

# PRODUCT RESTRICTED SUBSTANCES LIST (P-RSL)

Group	Substance	CAS-Nr.	Detection Limit	Test Method	MNG Actual Limits
1. Alkylphenols	Nonylphenolethoxilates NPEO <sub>(2-18)</sub> Octylphenolethoxylates OPEO <sub>(2-18)</sub>	Various	0.2 mg/kg	Solvent Extraction, GC-MS (AP) & LC-MS (APEO) analysis.	Phase-out
	Nonylphenolethoxilates NPEO <sub>(1-2)</sub> Octylphenolethoxylates OPEO <sub>(1-2)</sub>	Various			
	Nonylphenol (NP), Octylphenol (OP)	Various			
2. Phthalates	DEHP	117-81-7	0.3 mg/kg	CEN-ISO-TS 16181 TS 16181 EN 15777 EN 14372 Solvent Extraction & GC-MS analysis.	Banned
	DBP	84-74-2			
	BBP	85-68-7			
	DIBP	84-69-5			
	DNOP	117-84-0			
	DINP	28553-12-0 / 68515-48-0			
	DIDP	26761-40-0 / 68515-49-1			
3. B.&C. Flame retardants	DNHP	84-75-3	0.3 mg/kg	Solvent Extraction & GC-CE analysis.	Banned
	PBs	Various			
	TRIS	126-72-7			
	TEPA	545-55-1			
	PBDEs	Various			
	HBCDD	25637-99-4			
	TCEP	115-96-8			
4. Azo dyes	4 – AMINOBIPHENYL	92-67-1	0.1 mg/kg	EN 14362-1:2012. ISO 17234-1:2010; ISO 17234-2:2011 → Leather. GB/T 17592- GB/T 23344 (4-aminoazobenzene)	Banned
	BENZIDINE	92-87-5			
	4 – CHLORO – o – TOLUIDINE	95-69-2			
	2 – NAPHTHYLAMINE	91-59-8			
	o – AMINOAZOTOLUENE	97-56-3			
	2 – AMINO – 4 – NITROTOLUENE	99-55-8			
	p – CHLORANILINE	106-47-8			
	2-4 DIAMINOANISOLE	615-05-4			
	4,4' – DIAMINODIPHENYLMETHANE	101-77-9			
	3,3' – DICHLOROBENZIDINE	91-94-1			
	3,3' – DIMETHOXYBENZIDINE	119-90-4			
	3,3' – DIMETHYLBENZIDINE	119-93-7			
	3,3' – DIMETHYL – 4,4' DIAMINODIPHENYLMETHANE	838-88-0			
	p – CRESIDINE	120-71-8			
	4,4' – METHYLEN – BIS – (2-CHLOROANILINE)	101-14-4			
	4,4' – OXYDIANILINE	101-80-4			
	4,4' - THIODIANILINE	139-65-1			
	o – TOLUIDINE	95-53-4			
	2,4 – TOLUYLENDIAMINE	95-80-7			
	2,4,5 – TRIMETHYLANILINE	137-17-7			
	2,4 – DIMETHYLANILINE (=2,4 – XYLIDINE)	95-68-1			
	2,6 – DIMETHYLANILINE (=2,6 – XYLIDINE)	87-62-7			
	2 – METHOXYANILINE	90-04-0			
	4 – AMINOAZOBENZENE	60-09-3			
5. Organotin compounds	DBT	1002-53-5	0.01 mg/kg	Extraction / Derivation followed by GC-MS analysis	Banned
	TBT	688-73-3			
	TPhT	892-20-6			
	DOT	94410-05-6			
	MBT	1118-46-3			
	MOT	15231-44-4			
	DPhT	-			
	TeBT	1461-25-2			
	TCyT	-			
6. PFCS	TPT	-	0.01 mg/kg	Extraction/ Derivation followed by GC-MS analysis	Phase-out
	TeET	597-64-8			
	PFOA	335-67-1			
	PFNA	375-95-1			
	PFBS	375-73-5 / 59933-66-3			
	4:2 FTOH	2043-47-2			
	6:2 FTOH	647-42-7			
	8:2 FTOH	678-39-7			
	10:2 FTOH	865-86-1			
	POSF	307-35-7			
	FOSA	754-91-6			
	PFHxS	355-46-4			
	PFHxA	307-24-4			
	PFOS	1763-23-1			
	N-Me-FOSA	31506-32-8			
	N-Et-FOSA	4151-50-2			
	N-Me-FOSE alcohol	24448-09-7			
	N-Et-FOSE alcohol	1691-99-2			
	PFBA	375-22-4			

	PFPeA	2706-90-3	0.01		
	PFHpA	375-85-9	0.01		
	PFDA	335-76-2	0.01		
	PFUnA	2058-94-8	0.01		
	PFDoA	307-55-1	0.01		
	PFTrA	72629-94-8	0.01		
	PFteA	376-06-7	0.01		
	PFHps	375-92-8	0.01		
	PFDS	335-77-3	0.01		
	6:2 FTA	17527-29-6	0.1		
	8:2 FTA	27905-45-9	0.1		
	10:2 FTA	17741-60-5	0.1		
	PF-3,7-DMOA	172155-07-6	0.1		
	HPFHpA	1546-95-8	0.1		
	4HPFUuA	34598-33-9	0.01		
	1H, 1H, 2H, 2H-PFOS	27619-97-2	0.01		
7. Chlorobenzenes	1,2-DICHLOROBENZENE	95-50-1	0.1 mg/kg	Extraction / Derivation followed by GC-MS analysis	Banned
	1,3-DICHLOROBENZENE	541-73-1			
	1,4- DICHLOROBENZENE	106-46-7			
	1,2,3-TRICHLOROBENZENE	87-61-6			
	1,2,4- TRICHLOROBENZENE	120-82-1			
	1,2,5- TRICHLOROBENZENE	120-82-1			
	1,3,4- TRICHLOROBENZENE	120-82-1			
	1,3,5- TRICHLOROBENZENE	108-70-3			
	1,2,3,4-TETRACHLOROBENZENE	634-66-2			
	1,2,3,5- TETRACHLOROBENZENE	634-90-2			
	1,2,4,5- TETRACHLOROBENZENE	95-94-3			
	PENTACHLOROBENZENE	608-93-5			
	HEXACHLOROBENZENE	118-74-1			
	Dichloromethane	75-09-2			
8. Chlorinated solvents	Chloroform	67-66-3	0.3 mg/kg	Extraction / Derivation followed by GC-MS analysis	Banned
	Tetrachloromethane	56-23-5			
	Trichloroethylene	79-01-6			
	Perchloroethylene	127-18-4			
	Pentachloroethane	76-01-7			
	1,1,2-Trichloroethane	79-00-5			
	1,1-Dichloroethane	75-34-3			
	1,2-Dichloroethane	107-06-2			
	1,1,1-trichloroethane	71-55-6			
	1,1,1,2-Tetrachloroethane	630-20-6			
9. Chlorophenols	1,1,2-Tetrachloroethane	79-34-5	0.02 mg/kg	Extraction / Derivation followed by GC-MS analysis	Banned
	1,1,2,2-Tetrachloroethane	75-35-4			
	1,1-Dichloroethylene	75-35-4			
	Tetrachlorophenol	25167-83-3			
	Pentachlorophenol	87-86-5			
10. Short chain chlorinated paraffins	Ortophenilphenol	90-43-7	0.03 mg/kg	Solvent Extraction & GC-CE analysis.	Phase-out
	Trichlorophenols (TriCP)	various			
	Dichlorophenols (DiCP)	various			
	Mono Chlorophenol	various			
11. Heavy metals	Short chain chlorinated paraffins (C10 – C13)	85535-84-8	1 mg/kg	EN 1122-2001 / Acid Digestion followed by ICP analysis. (Total)	Phase-out
	Total Cadmium(Cd)	7440-43-9			
	Total Lead(Pb)	7439-92-1			
	Total Mercury(Hg)	7439-97-6			
	Total Nickel(Ni)	7440-02-0			
	Total Hexavalent Chromium(Cr-VI)	18540-29-9			
	Total Arsenic (As)	7440-38-2			
	Total Chromium(Cr)	7440-47-3			
	Total Copper(Cu)	7440-50-8			
	Total Zinc(Zn)	7440-66-6			
	Total Manganese(Mn)	7439-96-5			

12. Others	Cyadine		1 mg/kg	ISO 105-E04 acid perspiration extraction & ICP analysis. (Extractable)	Phase-out
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