STANDARD 2023

RESTRICTED SUBSTANCES LIST (RSL)



RSL (Status: March 2023)

		ALDI RSL Limits		
Substance	**CAS-no.**	**Product section / Limits - Textiles[1)]**	**Product section / Limits - Shoes[1)]**	**Test Method [9)]**
1. Alkylphenols / Alkylphenolethoxylates (AP/APEO)				
Octylphenol OP	Various	OP, NP: 5 mg/kg (sum) OP(EO), NP(EO): 50 mg/kg (sum)	OP, NP: 50 mg/kg (sum) OP(EO), NP(EO): 50 mg/kg (sum)	DIN EN ISO 18254-1 (Textile) / DIN EN ISO 21084 (Textile) DIN EN ISO 18218-1 (Leather) Solvent extraction: Methanol GC-MS / LC-MS (AP + $APEO_{(1-2)}$) & LC-MS ($APEO_{(3-18)}$)
4-(1,1,3,3-Tetramethylbutyl)-phenol	140-66-9			
Octylphenol	27193-28-8			
4-Octylphenol	1806-26-4			
Nonylphenol NP	various			
4-Nonylphenol	104-40-5			
Nonylphenol	25154-52-3			
Nonylphenol (branched)	90481-04-2			
4-Nonylphenol (branched)	84852-15-3			
Nonylphenol Ethoxylates $NPEO_{(1-2)}$	various			
Nonylphenol Ethoxylates $NPEO_{(3-18)}$	various			
(Nonylphenoxy)-polyethylenoxid	9016-45-9			
4-Nonylphenol, ethoxylated	26027-38-3			
Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4			
4-Nonylphenol, branched, ethoxylated	127087-87-0			
Unbekanntes Farbmittel 94 (SIN list Isononylphenol-ethoxylate)	37205-87-1			
Octylphenol Ethoxylates $OPEO_{(1-2)}$	various			
Octylphenol Ethoxylates $OPEO_{(3-18)}$	various			
alpha-[4-(1,1,3,3-Tetramethylbutyl)phenyl]-w-hydroxypoly(oxy-1,2-ethandiyl) (SIN List OPEs)	9002-93-1			
4-tert-Octylphenolethoxylate	9036-19-5			
4-tert-Octylphenolethoxylate (branched)	68987-90-6			

		ALDI RSL Limits		
Substance	**CAS-no.**	**Product section / Limits - Textiles[1)]**	**Product section / Limits - Shoes[1)]**	**Test Method [9)]**
2. Phthalates				
Di-Butyl Phthalate (DBP)	84-74-2	250 mg/kg (sum)	500 mg/kg (sum)	DIN EN ISO 14389 or CPSC-CH-C1001-09.3 Solvent extraction: THF GC-MS analysis
Di(2-Ethyl Hexyl) Phthalate (DEHP)	117-81-7			
Benzyl Butyl Phthalate (BBP)	85-68-7			
Di-Iso-Nonyl Phthalate (DINP)	28553-12-0, 68515-48-0			
Di-N-Octyl Phthalate (DNOP)	117-84-0			
Di-Iso-Decyl Phthalate (DIDP)	26761-40-0, 68515-49-1			
Di-Iso-Butyl Phthalate (DIBP)	84-69-5			
Di-N-Hexyl Phthalate (DNHP)	84-75-3			
Di-(2-methoxyethyl) Phthalate (DMEP)	117-82-8			
DHNUP	68515-42-4			
DIHP	71888-89-6			
DPP	131-18-0			
Diisopentylphthalate (DIPP)	605-50-5			

		ALDI RSL Limits		
Substance	**CAS-no.**	**Product section / Limits - Textiles[1)]**	**Product section / Limits - Shoes[1)]**	**Test Method [9)]**
3. Brominated and Chlorinated Flame Retardants[3)]				
Polybrominated biphenyls (PBBs)	59536-65-1 various	10 mg/kg (each)	10 mg/kg (each)	DIN EN ISO 17881-1 and DIN EN ISO 17881-2 Solvent extraction: Toluol / Acetone / THF GC-MS / LC-MS analysis
Monobromo biphenyls (MonoBB)				
Dibromo biphenyls (DiBB)	-			
Tribromo biphenyls (TriBB)	-			
Tetrabromo biphenyls (TetraBB)	-			
Pentabromo biphenyls (PentaBB)	-			
Hexabromo biphenyls (HexaBB)	-			
Heptabromo biphenyls (HeptaBB)	-			
Octabromo biphenyls (OctaBB)	-			
Nonabromo biphenyls (NonaBB)	-			
Decabromo biphenyl (DecaBB)	13654-09-6			
Polybrominated diphenyl ethers (PBDEs)	various			
Monobromo diphenyl ethers (MonoBDE)	-			
Dibromo diphenyl ethers (DiBDE)	-			
Tribromo diphenyl ethers (TriBDE)	-			
Tetrabromo diphenyl ethers (TetraBDE)	40088-47-9			
Pentabromo diphenyl ethers (PentaBDE)	32534-81-9			
Hexabromo diphenyl ethers (HexaBDE)	36483-60-0			
Heptabromo diphenyl ethers (HeptaBDE)	68928-80-3			
Octabromo diphenyl ethers (OctaBDE)	32536-52-0			
Nonabromo diphenyl ethers (NonaBDE)	63936-56-1			
Decabromo diphenyl ether (DecaBDE)	1163-19-5			
Tris(2,3-Dibromopropyl)-Phosphate	126-72-7			
Tris(2-Chloroethyl)Phosphate (TCEP)	115-96-8			
Hexabromocyclododecane (HBCDD)	134237-50-6, 134237-51-7, 134237-52-8, 25637-99-4, 3194-55-6			
Tetrabromo-bisphenol A (TBBPA)	79-94-7			

		ALDI RSL Limits		
Substance	**CAS-no.**	**Product section / Limits - Textiles[1)]**	**Product section / Limits - Shoes[1)]**	**Test Method [9)]**
Subgroup: Other Flame Retardants				
TEPA	545-55-1	best current technology	best current technology	DIN EN ISO 17881-2 Solvent extraction: Toluol / Acetone / THF GC-MS / HPLC-MS analysis For boron and antimony (total): Microwave extraction with nitric acid/hydrochloric acid ICP-MS analysis
TRIS	126-72-7			
Sodium tetraborate	1303-96-4 1303-43-4 12179-04-3 215-540-4			
Boron trioxide	1303-86-2			
Boric acid	10043-35-3 11113-50-1			
Antimony trioxide	1309-64-4			
Tri-o-cresyl phosphate	78-30-8			
Tris(1,3-dichloro-2-propyl)phosphate (TDCPP)	13674-87-8			
4. Amines (associated with Azo dyes/ colorants)				
4-Aminodiphenyl	92-67-1	< 20 mg/kg (each)	< 20 mg/kg (each)	DIN EN ISO 14362-1 and DIN EN ISO 14362-3 (Textile) DIN EN ISO 17234-1 and DIN EN ISO 17234-2 (Leather)
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-Chloroaniline	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’-Methylene-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-Toluylenediamine	95-80-7			
2,4,5-Trimethylaniline	137-17-7			
o-Anisidine	90-04-0			
p-Aminoazobenzene	60-09-3			
2,4-Xylidine	95-68-1			
2,6-Xylidine	87-62-7			

		ALDI RSL Limits		
Substance	**CAS-no.**	**Product section / Limits - Textiles[1)]**	**Product section / Limits - Shoes[1)]**	**Test Method [9)]**
Subgroup: Carcinogenic dyes				
C.I Acid Red 26	3761-53-3	< 20 mg/kg (each)	< 20 mg/kg (each)	DIN 54231 Solvent extraction: Methanol (Solvent extraction: Pyridine according to DIN 16373-2 for special cases) HPLC-DAD-MS
C.I. Basic Red 9	569-61-9			
C.I. Basic Violet 3 (with ≥ 0,1 % Michler´s ketone or base)	548-62-9			
C.I. Basic Violet 14	632-99-5			
C.I Direct Blue 6	2602-46-2			
C.I Direct Red 28	573-58-0			
C.I Direct Black 38	1937-37-7			
C.I Disperse Blue 1	2475-45-8			
C.I. Disperse Yellow 3	2832-40-8			
C.I. Disperse Orange 11	82-28-0			
C.I. Disperse Yellow 23	6250-23-3			
C.I. Disperse Orange 149	85136-74-9			
C.I. Solvent Yellow 1	60-09-3			
C.I. Solvent Yellow 2	60-11-7 EN71-9			
C.I. Solvent Yellow 3	97-56-3			
C.I. Solvent Yellow 14	842-07-9			
C.I. Basic Blue 26	2580-56-5			
C.I. Basic Violet 1	8004-87-3 EN71-9			
C.I. Direct Brown 95	16071-86-6			
C.I. Direct Blue 15	2429-74-5			
C.I. Direct Blue 218	28407-37-6			
C.I Acid Red 114	6459-94-5			
C.I Acid Violet 49	1694-09-3			

		ALDI RSL Limits		
Substance	**CAS-no.**	**Product section / Limits - Textiles[1)]**	**Product section / Limits - Shoes[1)]**	**Test Method [9)]**
Subgroup: Allergenic Disperse Dyes				
C.I. Disperse Blue 1	2475-45-8	< 20 mg/kg (each)	< 20 mg/kg (each)	DIN 54231 Solvent extraction: Methanol (Solvent extraction: Pyridine according to DIN 16373-2 for special cases) HPLC-DAD-MS
C.I. Disperse Blue 3	2475-46-9			
C.I. Disperse Blue 7	3179-90-6			
C.I. Disperse Blue 26	3860-63-7			
C.I. Disperse Blue 35	12222-75-2			
C.I. Disperse Blue 102	12222-97-8			
C.I. Disperse Blue 106	12223-01-7			
C.I. Disperse Blue 124	61951-51-7			
C.I. Disperse Brown 1	23355-64-8			
C.I. Disperse Orange 1	2581-69-3			
C.I. Disperse Orange 3	730-40-5			
C.I. Disperse Orange 37/76	13301-61-6			
C.I. Disperse Red 1	2872-52-8			
C.I. Disperse Red 11	2872-48-2			
C.I. Disperse Red 17	3179-89-3			
C.I. Disperse Yellow 1	119-15-3			
C.I. Disperse Yellow 3	2832-40-8			
C.I. Disperse Yellow 9	6373-73-5			
C.I. Disperse Yellow 39	12236-29-2			
C.I. Disperse Yellow 49	54824-37-2			

		ALDI RSL Limits		
Substance	**CAS-no.**	**Product section / Limits - Textiles[1)]**	**Product section / Limits - Shoes[1)]**	**Test Method [9)]**
5. Organotin compounds				
MBT(Monobutyltin)	1118-46-3	0,5 mg/kg (each)	0,5 mg/kg (each)	ISO/TS 16179 Solvent extraction / Derivatisation: Ethanol GC-MS analysis DIN EN ISO 22744-1 Solvent extraction / Derivatisation: Methanol/Ethanol GC-MS analysis
DBT(Dibutyltin)	1002-53-5			
TBT(Tributyltin)	56573-85-4			
TPhT(Triphenyltin)	892-20-6			
DOT(Dioctyltin)	94410-05-6			
MOT(Monooctyltin)	15231-44-4			
DPhT(Diphenyltin)	1011-95-6			
TeBT(Tetrabutyltin)	1461-25-2			
TCyT(TricyclohexylTin)	NA			
TPT(Tripropyltin)	NA			
xxxTeET(Tetraethyltin)	597-64-8			
TBTO	56-35-9			
DBTC	683-18-1			
TPT	668-34-8			
DBB	75113-37-0			

		ALDI RSL Limits		
Substance	**CAS-no.**	**Product section / Limits - Textiles[1)]**	**Product section / Limits - Shoes[1)]**	**Test Method [9)]**
6. Per- and Polyfluoroalkyl Substances (PFAS)				
For Per- and Polyfluoroalkyl substances we refer to the current limits of the Afirm RSL https://afirm-group.com/afirm-rsl/				
7. Chloro benzenes				
Dichlorobenzenes	various	1 mg/kg (sum)	1 mg/kg (sum)	EN 17137 Solvent extraction: Dichloromethane GC-MS analysis
1,2-Dichlorobenzene	95-50-1			
1,3-Dichlorobenzene	541-73-1			
1,4-Dichlorobenzene	106-46-7			
Trichlorobenzenes	various			
1,2,3-Trichlorobenzene	87-61-6			
1,2,4-trichlorobenzene	120-82-1			
1,3,5-Trichlorobenzene	108-70-3			
Tetrachlorobenzene	various			
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			

		ALDI RSL Limits		
Substance	**CAS-no.**	**Product section / Limits - Textiles[1)]**	**Product section / Limits - Shoes[1)]**	**Test Method [9)]**
Chloro-Toluenes (solvents and biocides. Production dyes. Chemical Intermediates. Antifelting)				
2-chlorotoluene	95-49-8	1 mg/kg (sum)	1 mg/kg (sum)	EN 17137 Solvent extraction: Dichloromethane GC-MS analysis
3-chlorotoluene	108-41-8			
4-chlorotoluene	106-43-4			
2,3-dichlorotoluene	32768-54-0			
2,4-dichlorotoluene	95-73-8			
2,5-dichlorotoluene	19398-61-9			
2,6-dichlorotoluene	118-69-4			
3,4-dichlorotoluene	95-75-0			
2,3,6-trichlorotoluene	2077-46-5			
2,4,5-trichlorotoluene	6639-30-1			
Benzotrichloride	98-07-7			
alfa, 2,4-trichlorotoluene	94-99-5			
alfa, 2,6-trichlorotoluene	2014-83-7			
alfa, 3,4-trichlorotoluene	102-47-6			
alpha, alpha, 2,6-tetrachlorotoluene	81-19-6			
alpha, alpha, alpha, 2,-tetrachlorotoluene	2136-89-2			
alpha, alpha, alpha, 4-tetrachlorotoluene	5216-25-1			
2,3,4,5,6-pentachlorotoluene	877-11-2			
benzyl chloride	100-44-7			
8. Chlorinated solvents				
Dichloromethane	75-09-2	1 mg/kg (each) / 5 mg/kg (sum)	1 mg/kg (each) / 5 mg/kg (sum)	GC-MS Headspace Solvent extraction GC-MS analysis Thermal desorption analysis GC-MS analysis
Chloroform	67-66-3			
Tetrachloromethane	56-23-5			
1,1,2-Trichloroethane	79-00-5			
1,1-Dichloroethane	75-34-3			
1,2-Dichloroethane	107-06-2			
Trichloroethylene	79-01-6			
Perchloroethylene	127-18-4			
1,1,1-trichloroethane	71-55-6			
1,1,1,2-Tetrachloroethane	630-20-6			
1,1,2,2-Tetrachloroethane	79-34-5			
Pentachloroethane	76-01-7			
1,1-Dichloroethylene	75-35-4			

		ALDI RSL Limits		
Substance	**CAS-no.**	**Product section / Limits - Textiles[1)]**	**Product section / Limits - Shoes[1)]**	**Test Method [9)]**
Other VOCs[4)]				
Methyl-ethyl ketone	78-93-3	10 mg/kg	50 mg/kg	Solvent extraction: Acetone GC-MS analysis Thermal desorption analysis GC-MS analysis
Ethylbenzene	100-41-4	10 mg/kg	50 mg/kg	
Xylene	1330-20-7	10 mg/kg	30 mg/kg	
Cyclohexanone	108-94-1	10 mg/kg	50 mg/kg	
2-ethoxyethylacetate	111-15-9	10 mg/kg	50 mg/kg	
1,2,3-trichloropropane	96-18-4	10 mg/kg	50 mg/kg	
Acetophenone	98-86-2	10 mg/kg	10 mg/kg	
Naphtalene	91-20-3	2 mg/kg	2 / 5 mg/kg [5)]	
2-phenyl-2-propanole	617-94-7	10 mg/kg	10 mg/kg	
Bis-(2-methoxyethyl) ether	111-96-6	10 mg/kg	500 mg/kg (leather only)	
Styrene	100-42-5	10 mg/kg	50 mg/kg	
Benzene	71-43-2	1 mg/kg	1 mg/kg	
Toluene	108-88-3	10 mg/kg	10 mg/kg	
1-methyl-2-pyrrolidone	872-50-4	500 mg/kg [7)]	500 mg/kg	DIN CEN ISO/TS 16189 Solvent extraction: Methanol GC-MS analysis
N,N-dimethylacetamide	127-19-5	500 mg/kg [7)]	500 mg/kg	
N, N-Dimethylformamide				
N,N-dimethylformamide	68-12-2	500 mg/kg [7)]	100 mg/kg	DIN CEN ISO TS 16189 Solvent extraction: Methanol GC-MS analysis

		ALDI RSL Limits		
Substance	**CAS-no.**	**Product section / Limits - Textiles[1)]**	**Product section / Limits - Shoes[1)]**	**Test Method [9)]**
9. Chloro phenols				
Pentachlorophenols (PCP)	87-86-5	PCP - 0,05 / 0,25 mg/kg [2)] TeCP - 0,05 / 0,25 mg/kg [2)] (sum) TriCP - 0,2 / 1 mg/kg [2)] (sum)	0,5 / 1 mg/kg [2)] (each)	DIN EN ISO 17070 (Leather) or DIN 50009 (Textile); Solvent extraction or KOH extraction / Derivatization; GC-MS analysis or LC-MS (without derivatization)
Tetrachlorophenols (TeCP)	25167-83-3			
2,3,4,5-Tetrachlorophenol	4901-51-3			
2,3,4,6-Tetrachlorophenol	58-90-2			
2,3,5,6-tetrachlorophenol	935-95-5			
Trichlorophenol (TriCP)	25167-82-2			
2,4,6-trichlorophenol	88-06-2			
2,3,4-trichlorophenol	15950-66-0			
2,3,5-trichlorophenol	933-78-8			
2,3,6-trichlorophenol	933-75-5			
2,4,5-trichlorophenol	95-95-4			
3,4,5-trichlorophenol	609-19-8			
Dichlorophenols (DiCP)	25167-81-1	DiCP - 0,5 / 1 mg/kg [2)] (sum) MCP - 0,5 / 1 mg/kg [2)] (sum)	0,5 / 1 mg/kg [2)] (each) DiCP (leather): 1 mg/kg (each) MCP (leather): 2 mg/kg (each)	
2,3-dichlorophenol	576-24-9			
2,4-dichlorophenol	120-83-2			
2,5-dichlorophenol	583-78-8			
3, 4-dichlorophenol	95-77-2			
3, 5-dichlorophenol	591-35-5			
Mono Chlorophenol	various			
10. SCCP				
SCCP $C_{10–13}$	85535-84-8	50 mg/kg (sum)	100 mg/kg (sum)	DIN EN ISO 18219 Solvent Extraction: Hexan / Toluol GC-NCI-MS analysis

		ALDI RSL Limits		
Substance	**CAS-no.**	**Product section / Limits - Textiles[1)]**	**Product section / Limits - Shoes[1)]**	**Test Method [9)]**
11. Heavy metals				
Cadmium(Cd)	7440-43-9	0,1 mg/kg (soluble) or; 40 mg/kg (total) for plastics and coated materials	0,1 mg/kg (soluble) or; 40 mg/kg (total) for plastics and coated materials	DIN EN 16711-1 (textile), DIN EN ISO 17072-2 (Leather) Microwave digestion, ICP-MS analysis (total) DIN EN 16711-2 (texttile), DIN EN ISO 17072-1 (Leather) Acid perspiration extraction ICP analysis (Extractable)
Lead(Pb)	7439-92-1	0,2 mg/kg (soluble) or; 75 mg/kg (total) for plastics and coated materials	0,2 mg/kg (soluble) or; 75 mg/kg (total) for plastics and coated materials	
Mercury(Hg)	7439-97-6	0,02 mg/kg (soluble)	0,02 mg/kg (soluble)	DIN EN 16711-2 (texttile), DIN EN ISO 17072-1 (Leather) Acid perspiration extraction ICP analysis (Extractable)
Nickel(Ni)	7440-02-0	1 mg/kg (soluble)	1 mg/kg (soluble)	
Hexavalent Chromium(Cr-VI)	18540-29-9	not detectable (< 0,5 mg/kg) (soluble)	not detectable (1 mg/kg; < 3 mg/kg for leather) (soluble)	EN ISO 17075-1 and and EN ISO 17075-2:2017 for confirmation in case the extract causes interference.

		ALDI RSL Limits		
Substance	**CAS-no.**	**Product section / Limits - Textiles[1)]**	**Product section / Limits - Shoes[1)]**	**Test Method [9)]**
Arsenic(As)	7440-38-2	0,2 mg/kg (soluble)	0,2 mg/kg (soluble)	DIN EN 16711-2 (texttile), DIN EN ISO 17072-1 (Leather) Acid perspiration extraction ICP analysis (Extractable)
Chromium(Cr)	7440-47-3	1 mg/kg (soluble)	0,2 g/kg (soluble)	
Copper(Cu)	7440-50-8	25 / 50 mg/kg [2)] (soluble)	50 mg/kg (soluble)	
Zinc(Zn)	7440-66-6	750 mg/kg [8)] (soluble)	750 mg/kg [8)] (soluble)	
Manganese(Mn)	7439-96-5	90 mg/kg (soluble)	90 mg/kg (soluble)	
Antimony (Sb)	7440-36-0	30 mg/kg (soluble)	30 mg/kg (soluble)	
Cobalt (Co) (Extractable heavy-metals by artificial acidic sweat)	7440-48-4	1 mg/kg (soluble)	4 mg/kg (soluble)	

RSL (Status: March 2023)

		ALDI RSL Limits		
Substance	**CAS-no.**	**Product section / Limits - Textiles[1)]**	**Product section / Limits - Shoes[1)]**	**Test Method [9)]**

RSL
Restricted Substances List)
These detection/reporting limits and test methods will be revised - at least yearly - to ensure that always the best current technology and the lowest detection/reporting limits are applied.
Substances which are mandatory to use due to legal obligations or threshold limits in order to fulfil technical standards and requirements are exempt.

Footnote 1)	Textile products with leather as a main component are tested according to the Product section / Limits - Shoes
Footnote 2)	Limits set within the defined ranges depend on the requirement of use which apply to individual substances in certain articles (e.g. baby products <36month); excluding metal parts
Footnote 3)	Intentional use prohibited for all main components / 'confirmation of non-use'
Footnote 4)	Smell test based on SNV 195 651to be carried out first. Further analytical testing only if significant deviations occur
Footnote 5)	2 mg/kg for products with skin contact (AfPS)
Footnote 6)	Exception for products which must be treated hot (in wet or dry stage) during further processing: maximal 3.0%
Footnote 7)	For materials made of polyacrylonitrile (PAN), elastane (EL), polyurethane (PU), and aramides: 1000 mg/kg
Footnote 8)	It is intended to reduce the threshold limit to 90 ppm
Footnote 9)	Testing institutes always need to apply the latest test methods available for the defined standards and norms