110-86-1	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Tetrahydrothiopyran-3-carboxaldehyde	61571-06-0	tbd	tbd	tbd	tbd	tbd	tbd	verification [5]
	Thioacetamide	62-55-5	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Toluene diisocyanate	26471-62-5	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	toluene diisocyanate (2,4-)	584-84-9	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Trimethyl phosphate	512-56-1	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2, 3]

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
	alkylating agent Diethyl sulfate	64-67-5	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	alkylating agent Dimethyl sulfate	77-78-1	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Benzophenone	119-61-9	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2, 3]
	Bisphenol A	80-05-7	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Diaminobenzidine [biphenyl-3,3',4,4'-tetrayltetraamine]	91-95-2	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Diaminotoluene	25376-45-8	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	N,N'-Diacetylbenzidine	613-35-4	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Toluene-2,4-diammonium sulphate	65321-67-7	tbd	tbd	tbd	tbd	tbd	tbd	verification [3, 5]
	3-amino-9-ethyl carbazole, 9-ethylcarbazol-3-ylamine	132-32-1	tbd	tbd	tbd	tbd	tbd	tbd	verification [3, 5]
	4,4-isobutylethylidenediphenol	6807-17-6	tbd	tbd	tbd	tbd	tbd	tbd	verification [3, 5]
	4-amino-3-fluorophenol	399-95-1	tbd	tbd	tbd	tbd	tbd	tbd	verification [3, 5]
	Carbazole	86-74-8	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Safrole [5-allyl-1,3-benzodioxole]	94-59-7	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2]
	2-ethylhexyl diphenyl phosphate	1241-94-7	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2]
	dimethyldithiocarbamates dimethyldithiocarbamate, Potassium salt	128-03-0	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	dimethyldithiocarbamates dimethyldithiocarbamate, Sodium salt	128-04-1	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	dimethyldithiocarbamates Disodium ethylenebis(N,N'-dithiocarbamate)	142-59-6	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Octamethylcyclotetrasiloxane (D4)	556-67-2	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Decamethylcyclopentasiloxane (D5)	541-02-6	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Dodecamethylcyclohexasiloxane (D6)	540-97-6	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride) (TMA)	552-30-7	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
Others: Dye/ Fine Chemical intermediates and raw materials used for rubber/ technical polymer production - Part 2									
	Dimethylcarbamoyl chloride	79-44-7	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Dimethylhydrazines 1,2-Dimethylhydrazine	540-73-8	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Dimethylhydrazines 1,1-Dimethylhydrazine (UDMH)	57-14-7	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Dinitrobenzenes	99-65-0	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Hexachlorobutadiene	87-68-3	tbd	tbd	tbd	tbd	tbd	tbd	verification [3, 5]
	Diethanolamine	111-42-2	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2, 3]
	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2, 3]
	(2-chloroethyl)(3-hydroxypropyl)ammonium chloride	40722-80-3	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2, 3]
	1-(2-amino-5-chlorophenyl)-2,2,2-trifluoro-1,1-ethanediol, hydrochloride, containing < 0.1 % 4-chloroaniline	(EC No 203-401-0) 214353-17-0	tbd	tbd	tbd	tbd	tbd	tbd	verification [3, 5]
	2-butyryl-3-hydroxy-5-thiocyclohexan-3-yl-cyclohex-2-en-1-one	94723-86-1	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	Methylazoxymethanol acetate	592-62-1	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2, 3]

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
	N,N-(dimethylamino)thioacetamide hydrochloride	27366-72-9	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2, 3]
	N,N'-Bis-(1-ethyl-3-methylpentyl)-1,4-benzendiamin	139-60-6	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2, 3]
	N,N-di-2-naphthyl-benzen-1,4-diamin (Diafen NN)	93-46-9	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2, 3]
	N-[6,9-dihydro-9-[[2-hydroxy-1-(hydroxymethyl)ethoxy]methyl]-6-oxo-1H-purin-2-yl]acetamide	84245-12-5	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2, 3]
	O-isobutyl-N-ethoxy carbonylthiocarbamate	103122-66-3	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2, 3]
	Cyclododecane	294-62-2	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	potassium 1-methyl-3-morpholinocarbonyl-4-[3-(1-methyl-3-morpholinocarbonyl-5-oxo-2-pyrazolin-4-ylidene)-1-propenyl]pyrazole-5-olate containing < 0.5 %N,N-dimethylformamide	(EC No 200-679-5), 183196-57-8	tbd	tbd	tbd	tbd	tbd	tbd	verification [3, 5]
	Diazene-1,2-dicarboxamide [C,C`-azodi(formamide),ADCA]	123-77-3	tbd	tbd	tbd	tbd	tbd	tbd	verification [3]
	(4-ethoxyphenyl) (3-(4-fluoro-3-phenoxyphenyl)propyl) dimethylsilane	105024-66-6	tbd	tbd	tbd	tbd	tbd	tbd	verification [2]
	Colchicine	64-86-8	tbd	tbd	tbd	tbd	tbd	tbd	verification [2]
	2-chloro-6-fluoro-phenol	2040-90-6	tbd	tbd	tbd	tbd	tbd	tbd	verification [1, 2, 3]
Agricultural pesticides									
	2,4,5-T	93-76-5	tbd	tbd	tbd	tbd	tbd	Accelerated solvent exctraction (ASE) or Soxhlet Extraction with Acetone/Hexane // GC-MS or LC-MC	banned
	2,4-D	94-75-7	tbd	tbd	tbd	tbd	tbd		banned
	Acetamiprid	135410-20-7, 160430-64-8	tbd	tbd	tbd	tbd	tbd		banned
	Aldicarb	116-06-3	tbd	tbd	tbd	tbd	tbd		banned
	Aldrine	309-00-2	tbd	tbd	tbd	tbd	tbd		banned
	Azinophosethyl	2642-71-9	tbd	tbd	tbd	tbd	tbd		banned
	Azinophosmethyl	86-50-0	tbd	tbd	tbd	tbd	tbd		banned
	Bromophos-ethyl	4824-78-6	tbd	tbd	tbd	tbd	tbd		banned
	Captafol	2425-06-1	tbd	tbd	tbd	tbd	tbd		banned
	Carbaryl	63-25-2	tbd	tbd	tbd	tbd	tbd		banned
	Chlordane	57-74-9	tbd	tbd	tbd	tbd	tbd		banned
	Chlordimeform	6164-98-3	tbd	tbd	tbd	tbd	tbd		banned
	Chlorfenvinphos	470-90-6	tbd	tbd	tbd	tbd	tbd		banned
	Clothianidin	210880-92-5	tbd	tbd	tbd	tbd	tbd		banned
	Coumaphos	56-72-4	tbd	tbd	tbd	tbd	tbd		banned
	Cyfluthrin	68359-37-5	tbd	tbd	tbd	tbd	tbd		banned
	Cyhalothrin	91465-08-6	tbd	tbd	tbd	tbd	tbd		banned
	Cypermethrin	52315-07-8	tbd	tbd	tbd	tbd	tbd		banned
	DEF	78-48-8	tbd	tbd	tbd	tbd	tbd		banned
	Deltamethrin	52918-63-5	tbd	tbd	tbd	tbd	tbd		banned
	DDD	53-19-0, 72-54-8	tbd	tbd	tbd	tbd	tbd		banned
	DDE	3424-82-6, 72-55-9	tbd	tbd	tbd	tbd	tbd		banned
	DDT	50-29-3, 789-02-6	tbd	tbd	tbd	tbd	tbd		banned
	Diazinon	333-41-5	tbd	tbd	tbd	tbd	tbd		banned

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****
	Dichlorprop	120-36-5	tbd	tbd	tbd	tbd	tbd		banned
	Dicrotophos	141-66-2	tbd	tbd	tbd	tbd	tbd		banned
	Dieldrine	60-57-1	tbd	tbd	tbd	tbd	tbd		banned
	Dimethoate	60-51-5	tbd	tbd	tbd	tbd	tbd		banned
	Dinoseb, its salts and acetate	88-85-7 et al	tbd	tbd	tbd	tbd	tbd		banned
	Dinotefuran	165252-70-0	tbd	tbd	tbd	tbd	tbd		banned
	Endosulfan, α-	959-98-8	tbd	tbd	tbd	tbd	tbd		banned
	Endosulfan, β-	33213-65-9	tbd	tbd	tbd	tbd	tbd		banned
	Endrine	72-20-8	tbd	tbd	tbd	tbd	tbd		banned
	Esfenvalerate	66230-04-4	tbd	tbd	tbd	tbd	tbd		banned
	Fenvalerate	51630-58-1	tbd	tbd	tbd	tbd	tbd		banned
	Heptachlor	76-44-8	tbd	tbd	tbd	tbd	tbd		banned
	Heptachloroepoxide	1024-57-3	tbd	tbd	tbd	tbd	tbd		banned
	Hexachlorobenzene	118-74-1	tbd	tbd	tbd	tbd	tbd		banned
	Hexachlorcyclohexane, α-	319-84-6	tbd	tbd	tbd	tbd	tbd		banned
	Hexachlorcyclohexane, β-	319-85-7	tbd	tbd	tbd	tbd	tbd		banned
	Hexachlorcyclohexane, δ-	319-86-8	tbd	tbd	tbd	tbd	tbd		banned
	Imidacloprid	105827-78-9, 138261-41-3	tbd	tbd	tbd	tbd	tbd		banned
	Isodrine	465-73-6	tbd	tbd	tbd	tbd	tbd		banned
	Kelevane	4234-79-1	tbd	tbd	tbd	tbd	tbd		banned
	Kepone	143-50-0	tbd	tbd	tbd	tbd	tbd		banned
	Lindane	58-89-9	tbd	tbd	tbd	tbd	tbd		banned
	Malathion	121-75-5	tbd	tbd	tbd	tbd	tbd		banned
	MCPA	94-74-6	tbd	tbd	tbd	tbd	tbd		banned
	MCPB	94-81-5	tbd	tbd	tbd	tbd	tbd		banned
	Mecoprop	93-65-2	tbd	tbd	tbd	tbd	tbd		banned
	Metamidophos	10265-92-6	tbd	tbd	tbd	tbd	tbd		banned
	Methoxychlor	72-43-5	tbd	tbd	tbd	tbd	tbd		banned
	Mirex	2385-85-5	tbd	tbd	tbd	tbd	tbd		banned
	Monocrotophos	6923-22-4	tbd	tbd	tbd	tbd	tbd		banned
	Nitenpyram	150824-47-8, 120738-89-8	tbd	tbd	tbd	tbd	tbd		banned
	Parathion	56-38-2	tbd	tbd	tbd	tbd	tbd		banned
	Parathion-methyl	298-00-0	tbd	tbd	tbd	tbd	tbd		banned
	Perthane	72-56-0	tbd	tbd	tbd	tbd	tbd		banned
	Phosdrin/Mevinphos	7786-34-7	tbd	tbd	tbd	tbd	tbd		banned
	Propethamphos	31218-83-4	tbd	tbd	tbd	tbd	tbd		banned
	Profenophos	41198-08-7	tbd	tbd	tbd	tbd	tbd		banned
	Strobane	8001-50-1	tbd	tbd	tbd	tbd	tbd		banned
	Quinalphos	13593-03-8	tbd	tbd	tbd	tbd	tbd		banned
	Telodrine	297-78-9	tbd	tbd	tbd	tbd	tbd		banned
	Thiacloprid	111988-49-9	tbd	tbd	tbd	tbd	tbd		banned
	Thiamethoxam	153719-23-4	tbd	tbd	tbd	tbd	tbd		banned
	Toxaphene	8001-35-2	tbd	tbd	tbd	tbd	tbd		banned
	Trifluralin	1582-09-8	tbd	tbd	tbd	tbd	tbd		banned
								Accelerated solvent exctraction (ASE) or Soxhlet Extraction with Acetone/Hexane // GC-MS or LC-MC	

Substance group	Substance name	CAS No.	Detection Limit*: Input: Chemical Formulations** / Output: Waste Water	Detection Limit*: Output: Products*** / Output: Sludge	Method: Input: Chemical Formulations	Method: Output: Waste Water	Method: Output: Sludge	Method: Output: Products	Status: banned, verification of hazardous characteristics / applicability ****

**** Definition	
banned	Banned substances shall not be used intentionally in the production of Tchibo articles.
verification	All substances under verification will be screened in Tchibo headoffice. (1/ 2) Substances "under verification" will be listed on the MRSL implementation guideline, if usage in textile production has been confirmed, if hazardous characteristics apply and if non-regretable substitutes are available and applicable. (3) Substance groups, which are not expected to be used intentionally in the production of textiles, but are expected to be used in closed systems/ occur in the synthesis of chemicals/ textile fibres and/or materials (e.g. Polyurethane) used in apparel and footwear, Tchibo will engage in stakeholder initiatives to gain knowledge about the appearance of traces of the substances in textile processing and work with chemical suppliers and textile producers towards the reduction/ phase out of the substances. (4) Substances which are utmost important for the Tchibo textile product range and for which no phase out date can be defined yet, or for which input control measures are necessary, if impurities with hazardous characteristics are contained. Tchibo will engage in stakeholder initiatives and work with stakeholders, chemical suppliers and textile producers towards the reduction/ phase out of the substances. (5) Substances without identified usage.
tbd: to be determined	

Suppliers shall implement the MRSL stepwise via the Annex *MRSL implementation guidance.*