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Sadesa Restricted Substances Policy & MRSL – Chemical Products

SADESA is fully aware of the need to protect our workers and the environment and based on the relevance of this issue, the Company supports limiting the use of substances defined as hazardous in the manufacturing process of its products.

The restriction of use of hazardous substances is also significantly important for our customers and that´s why our suppliers are expected to assist us to achieve the objective of full compliance with the restrictions on hazardous substances listed in this Policy and any other products or substances which may be restricted now or in future in all countries we do business.

SADESA is fully committed to work with the ZDHC MRSL program (Zero Discharge of Hazardous Chemicals, Manufacturing Restricted Substances List) version 2.0 Chapter 1 (Annex I of this Policy), which relies on a listing of families of restricted substances for formulations used during the leather manufacturing processes. Acceptable concentration limits for each substance of family of substances is established, which can appear both as impurities or by-products in formulations used at the manufacture facilities.

Suppliers are responsible to ensure that content of each substance listed in the present Policy does not exceed the maximum allowed values.

Sampling and Testing System
To verify compliance with statements herein, each supplier shall annually send a report with the tests carried out at a certified laboratory (ISO 17025) for each chemical product delivered at SADESA, the substances to be tested shall be defined on the basis of the characteristics inherent to the synthesis process, formulation and/or eventual input impurities.

SADESA may perform sampling and testing on purchased products.
If any of the required agents is detected/exceeding limits, this would entail a transfer of responsibility upon an eventual claim and the test expenses generated will be debited to the supplier.

Testing Institutes
Testing institutes must be familiar with the corresponding testing methods and the following ones are recommended: Eurofins-BLC, SATRA, TÜV, INTERTEK, IQTC.

Any other institute officially accredited and certified in accordance with DIN/EN 45001 or DIN/ISO/IEC 17025 can also be used for testing.

We kindly ask you to sign the following statement of compliance:

The undersigned, a duly qualified Representative of the company, does hereby certify that all products and their components produced and shipped to SADESA factories comply with the SADESA Policy for Restricted Substances and the ZDHC MRSL and meet all requirements included in the list and does assume the commitment to periodically validate said list on the link www.sadesa.com/sustainability/restrictedsubstances/

We further agree to be held for all costs incurred by SADESA and its customers, should any of the substances contained in our products breach contents of this Policy.

We confirm that we have received, read and fully understand the SADESA Policy for Restricted Substances.

Signature _____

Name _____

Title/Position _____

Company _____

Date _____

Restrictive Substance	CAS	TLV refer to content in leather	Pre-treatment	Test Method
Substances included on IARC's list Group I as per last revision, http://monographs.iarc.fr/ENG/Classification/latest_classif.php		n.d.		
Teratogenic Substances		n.d.		
Mutagenic Substances		n.d.		
Substances with risk of damage to fertility and fetus (Reproductive Toxicity)		n.d.		
Reach list (*) except for those substances included specifically in this RSL which TLV is more demanding http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp		n.d. (*)		
Alkylphenols & Alkylphenols Ethoxylates				
Σ Alkyl phenols (e.g. NP, OP, etc)		n.d.	Extraction with dichloromethane	GC/MS or LC/MS (detection limit 10ppm)
Σ Alkyl phenols ethoxilates (e.g. NPEO, OPEO, etc)		n.d.	DIN EN ISO 18218-1	DIN EN ISO 18218-1 (detection limit 10ppm)
Azo-amines				
Azo-dyestuffs (24 substances)		20 ppm	---	EN ISO 17234-1 (2015) det. of certain aromatic amines EN ISO 17234-2 (2011) det. 4-aminoazobenzene
2,4,5-trimethylaniline	137-17-7			
2,4-diaminoanisole	615-05-4			
2,4-dimethylaniline (=2,4-xylidine)	95-68-1			
2,4-toluylendiamine	95-80-7			
2,6-dimethylaniline (=2,6-xylidine)	87-62-7			
2-amino-4nitrotoluene	99-55-8			
2-methoxyaniline (=o-anisidine)	90-04-0			
2-naphthylamine	91-59-8			
3,3,'-dimethoxybenzidine	119-90-4			
3,3'-dichlorbenzidine	91-94-1			
3,3'-dimethyl-4,4'-diaminodiphenylmethane	838-88-0			
3,3'-dimethylbenzidine	119-93-7			
4,4'-diaminodiphenylmethane	101-77-9			
4,4'-methylen-bis(2-chloraniline)	101-14-4			
4,4'-oxydianiline	101-80-4			
4,4'-thiodianiline	139-65-1			
4-aminoazobenzene	60-09-3			
4-aminobiphenyl	92-67-1			
4-chlor-o-toluidine	95-69-2			
Benzidine	92-87-5			

Restrictive Substance	CAS	TLV refer to content in leather	Pre-treatment	Test Method
m-toluidine o-aminoazotuluene o-toluidine p-chloraniline p-cresidine p-toluidine	108-44-1 97-56-3 95-53-4 106-47-8 120-71-8 106-49-0			
Navy Blue (EU-No.611-070-00-2)	118685-33-9	n.d.	---	GC-MS TEST
Aniline	62-53-3	5 ppm		ISO 17234-1:2015
4,4'-methylenebis(2-chloroaniline) (MOCA)		n.d.	---	GC-MS TEST
Bisphenols				
Bisphenol-A (BPA)	80-05-7	1 ppm		Extraction: 1g simple/20 ml THF,
Bisphenol S (BPS)	80-09-1	For informational		Sonification for 60 minutes at 60 degrees
Bisphenol F (BPF)	620-92-8	purposes only.		C, analysis with LC/MS
Bisphenol AF (BPAF)	1478-61-1			
Chlorinated Paraffins				
C10-C13 Chloroalkanes Short Chained Chlorinated paraffins (SCCP)		100 ppm	DIN EN ISO 18219:2016-02	DIN EN ISO 18219:2016-02
C14-C17 Chloroalkanes Medium Chained Chloroparaffines (MCCP)		1000 ppm	DIN EN ISO 18219 (2016)	DIN EN ISO 18219 (2016)
Chlorophenols				
Σ Pentachlorophenol (PCP), Tetrachlorophenol (TeCP) and Trichlorophenol (TriCP)		0.05 ppm	extraction with KOH (16 h at 90ºC) Derivatization acc. To ISO 17070 (2015)	GC-MS TEST* *in case of value near TLV (+/-10%) re-test with reference method ISO 17070 (2015)
Chlorinated Benzenes & Toluenes				
Chloroorganic Carriers (all chlorobenzenes and all chlorotoluenes)		1 ppm	DIN 54232 (2010)	GC-MS TEST
Chlorotoluenes Dichlorobenzenes Dichlorotoluenes Hexachlorobenzenes Pentachlorobenzenes Pentaclorotoluenes Tetrachlorobenzenes tetrachlorotoluenes Trichlorobenzenes Trichlorotoluenes				
Dimethylfumarate				

Restrictive Substance	CAS	TLV refer to content in leather	Pre-treatment	Test Method
Dimethyl fumarate (DMFu)	624-49-7	0.1 ppm	ISO/TS 16186:2012	
Disperse dyes & Dyestuffs				
Disperse dyes and dyestuffs		n.d.	---	DIN 54231 (2005) Detection limit depending on dye
acid red 26	3761-53-3			
basic blue 26	2580-56-5			
basic red 9	569-61-9			
basic violet 3	548-62-9			
basic violet 14	632-99-5			
direct black 3	6227-04-9			
direct black 6	-			
direct black 28	6745-67-1			
direct black 38	1937-37-7			
direct blue 6	2602-46-2			
direct brown 95	16071-86-6			
direct red 28	573-58-0			
disperse blue 1	2475-45-8			
disperse blue 3	2475-46-9			
disperse blue 7	3179-90-6			
disperse blue 26	3860-63-7			
disperse blue 35	12222-75-2			
disperse blue 102	12222-97-8			
disperse blue 106	12223-01-7			
disperse blue 124	61951-51-7			
disperse brown 1	23355-64-8			
disperse orange 1	2581-69-3			
disperse orange 3	730-40-5			
disperse orange 11	82-28-0			
disperse orange 37/59/76	12223-33-5*			
disperse orange 149	85136-74-9			
disperse red 1	2872-52-8			
disperse red 11	2872-48-2			
disperse red 17	3179-89-3			
disperse red 151	61968-47-6			
disperse yellow 1	119-15-3			
disperse yellow 3	2832-40-8			
disperse yellow 7	6300-40-8			
disperse yellow 9	6373-73-5			
disperse yellow 23	6250-22-3			
disperse yellow 39	12239-29-2			
disperse yellow 49	54824-37-2			
disperse yellow 56	54077-16-6			
solvent red 23	85-86-9			
navy blue - consists of: dinatrium-(6-(4-anisidino)-3-sulfonato2-2-				

Restrictive Substance	CAS	TLV refer to content in leather	Pre-treatment	Test Method
(3,5-dinitro-2-oxidophenylazo)-1-(naphtolato)(1-(5-chlor-2-oxidophenylazo)-2-naphtolato)chromat (1-);Trinatrium bis(6-(4-anisidino)-3-sulfonato-2-(3,5-dinitro-2-oxidophenylazo)-1-(naphtolato)chromat(1-) * disperse orange 59 and disperse orange 76 are synonymic names for disperse orange 37				
Flame Retardants				
Flame Retardants of any type		n.d.	Extraction with THF	GC/MS or LC/MS
Formaldehyde				
Formaldehyde –extractable-	50-00-0	16 ppm	DIN EN ISO 17226-1 (2019) DIN EN ISO 17226-2 (2019)	Formaldehyde –extractable-
Heavy Metals –extractable-				
Antimony	7440-36-0	5 ppm	DIN EN ISO 17072-1 (2019)	DIN EN ISO 11885 (2009) or DIN EN ISO 17294-2 (2017) or DIN 38405, D32, (2000)
Arsenic	7440-38-2	0.2 ppm	DIN EN ISO 17072-1 (2019)	DIN EN ISO 11885 (2009) or DIN EN ISO 17294-2 (2017)
Cadmium	7440-43-9	0.1 ppm	DIN EN ISO 17072-1 (2019)	DIN EN ISO 11885 (2009) or DIN EN ISO 17294-2 (2017) or DIN EN ISO 5961 (1995)
Chrome VI	7440-47-3 18540-29-9	3 ppm	DIN EN ISO 17075-1 (2017) or DIN EN ISO 17075-2 (2017) or LFGB §64 82.02-11(2008) Aging of the sample is required according to BS ISO 10195 (2018) Method A2 (24h, 80°C, max. 10%rH, usage of a non-ventilated oven)	DIN EN ISO 17075-1 (2017) or DIN EN 17075-2 (2017) or LFGB §64 82.02-11(2008)
Chromium **- not applicable to tanning or retanning products based on Chrome III salts-**	7440-47-3	1 ppm	DIN EN ISO 105-E04 (2013) acid solution (1 hour extraction with 37ºC) or DIN EN ISO 16711-2 (2016)	DIN EN ISO 11885 (2009) or DIN EN ISO 17294-2 (2017) or DIN EN 1233 (1996)
Cobalt	7440-48-4	1 ppm	DIN EN ISO 17072-1 (2019)	DIN EN ISO 11885 (2009) or DIN EN ISO 17294-2 (2017) or DIN 38406, E 24, (1993)
Copper	7440-50-8	25 ppm	DIN EN ISO 17072-1 (2019)	DIN EN ISO 11885 (2009) or DIN EN ISO 17294-2 (2017) or DIN 38406, E7 (1991)
Lead	7439-92-1	0.2 ppm	DIN EN ISO 17072-1 (2019)	DIN EN ISO 11885 (2009) or DIN EN ISO 17294-2 (2017) or DIN 38406, E6 (1998)
Mercury	7439-97-6	0.02 ppm	DIN EN ISO 17072-1 (2019)	DIN EN ISO 12846 (2012) or DIN EN ISO 17294-2 (2017)
Nickel	7440-02-0	0.5 ppm	DIN EN ISO 17072-1 (2019)	DIN EN ISO 11885 (2009) or DIN EN ISO 17294-2 (2017) or DIN 38406, E11 (1991)

Restrictive Substance	CAS	TLV refer to content in leather	Pre-treatment	Test Method
Heavy Metals –total content-				
Arsenic	7440-38-2	10 ppm	DIN EN ISO 17072-1 (2019)	DIN EN ISO 11885 (2009) or DIN EN ISO 17294-2 (2017)
Cadmium	7440-43-9	40 ppm	DIN EN ISO 17072-2 (2019)	DIN EN ISO 11885 (2009) or DIN EN ISO 17294-2 (2017) or DIN EN ISO 5961 (1995)
Lead	7439-92-1	40 ppm	DIN EN ISO 17072-2 (2019)	DIN EN ISO 11885 (2009) or DIN EN ISO 17294-2 (2017) or DIN 38406, E6 (1998)
Mercury	7439-97-6	0.5 ppm		DIN EN ISO 17072-2:2017
Heavy Metals –infant & toddlers-				
Heavy Metals –infants/toddlers-				EN71-3:2013 + A1:2014
Aluminium (Al)	7429-90-5	10 ppm		
Antimony (Sb)	7440-36-0	10 ppm		
Arsenic (As)	7440-38-2	10 ppm		
Barium (Ba)	12047-27-7	10 ppm		
Boron (B)	7440-42-8	10 ppm		
Cadmium (Cd)	7440-43-9	n.d.		
Chrome VI	18540-29-9	n.d.		
Chromium	7440-47-3	n.d.		
Cobalt (Co)	7440-48-4	n.d.		
Copper (Cu)	7440-50-8	10 ppm		
Lead (Pb)	7439-92-1	n.d.		
Manganese (Mn)	7439-96-5	10 ppm		
Mercury (Hg)	7439-97-6	n.d.		
Nickel (Ni)	7440-02-0	n.d.		
Selenium (Se)	7782-49-2	10 ppm		
Strontium (Sr)	7440-24-6	10 ppm		
Tin (Sn)	7440-31-5	n.d.		
Zinc (Zn)	7440-66-6	10 ppm		
N-Nitrosamines				
n-Nitrosamines		n.d.	---	GB/T 24153-2009 (detection limit 0.5ppm)
N-Nitrosopiperidine	100-75-4			
N-Nitrosodiethylamine	55-18-5			
N-Nitrosomorpholine	59-89-2			
N-Nitroso-N-ethylaniline	612-64-6			
N-Nitroso-N-methylaniline	614-00-6			
N-Nitrosodiprophylamine	621-64-7			
N-Nitrosodimethylamine	62-75-9			

Restrictive Substance	CAS	TLV refer to content in leather	Pre-treatment	Test Method
N-Nitrosodibutylamine	924-16-3			
N-Nitrosopyrrolidine	930-55-2			
Organotins Compounds				
Dibutyltin (DBT)	1002-53-5	0.2 ppm	ISO/TS 16179 (2012)	
Dioctyltin (DOT)	15231-44-4	1 ppm	ISO/TS 16179 (2012)	
Monobutyltin (MBT)	787863-54-9	1 ppm	ISO/TS 16179 (2012)	
Monooctyltin (MOT)	94410-07-8	1 ppm	ISO/TS 16179 (2012)	
Tributyltin (TBT)	56573-85-4	0.025 ppm	ISO/TS 16179 (2012)	
Tricyclohexyltin	3091-32-5	1 ppm	ISO/TS 16179 (2012)	
Trimethyltin (TMT)	-	1 ppm	ISO/TS 16179 (2012)	
Trioctyltin (TOT)	2587-76-0	1 ppm	ISO/TS 16179 (2012)	
Triphenyltin (TPhT)	668-34-8	0.5 ppm	ISO/TS 16179 (2012)	
Tripropyltin	2279-76-7	1 ppm	ISO/TS 16179 (2012)	
Σ Tri substituted organotin compounds		1000 ppm refer to tin content	ISO/TS 16179/2012	
Organotin compounds – Others		0.050 ppm	With methanolic buffer with carbamate	Acc. To ISO 17353 (2005)
o-PP				
o-phenyl-phenol (o-PP) & its salts	90-43-7	50 ppm	extraction with KOH (16 h at 90ºC)	GC-MS or DIN EN ISO 13365 (2011)
Pesticides & Insecticides				
Σ Pesticides & Insecticides		0.5 ppm	Extraction with acetone/hexane	GC-MS
α-Hexachlorcychlohexane	319-84-6			
γ-Hexachlorcyclohexane	608-73-1			
2-(2,4,5-trichlorophenoxy) propionic acid (2,4,5-TP), its salts, and 2-(2,4,5-trichlorophenoxy) propionyl compounds				
2,4,5-T	95-95-4			
2,4,5-trichlorophenoxyacetic acid (2,4-T), its salts and 2.4,5-trichlorophenoxyacetyl compounds				
2,4-D	94-75-7			
Aldicarb	116-06-3			
Aldrine	309-00-2			
Alpha and Beta Endosulfanes	115-29-7			
Carbaryle	63-25-2			
Captafol	2425-06-1			
Chlordane	57-74-9			

Restrictive Substance	CAS	TLV refer to content in leather	Pre-treatment	Test Method
Chlordecone (kepone)	143-50-0			
Chlordimeform	6164-98-3			
Chlorfenvinphos	470-90-6			
Chlorobenzilate	510-15-6			
Chlorthalonil	All isomers			
Cyhalothrin	91465-08-6			
DDD	72-54-8			
DDE	72-55-9			
DDT	50-29-3			
Deltamethrin	52918-63-5			
Diazinon	333-41-5			
Dichlofenthion	97-17-6			
Dichlofluanide	1085-98-9			
Dicofol	115-32-2			
Dieldrine	60-57-1			
Dinoseb, its salts & compounds	88-85-7			
Endosulfanes				
Endrine	72-20-8			
Ethylparathione –Parathion-	56-38-2			
Fenchlorphos	299-84-3			
Fenvalerate	51630-58-1			
Halogenated diarylalkanes				
Halogenated diphenyl methanes				
Halogenated naphtthalenes				
HCH's without Lindane				
Heptachlor	76-44-8			
Heptachloroepoxide	1024-57-3			
Hexachlorobenzene	118-74-1			
Isodrine	465-73-6			
Kelevane	4234-79-1			
Kepone	143-50-0			
Lindane	58-89-9			
Malathione	121-75-5			
Methoxychlor	72-43-5			
Methyl Parathion	298-00-0			

Restrictive Substance	CAS	TLV refer to content in leather	Pre-treatment	Test Method
Mirex	2385-85-5			
Monocrotophos	6923-22-4			
Monomethyl-dibromo-diphenyl methane	99688-47-8			
Monomethyl-dichloro-diphenyl methane	81167-70-8			
Monomethyl-tetrachloro-diphenyl methane	76253-60-6			
Pentachloroanisole	1825-21-4			
Permethrine	52645-53-1			
Perthane	72-56-0			
Quintozene	82-68-8			
Strobane	8001-50-1			
Telodrin	297-78-9			
Timiperone (DTTB)	57648-21-2			
Tolylfluanide	731-27-1			
Toxaphene	8001-35-2			
Trifluraline	1582-09-8			
β-He xachlorcyclohexane	58-89-9 319-85-7			
Triclosan	3380-34-5	50 ppm	extraction with KOH	DIN EN ISO 13365 (2011)
Phthalates				
Phthalates All esters of –phtalic acid including but not restricted to:		500 ppm	DIN EN ISO 14389 (2014)	DIN EN ISO 14389 (2014) or CPSC-CH-C1001-09.4 (2018)
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4			
1,2-Benzenedicarboxylic acid, diphenyl ester, branched and linear	84777-06-0			
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8			
butyl benzyl phthalate (BBP)	85-68-7			
di(2-ethylhexyl)-phthalate (DEHP)	117-81-7			
dibutyl phthalate (DBP)	84-74-2			
di-C6-8-branched alkylphthalates (DIHP)	71888-89-6			
di-C711-branched alkylphthalates (DHNUP)	68515-42-4			
di-cyclo-hexyl phthalate (DCHP)	84-61-7			
di-ethylphthalate	84-66-2			
diisobutyl phthalate (DIBP)	84-69-5			
di-isodecyl phthalate (DIDP)	26761-40-0			
di-isononyl phthalate (DINP)	28553-12-0			
di-iso-octyl phthalate (DIOP)	27554-26-3			
Diisopentylphthalate (DIPP)	605-50-5			
di-methylphthalate	131-11-3			
di-n-hexylphthalate (DHP)	84-75-3			

Restrictive Substance	CAS	TLV refer to content in leather	Pre-treatment	Test Method
di-n-octyl phthalate (DNOP) di-nonyl phthalate (DNP) di-n-propyl phthalate (DPrP) di-pentylphthalate (DPP) N-pentyl-isopentyl phthalate (NPIPP)	117-84-0 84-76-4 131-16-8 131-18-0 776297-69-9			
Solvents & Residuals				
Cyclohexanone	108-94-1	n.d.	---	GC-MS TEST
Methyl chloride (MC)	74-87-3	n.d.	---	GC-MS TEST
Methylene chloride (MDC)	75-09-2	n.d.	---	GC-MS TEST
2-Methoxyethanol	109-86-4	100 ppm	---	GC-MS TEST
2-Ethoxyethanol	110-80-5	100 ppm	---	GC-MS TEST
2-Ethoxyethyl acetate	111-15-9	100 ppm	---	GC-MS TEST
Dimethyl formamide (DMFa)	68-12-2	n.d.	---	GC-MS TEST
Ethylene glycol monobutyl ether	111-76-2	n.d.	---	GC-MS TEST
Ethyl methyl pyrrolidine	765-79-7	n.d.	---	GC-MS TEST
n-Hexane	92112-69-1	n.d.	---	GC-MS TEST
n-methyl pyrrolidone (NMP)	872-50-4	n.d.	---	GC-MS TEST
Tetrahydrofuran (THF)		n.d.	---	GC-MS TEST
Volatile Organic Compounds (VOC)				
Solvents (VOC) 1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethylene Pentachloroethane Tetrachlorethylene Tetrachloromethane (carbon tetrachloride) Trichloroethylene (TCE)	 630-20-6 71-55-6 79-34-5 79-00-5 75-35-4 76-01-7 127-18-4 56-23-5 79-01-6	1000 ppm	---	GC-MS TEST
Toluene	108-88-3	n.d.	---	GC-MS TEST
Toluene diisocyanate	91-08-7 584-84-9	n.d.	---	GC-MS TEST

Restrictive Substance	CAS	TLV refer to content in leather	Pre-treatment	Test Method
Benzene	71-43-2	n.d.	---	GC-MS TEST
Xylene –all isomers-	1330-20-7	n.d.	---	GC-MS TEST
Dimethylacetamide (DMAC)	127-19-5	n.d.	---	GC-MS TEST
Dimethylsulfoxide (DMSO)	67-68-5	n.d.	---	GC-MS TEST
Dioxins and furans		n.d.	---	GC-MS TEST
Benzo(a)pyrene (BaP)	50-32-8	1 ppm	---	ZEK 01.2-08
Butylated Hydroxytoluene (BHT)	128-37-0	n.d.	---	HPLC
Cresol	All isomers 1319-77-3	n.d.	---	GC-MS TEST
Phenol				
Phenol	108-95-2	10 ppm	---	EN 71-9 (2007) (TLV) EN 71-10 (2006) (Method)
Polychlorinated Biphenyls & Terphenyls				
Polychlorinated Biphenyls (PCB's)	1336-36-3	n.d.	---	DIN 38407, F2 (1993)
Polychlorinated Terphenyls (PCT's)		n.d.	---	DIN 38407, F2 (1993)
Polyvinylchloride (PVC)				
Polyvinylchloride (PVC)	9002-86-2	n.d.	---	Infrared Analysis
Boric Acid				
Boric acid	10043-35-3 11113-50-1	100 ppm	---	GC-MS TEST
Perfluorinated and Polyfluorinated Chemicals (PFCs) Beginning January 1, 2015: durable water, oil and stain repellent finishes (fluorinated polymers) based on long-chain technology are banned from Intentional use by ZDCH signatory brands. Long-chain compounds according to the OECD definition (http://www.oecd.org./ehs/pfc/) are based on long-chain perfluorocarboxylic acids (C8 and higher) and on long-chain perfluoroalkyl sulfonates (C6 and higher). The main contaminants of this technology include: - Perfluroalkyl sulfonates (PFSAs) with carbon chain lengths C6 and higher (e.g., PFOS, perfluorooctane sulfonate) - Perfluorocarboxylic acids with carbon chain lengths C8 and higher (e.g., PFOA, perfluorooctanoic acid)			prISO/FDIS 23702-1 (2018)	
Perfluorooctane sulfonate (PFOS) and related substances	Multiple	2 ppm (sum)		
Perfluorooctanoic acid (PFOA)	335-67-1	2 ppm		

tlv = threshold limit value
ppm = mg/kg n.d.= not detected

ANNEX I

Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers

Potential Uses in Apparel and Footwear Textile Processing

APEOs can be used as or found in: detergents, scouring agents, spinning oils, wetting agents, softeners, emulsifier/dispersing agents for dyes and prints, impregnating agents, de- gumming for silk production, dyes and pigment preparations, polyester padding and down/feather fillings.

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
104-40-5 11066-49-2 25154-52-3 84852-15-3	Nonylphenol (NP), mixed isomers	Textile	No intentional use	250 ppm	Liquid chromatography-mass spectrometry (LC-MS), gas chromatography-mass spectrometry (GC-MS)
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
9016-45-9 26027-38-3 37205-87-1 68412-54-4 127087-87-0	Nonylphenolethoxylates (NPEO)	Textile	No intentional use	500 ppm	Liquid chromatography-mass spectrometry (LC-MS), gas chromatography-mass spectrometry (GC-MS)
		Leather	No intentional use	500 ppm	
		Polymers (R,F,A)*	No intentional use	500 ppm	
9002-93-1 9036-19-5 68987-90-6	Octylphenolethoxylates (OPEO)	Textile	No intentional use	500 ppm	Liquid chromatography-mass spectrometry (LC-MS), gas chromatography-mass spectrometry (GC-MS)
		Leather	No intentional use	500 ppm	
		Polymers (R,F,A)*	No intentional use	500 ppm	
140-66-9 1806-26-4 27193-28-8	Octylphenol (OP),mixed isomers	Textile	No intentional use	250 ppm	'Liquid chromatography-mass spectrometry (LC-MS), gas chromatography-mass spectrometry (GC-MS)
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	

Anti- Microbials & Biocides

Potential Uses in Apparel and Footwear Textile Processing

These substances have biocidal properties, making it useful for Multiple preservation applications.

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
90-43-7	o-Phenylphenol (+salts)	Textile	No intentional use	5000 ppm	Solvent extraction LC MS, LC DAD, GC MS
		Leather		Use is permitted and OPP is approved for use under BPR PT6 as a preservative for formulations.	
		Polymers (R,F,A)*	No Limit		
Multiple	Permethrin	Textile	No intentional use	250 ppm except for processes mentioned	Solvent extraction, LC MS/MS, GC MS/MS
		Leather	No intentional use	250 ppm except for processes mentioned	
		Polymers (R,F,A)*	No intentional use	250 ppm except for processes mentioned	
	In most situations, deliberate use is not permitted. However, it should be noted that Permethrin is approved for use on PT18 under BPR and is permitted for use on wool curtains and carpets, rugs and floor coverings. Permethrin is permitted for PPE use (EU 2016/425, EPA registered product, APVMA Registered Product, PMRA Registered Product, etc.). Also, its use is sometimes stipulated for certain end uses such as military. All efforts should be made to maximise the durability of the chemical finish and to minimise losses to the environment.				
3380-34-5	Triclosan	Textile	No intentional use	250 ppm	solvent extraction LC MS, DAD
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	

Chlorinated Parafins

Potential Uses in Apparel and Footwear Textile Processing

These are used occasionally as flame retardants in certain industries. In leather formulations, these are also used as fat liquoring agents.

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
85535-84-8	Short-chain Chlorinatedparaffin (C10– C13)	Textile	No intentional use	50 ppm	prEN ISO 22699-2
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No Limit		
85535-85-9	Medium-chain Chlorinatedparaffins (MCCPs) (C14-C17)	Textile	No intentional use	500 ppm	prEN ISO 22699-2
		Leather	No intentional use	500 ppm	
		Polymers (R,F,A)*	No intentional use	500 ppm	

Chlorobenzenes and Chlorotoluenes

Potential Uses in Apparel and Footwear Textile Processing

Chlorobenzenes and Chlorotoluenes (chlorinated aromatic hydrocarbons) can be used as carriers in the dyeing process of polyester or wool/polyester fibres. They can also be used as solvents.

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
95-50-1	1,2-dichlorobenzene	Textile	No intentional use	500 ppm	GC-MS
		Leather	No intentional use	500 ppm	
		Polymers (R,F,A)*	No intentional use	500 ppm	
Multiple	Other isomers of mono-, di-, tri-, tetra-, penta- and hexa-Chlorobenzene and mono-, di-, tri-, tetra- and penta-chlorotoluene	Textile	No intentional use	Sum = 200 ppm tetrachlorotoluene, and trichlorotoluene 5 ppm each	GC-MS
		Leather	No intentional use	Sum = 200 ppm tetrachlorotoluene, and trichlorotoluene 5 ppm each	
		Polymers (R,F,A)*	No intentional use	Sum = 200 ppm tetrachlorotoluene, and trichlorotoluene 5 ppm each	

Chlorophenols

Potential Uses in Apparel and Footwear Textile Processing

Chlorophenols are polychlorinated compounds used as preservatives or pesticides. Pentachlorophenol (PCP) and tetrachlorophenol (TeCP) have been used in the past to prevent mould when storing/ transporting raw hides and leather. They are now regulated and should not be used.

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
87-86-5	Pentachlorophenol (PCP) [1]	Textile	No intentional use	Sum of substances [1] = 20 ppm	GC-MS EN ISO 17070
		Leather	No intentional use	Sum of substances [1] = 20 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [1] = 20 ppm	
Multiple	Tetrachlorophenol (TeCP) [1]	Textile	No intentional use	Sum of substances [1] = 20 ppm	GC-MS EN ISO 17070
		Leather	No intentional use	Sum of substances [1] = 20 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [1] = 20 ppm	
120-83-2	2,4-dichlorophenol [2]	Textile	No intentional use	Sum of substances [2]	GC-MS EN ISO 17070
		Leather	No intentional use	Sum of substances [2]	
		Polymers (R,F,A)*	No intentional use	Sum of substances [2]	
95-57-8	2-chlorophenol [2]	Textile	No intentional use	Sum of substances [2] = 50 ppm	GC-MS EN ISO 17070
		Leather	No intentional use	Sum of substances [2] = 50 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [2] = 50 ppm	
583-78-8	2,5-dichlorophenol [2]	Textile	No intentional use	Sum of substances [2] = 50 ppm	GC-MS EN ISO 17070
		Leather	No intentional use	Sum of substances [2] = 50 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [2] = 50 ppm	
87-65-0	2,6-dichlorophenol [2]	Textile	No intentional use	Sum of substances [2] = 50 ppm	GC-MS EN ISO 17070
		Leather	No intentional use	Sum of substances [2] = 50 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [2] = 50 ppm	
88-06-2	2,4,6-trichlorophenol [2]	Textile	No intentional use	Sum of substances [2] = 50 ppm	GC-MS EN ISO 17070
		Leather	No intentional use	Sum of substances [2] = 50 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [2] = 50 ppm	
591-35-5	3,5-dichlorophenol [2]	Textile	No intentional use	Sum of substances [2] = 50 ppm	GC-MS EN ISO 17070
		Leather	No intentional use	Sum of substances [2] = 50 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [2] = 50 ppm	

Chlorophenols

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
95-95-4	2,4,5-trichlorophenol [2]	Textile	No intentional use	Sum of substances [2] = 50 ppm	GC-MS EN ISO 17070
		Leather	No intentional use	Sum of substances [2] = 50 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [2] = 50 ppm	
576-24-9	2,3-dichlorophenol [2]	Textile	No intentional use	Sum of substances [2] = 50 ppm	GC-MS EN ISO 17070
		Leather	No intentional use	Sum of substances [2] = 50 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [2] = 50 ppm	
95-77-2	3,4-dichlorophenol [2]	Textile	No intentional use	Sum of substances [2] = 50 ppm	GC-MS EN ISO 17070
		Leather	No intentional use	Sum of substances [2] = 50 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [2] = 50 ppm	
108-43-0	3-chlorophenol [2]	Textile	No intentional use	Sum of substances [2] = 50 ppm	GC-MS EN ISO 17070
		Leather	No intentional use	Sum of substances [2] = 50 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [2] = 50 ppm	
106-48-9	4-chlorophenol [2]	Textile	No intentional use	Sum of substances [2] = 50 ppm	GC-MS EN ISO 17070
		Leather	No intentional use	Sum of substances [2] = 50 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [2] = 50 ppm	
15950-66-0	2,3,4-trichlorophenol [2]	Textile	No intentional use	Sum of substances [2] = 50 ppm	GC-MS EN ISO 17070
		Leather	No intentional use	Sum of substances [2] = 50 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [2] = 50 ppm	
609-19-8	3,4,5-trichlorophenol [2]	Textile	No intentional use	Sum of substances [2] = 50 ppma	GC-MS EN ISO 17070
		Leather	No intentional use	Sum of substances [2] = 50 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [2] = 50 ppm	
933-78-8	2,3,5-trichlorophenol [2]	Textile	No intentional use	Sum of substances [2] = 50 ppm	GC-MS EN ISO 17070
		Leather	No intentional use	Sum of substances [2] = 50 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [2] = 50 ppm	
933-75-5	2,3,6-trichlorophenol [2]	Textile	No intentional use	Sum of substances [2] = 50 ppm	GC-MS EN ISO 17070
		Leather	No intentional use	Sum of substances [2] = 50 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [2] = 50 ppm	

Dyes – Azo (Forming Restricted Amines)

Potential Uses in Apparel and Footwear Textile Processing

Azo dyes and pigments are colourants that incorporate one or several azo groups (-N=N-) bound with aromatic compounds. Thousands of azo dyes exist, but only those that degrade to form the listed cleavable amines are restricted. Azo dyes that release these amines are regulated and should no longer be used for the dyeing of textiles. Please find a non-exhaustive list of dyes which can form restricted amines in the appendix.

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
101-80-4	4,4-oxydianiline	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
101-14-4	4,4-methylene-bis-(2-chloro-aniline)	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
119-90-4	3,3-dimethoxylbenzidine	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
101-77-9	4,4-methylenedianiline	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
106-47-8	4-chloroaniline	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
119-93-7	3,3-dimethylbenzidine	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
120-71-8	6-methoxy-m-toluidine	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
139-65-1	4,4-thiodianiline	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
60-09-3	4-aminoazobenzene	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
137-17-7	2,4,5-trimethylaniline	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	

Dyes – Azo (Forming Restricted Amines)					
CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
90-04-0	o-anisidine	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
838-88-0	4,4-methylenedi-o-toluidine	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
91-94-1	3,3'-dichlorobenzidine	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
615-05-4	4-methoxy-m-phenylenediamine	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
87-62-7	2,6-xylidine	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
91-59-8	2-naphthylamine	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
95-53-4	o-toluidine	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
92-87-5	Benzidine	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
95-69-2	4-chloro-o-toluidine	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
92-67-1	4-aminodiphenyl	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
95-80-7	4-methyl-m-phenylenediamine	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
95-68-1	2,4-xylidine	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	

Dyes – Azo (Forming Restricted Amines)					
CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
97-56-3	o-aminoazotoluene	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
99-55-8	5-nitro-o-toluidine	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
553-00-4	2-Naphthylammoniumacetate	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
3165-93-3	4-chloro-o-toluidinium chloride	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
39156-41-7	4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	
21436-97-5	2,4,5-trimethylaniline hydrochloride	Textile	No intentional use	150 ppm	LC, GC
		Leather	No intentional use	150 ppm	
		Polymers (R,F,A)*	No intentional use	150 ppm	

Dyes – Carcinogenic or Equivalent Concern

Potential Uses in Apparel and Footwear Textile Processing

Most of these substances are regulated and should no longer be used for the dyeing of textiles.

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
632-99-5	C.I. Basic Violet 14	Textile	No intentional use	250 ppm	DIN 54231
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
1937-37-7	C.I. Direct Black 38	Textile	No intentional use	250 ppm	DIN 54231
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
2602-46-2	C.I. Direct Blue 6	Textile	No intentional use	250 ppm	DIN 54231
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
3761-53-3	C.I. Acid Red 26	Textile	No intentional use	250 ppm	DIN 54231
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
573-58-0	C.I. Direct Red 28	Textile	No intentional use	250 ppm	DIN 54231
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
569-61-9	C.I. Basic Red 9	Textile	No intentional use	250 ppm	DIN 54231
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
2475-45-8	C.I. Disperse Blue 1	Textile	No intentional use	250 ppm	DIN 54231
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
2580-56-5	C.I. Basic Blue 26 (with Michler's Ketone > 0.1%)	Textile	No intentional use	250 ppm	DIN 54231
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
2475-46-9	C.I. Disperse Blue 3	Textile	No intentional use	250 ppm	DIN 54231
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
2437-29-8	C.I. Basic Green 4 (Malachite Green Oxalate)	Textile	No intentional use	250 ppm	DIN 54231
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
569-64-2	C.I. Basic Green 4 (Malachite Green Chloride)	Textile	No intentional use	250 ppm	DIN 54231
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	

Dyes – Carcinogenic or Equivalent Concern

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
82-28-0	Disperse Orange 11	Textile	No intentional use	250 ppm	DIN 54231
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
10309-95-2	C.I. Basic Green 4 (Malachite Green)	Textile	No intentional use	250 ppm	DIN 54231
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
1694-09-3	C.I. Acid Violet 49	Textile	No intentional use	250 ppm	DIN 54231
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
548-62-9	Basic violet 3 with >0.1% of Michler´s Ketone	Textile	No intentional use	250 ppm	DIN 54231
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	

Dyes – Disperse (Sensitising)

Potential Uses in Apparel and Footwear Textile Processing

Disperse dyes are a class of water- insoluble dyes that penetrate the fibre system of synthetic or manufactured fibres and are held in place by physical forces without forming chemical bonds. Disperse dyes are used in synthetic fibre (e.g. polyester, acetate, polyamide). Restricted disperse dyes are suspected of causing allergic reactions and should no longer be used for dyeing of textiles.

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
12236-29-2	Disperse Yellow 39	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		
23355-64-8	Disperse Brown 1	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		
119-15-3	Disperse Yellow 1	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		
12222-97-8	Disperse Blue 102	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		

Dyes – Disperse (Sensitising)					
CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
12223-01-7	Disperse Blue 106	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		
13301-61-6	Disperse Orange 37/59/76	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		
2581-69-3	Disperse Orange 1	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		
2832-40-8	Disperse Yellow 3	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		
2872-48-2	Disperse Red 11	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		
2872-52-8	Disperse Red 1	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		
3179-89-3	Disperse Red 17	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		
54824-37-2	Disperse Yellow 49	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		
3179-90-6	Disperse Blue 7	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		
3860-63-7	Disperse Blue 26	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		
6373-73-5	Disperse Yellow 9	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		
61951-51-7	Disperse Blue 124	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		

Dyes – Disperse (Sensitising)

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
12222-75-2	Disperse Blue 35	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		
730-40-5	Disperse Orange 3	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		
56524-77-7	Disperse Blue 35	Textile	No intentional use	250 ppm	LC
		Leather	No Limit		
		Polymers (R,F,A)*	No Limit		

Dyes – Navy Blue Colourant

Potential Uses in Apparel and Footwear Textile Processing

Navy Blue Colourant is regulated and should no longer be used for the dyeing of textiles.

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
118685-33-9	Component 1: C39 H23Cl-CrN7O12S 2Na	Textile	No intentional use	250 ppm	LC
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
Not Allocated	Component 2: C46 H-30CrN10O20S2 3Na	Textile	No intentional use	250 ppm	LC
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	

Flame Retardants

Potential Uses in Apparel and Footwear Textile Processing

Flame retardant chemicals are rarely used to meet flammability requirements in children's clothing and adult products. They should no longer be used in apparel and footwear.
All Halogenated Flame Retardants are banned from intentional use that means including but not exclusive the list below;

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
32536-52-0	Octabromodiphenyl ether (OctaBDE)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
115-96-8	Tris(2-chloroethyl) phosphate (TCEP)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
126-72-7	Tris(2,3,-dibromopropyl)-phosphate (TRIS)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
5412-25-9	Bis(2,3-dibromopropyl)phosphate (BIS)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
1163-19-5	Decabromodiphenyl ether (DecaBDE)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
32534-81-9	Pentabromodiphenyl ether (PentaBDE)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
545-55-1	Tris(1-aziridinyl)phosphineoxide) (TEPA)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
79-94-7	Tetrabromobisphenol A(TBBPA)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
13674-87-8	Tris(1,3-dichloro-isopropyl)phosphate (TDCP)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
59536-65-1	Polybromobiphenyls (PBB)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	

Flame Retardants

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
3296-90-0	2,2-bis(bromomethyl)-1,3-propanediol (BBMP)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
3194-55-6	Hexabromocyclododecane(HBCDD)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
10043-35-3/ 11113-50-1	Boric acid	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
13654-09-6	Decabromobiphenyl (DecaBB)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
1303-96-4/ 1330-43-4	Disodium tetraborate, anhydrous	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
12008-41-2	Disodium octaborate	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
21850-44-2	dibromopropylether	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
1303-86-2	Diboron trioxide	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
68928-80-3	Heptabromodiphenyl ether (HeptaBDE)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
Multiple	Dibromobiphenyls (DiBB)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
Multiple	Monobromodiphenylethers (MonoBDEs)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
Multiple	Monobromobiphenyls (MonoBB)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	

Flame Retardants

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
36483-60-0	Hexabromodiphenyl ether (HexaBDE)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
Multiple	Nonabromobiphenyls (NonaBB)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
63936-56-1	Nonabromodiphenyl ether (NonaBDE)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
Multiple	Octabromobiphenyls (OctaBB)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
12267-73-1	Tetraboron disodium heptaoxide, hydrate	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
40088-47-9	Tetrabromodiphenyl ether (TetraBDE)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
Multiple	Tribromodiphenyl ethers (TriBDEs)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	
13674-84-5	Tris-(2-chloro-1-methylethyl)phosphate (TCPP)	Textile	No intentional use	250 ppm	GC-MS
		Leather	No intentional use	250 ppm	
		Polymers (R,F,A)*	No intentional use	250 ppm	

Glycols / Glycol Ethers

Potential Uses in Apparel and Footwear Textile Processing

In apparel and footwear, glycols have a wide range of uses including as solvents for finishing/ cleaning, printing agents, and dissolving/ diluting fats, oils, and adhesives (e.g. in degreasing or cleaning operations).

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
110-71-4	Ethylene glycol dimethylether	Textile	No intentional use	50 ppm	High-performance liquid chromatography (HPLC), LC-MS
		Leather	No intentional use	50 ppm	
		Polymers (R,F,A)*	No intentional use	50 ppm	
110-49-6	2-methoxyethylacetate	Textile	No intentional use	50 ppm	High-performance liquid chromatography (HPLC), LC-MS
		Leather	No intentional use	50 ppm	
		Polymers (R,F,A)*	No intentional use	50 ppm	
110-80-5	2-ethoxyethanol	Textile	No intentional use	50 ppm	High-performance liquid chromatography (HPLC), LC-MS
		Leather	No intentional use	50 ppm	
		Polymers (R,F,A)*	No intentional use	50 ppm	
109-86-4	2-methoxyethanol	Textile	No intentional use	50 ppm	High-performance liquid chromatography (HPLC), LC-MS
		Leather	No intentional use	50 ppm	
		Polymers (R,F,A)*	No intentional use	50 ppm	
111-96-6	Bis(2-methoxyethyl)-ether	Textile	No intentional use	50 ppm	High-performance liquid chromatography (HPLC), LC-MS
		Leather	No intentional use	50 ppm	
		Polymers (R,F,A)*	No intentional use	50 ppm	
111-15-9	2-ethoxyethyl acetate	Textile	No intentional use	50 ppm	High-performance liquid chromatography (HPLC), LC-MS
		Leather	No intentional use	50 ppm	
		Polymers (R,F,A)*	No intentional use	50 ppm	
70657-70-4	2-methoxypropylacetate	Textile	No intentional use	50 ppm	High-performance liquid chromatography (HPLC), LC-MS
		Leather	No intentional use	1000 ppm	
		Polymers (R,F,A)*	No Limit		
112-49-2	Triethylene glycol dimethyl ether	Textile	No intentional use	50 ppm	High-performance liquid chromatography (HPLC), LC-MS
		Leather	No intentional use	50 ppm	
		Polymers (R,F,A)*	No intentional use	50 ppm	

Halogenated Solvents

Potential Uses in Apparel and Footwear Textile Processing

In apparel and footwear, halogenated solvents are used as finishing/ cleaning and printing agents, for dissolving/ diluting fats, oils and adhesives (e.g. in degreasing or cleaning operations).

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
75-09-2	Methylene chloride	Textile	No intentional use	5 ppm	GC-MS
		Leather	No intentional use	5 ppm	
		Polymers (R,F,A)*	No intentional use	5 ppm	
79-01-6	Trichloroethylene	Textile	No intentional use	40 ppm	GC-MS
		Leather	No intentional use	40 ppm	
		Polymers (R,F,A)*	No intentional use	40 ppm	
127-18-4	Tetrachloroethylene	Textile	No intentional use	5 ppm	GC-MS
		Leather	No intentional use	5 ppm	
		Polymers (R,F,A)*	No intentional use	5 ppm	
100-44-7	Benzylchloride	Textile	No intentional use	5 ppm Dyes 100 ppm	GC-MS
		Leather	No intentional use	5 ppm Dyes 100 ppm	
		Polymers (R,F,A)*	No intentional use	5 ppm Dyes 100 ppm	
107-06-2	1,2-dichloroethane	Textile	No intentional use	5 ppm	GC- MS
		Leather	No intentional use	5 ppm	
		Polymers (R,F,A)*	No intentional use	5 ppm	

Organotin Compounds

Potential Uses in Apparel and Footwear Textile Processing

Organotins are a class of chemicals combining tin and organics such as butyl and phenyl groups. Organotins are predominantly found in the environment as antifoulants in marine paints, but they can also be used as biocides (e.g. antibacterials), catalysts in plastic and glue production and heat stabilisers in plastics/rubber. In textiles and apparel, organotins are associated with plastics/rubber, inks, paints, metallic glitter, polyurethane products and heat transfer material.

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
Multiple	Dibutyltin (DBT)	Textile	No intentional use	20 ppm	Solvent extraction, GC MS, ISO TS 16179
		Leather	No intentional use	20 ppm (EXCEPTION 100 ppm for polyurethane based thickeners used at	
		Polymers (R,F,A)*	No intentional use	20 ppm	
Multiple	Mono-, di- and tri-methyltin derivatives	Textile	No intentional use	5 ppm	Solvent extraction, GC MS, ISO TS 16179
		Leather	No intentional use	5 ppm	
		Polymers (R,F,A)*	No intentional use	5 ppm	
Multiple	Mono-, di- and tri-octyltin derivatives	Textile	No intentional use	5 ppm	Solvent extraction, GC MS, ISO TS 16179
		Leather	No intentional use	5 ppm	
		Polymers (R,F,A)*	No intentional use	5 ppm	
Multiple	Mono-, di- and tri-phenyltin derivatives	Textile	No intentional use	5 ppm	Solvent extraction, GC MS, ISO TS 16179
		Leather	No intentional use	5 ppm	
		Polymers (R,F,A)*	No intentional use	5 ppm	
Multiple	Mono- and tri-butyltin derivatives	Textile	No intentional use	5 ppm	Solvent extraction, GC MS, ISO TS 16179
		Leather	No intentional use	5 ppm	
		Polymers (R,F,A)*	No intentional use	5 ppm	
Multiple	Dipropyltin compounds (DPT)	Textile	No intentional use	5 ppm	Solvent extraction, GC MS, ISO TS 16179
		Leather	No intentional use	5 ppm	
		Polymers (R,F,A)*	No intentional use	5 ppm	
Multiple	Tetraethyltin Compounds (TeET)	Textile	No intentional use	1 ppm	Solvent extraction, GC MS, ISO TS 16179
		Leather	No intentional use	1 ppm	
		Polymers (R,F,A)*	No intentional use	1 ppm	
Multiple	Tripropyltin Compounds (TPT)	Textile	No intentional use	1 ppm	Solvent extraction, GC MS, ISO TS 16179
		Leather	No intentional use	1 ppm	
		Polymers (R,F,A)*	No intentional use	1 ppm	
Multiple	Tetrabutyltin compounds (TeBT)	Textile	No intentional use	1 ppm	Solvent extraction, GC MS, ISO TS 16179
		Leather	No intentional use	1 ppm	
		Polymers (R,F,A)*	No intentional use	1 ppm	
Multiple	Tetraoctyltin compounds (TeOT)	Textile	No intentional use	1 ppm	Solvent extraction, GC MS, ISO TS 16179
		Leather	No intentional use	1 ppm	
		Polymers (R,F,A)*	No intentional use	1 ppm	

Organotin Compounds

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
Multiple	Tricyclohexyltin (TCyHT)	Textile	No intentional use	1 ppm	Solvent extraction, GC MS, ISO TS 16179
		Leather	No intentional use	1 ppm	
		Polymers (R,F,A)*	No intentional use	1 ppm	

Other/ Miscellaneous Chemicals

These are other chemicals/ substances/ process with a usage ban.

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
12767-90-7	Borate, zinc salt	Textile	No intentional use	1000 ppm	Acid digestion, ICP
		Leather	No intentional use	1000 ppm	
		Polymers (R,F,A)*	No intentional use	1000 ppm	

Borate, zinc salt can be used as a flame retardant but also in paints, pigments, and adhesives.

80-05-7	Bisphenol A	Textile	No intentional use	100 ppm	Solvent extraction, LC MS/MS, GC MS
		Leather	No intentional use	100 ppm	
		Polymers (R,F,A)*	No Limit		

Bisphenol A (BPA) is a precursor chemical used along with other chemicals to create some plastics and resins. It is commonly used to harden plastics.

62-56-6	Thiourea	Textile	No intentional use	1000 ppm	Solvent extraction, LC MS/MS
		Leather	No intentional use	1000 ppm	
		Polymers (R,F,A)*	No intentional use	1000 ppm	

Thiourea is used in many formulations to increase the solubility.

91-22-5	Quinoline	Textile	No intentional use	1000 ppm	DIN 54231
		Leather	No intentional use	1000 ppm	
		Polymers (R,F,A)*	No intentional use	1000 ppm	

Contaminant of dispersing agents in disperse dyes.

14464-46-1	Silica (particles of respirable size)	Textile	No intentional use	No use of Sand Blasting	Process due diligence, no test method available
		Leather	No intentional use	No use of Sand Blasting	
		Polymers (R,F,A)*	No intentional use	No use of Sand Blasting	

Respirable particles of silica are often generate during the process of sand blasting.

Other/ Miscellaneous Chemicals

These are other chemicals/ substances/ process with a usage ban.

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
111-41-1	AEEA [2-(2-aminoethylamino)ethanol]	Textile	No intentional use	100 ppm	Solvent extraction, LC MS/MS
		Leather	No intentional use	100 ppm	
		Polymers (R,F,A)*	No intentional use	100 ppm	

AEEA is used a.o. in chelating agents, surfactants and fabric softeners.

Perfluorinated and Polyfluorinated Chemicals (PFCs)

Durable water, oil and stain repellent finishes based on long-chain PFC's are banned from intentional use. There are two methods of manufacture of PFCs referred to as electrofluorination and telomerisation. PFC's made by the electrofluorination method have by-products associated with them called perfluoroalkyl sulphonates with the most common being the C8 species Perfluorooctane sulphonate (PFOS). The deliberate use of any PFCs made by electrofluorination with a chain length of C6 or above is not permitted. The detection of any PFOS analogue as where the chain length is 6 units or longer will trigger a failure [i.e. PFHS and above]. These types of PFCs are typically used in home textiles. PFC's made by the telomerisation method have by-products associated with them called perfluorocarboxylic acids with the most common being the C8 species perfluorooctanoic acid (PFOA). The deliberate use of any PFCs made by telomerisation with a chain length of C8 or above is restricted. ZDHC plans to further restrict the use of PFCs in future revisions and details can be found in the candidate list is not permitted. The detection of any PFOA analogue as where the chain length is 8 units or longer will trigger a failure (i.e. PFOA and above). These types of PFCs are typically used in clothing and footwear.

Potential Uses in Apparel and Footwear Textile Processing

PFOA and PFOS may be present as unintended by-products in long-chain commercial water, oil and stain repellent agents. PFOA also may be in used in the production for polymers like polytetrafluoroethylene (PTFE).

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
Multiple	Perfluorooctane sulfonate (PFOS) and related substances	Textile	No intentional use	Sum = 2 ppm	LC-MS
		Leather	No intentional use	Sum = 2 ppm	
		Polymers (R,F,A)*	No intentional use	Sum = 2 ppm	
Multiple	Perfluorooctanoic acid (PFOA) and related substances	Textile	No intentional use	PFOA = 25 ppb PFOA-related substances = 1000 ppb	LC-MS
		Leather	No intentional use	PFOA = 25 ppb PFOA-related substances = 1000 ppb	
		Polymers (R,F,A)*	No intentional use	PFOA = 25 ppb PFOA-related substances = 1000 ppb	

Phthalates – including all other esters of ortho-phthalic acid

Potential Uses in Apparel and Footwear Textile Processing

Esters of ortho-phthalic acid (phthalates) are a class of organic compounds commonly added to plastics to increase flexibility. They sometimes are used to facilitate moulding of plastic by decreasing its melting temperature.
Phthalates can be found in:
- Flexible plastic components (e.g. PVC)
- Print pastes
- Adhesives
- Plastic buttons
- Plastic sleevings
- Polymeric coatings

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
117-84-0	Di-n-octyl phthalate(DNOP) [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	
117-82-8	Bis(2-methoxyethyl)phthalate (DMEP) [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	
26761-40-0	Di-iso-decyl phthalate(DIDP) [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	
117-81-7	Di(ethylhexyl) phthalate(DEHP) [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	
28553-12-0	Di-isononyl phthalate(DINP) [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	
84-75-3	Di-n-hexyl phthalate(DnHP) [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	
85-68-7	Butyl benzyl phthalate(BBP) [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	

Phthalates – including all other esters of ortho-phthalic acid					
CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
84-74-2	Dibutyl phthalate (DBP) [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	
84-76-4	Dinonyl phthalate (DNP) [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	
84-66-2	Diethyl phthalate (DEP) [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	
131-16-8	Di-n-propyl phthalate(DPRP) [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	
84-61-7	Di-cyclohexyl phthalate(DCHP) [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	
84-69-5	Di-isobutyl phthalate(DIBP) [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	
27554-26-3	Di-iso-octyl phthalate(DIOP) [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	
68515-42-4/ 68515-50-4	1,2-benzenedicarboxylic acid, di-C7-11 branched and liearalkyl esters (DHNUP) [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	
71888-89-6/ 84777-06-0	1,2-benzenedicarboxylic acid, di-C6-8 branched and liearalkyl esters , C7-rich (DIHP) [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	

Phthalates – including all other esters of ortho-phthalic acid

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
605-50-5	Diisopentylphthalates [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	
131-18-0	Di-n-pentylphthalates [5]	Textile	No intentional use	Sum of substances [5] = 250 ppm	GC-MS
		Leather	No intentional use	Sum of substances [5] = 250 ppm	
		Polymers (R,F,A)*	No intentional use	Sum of substances [5] = 250 ppm	

Polycyclic Aromatic Hydrocarbons (PAHs)

Potential Uses in Apparel and Footwear Textile Processing

Oil containing PAHs are added to rubber and plastics as a softener or extender and may be found in rubber, plastics, lacquers, and coatings. Within the footwear producing industry, PAHs are often found in the outsoles of footwear and in printing pastes for screen prints. PAHs can be present as impurities in carbon black dyestuffs.

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
50-32-8	Benzo[a]pyrene	Textile	No intentional use	20 ppm	GC-MS
		Leather	No intentional use	20 ppm	
		Polymers (R,F,A)*	No intentional use	20 ppm	
129-00-0	Pyrene [3,4]	Textile	No intentional use	Sum of substances [3] = 200 ppm	GC-MS
		Leather	No intentional use	Sum of substances [4] = 200 ppm	
		Polymers (R,F,A)*	No Limit		
191-24-2	Benzo[ghi]perylene [3,4]	Textile	No intentional use	Sum of substances [3] = 200 ppm	GC-MS
		Leather	No intentional use	Sum of substances [4] = 200 ppm	
		Polymers (R,F,A)*	No Limit		
205-82-3	Benzo[j]fluoranthene [3,4]	Textile	No intentional use	Sum of substances [3] = 200 ppm	GC-MS
		Leather	No intentional use	Sum of substances [4] = 200 ppm	
		Polymers (R,F,A)*	No Limit		
120-12-7	Anthracene [3,4]	Textile	No intentional use	Sum of substances [3] = 200 ppm	GC-MS
		Leather	No intentional use	Sum of substances [4] = 200 ppm	
		Polymers (R,F,A)*	No Limit		

Polycyclic Aromatic Hydrocarbons (PAHs)					
CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
193-39-5	Indeno[1,2,3-cd]pyrene [3,4]	Textile	No intentional use	Sum of substances [3] = 200 ppm	GC-MS
		Leather	No intentional use	Sum of substances [4] = 200 ppm	
		Polymers (R,F,A)*	No Limit		
192-97-2	Benzo[e]pyrene [3,4]	Textile	No intentional use	Sum of substances [3] = 200 ppm	GC-MS
		Leather	No intentional use	Sum of substances [4] = 200 ppm	
		Polymers (R,F,A)*	No Limit		
205-99-2	Benzo[b]fluoranthene [3,4]	Textile	No intentional use	Sum of substances [3] = 200 ppm	GC-MS
		Leather	No intentional use	Sum of substances [4] = 200 ppm	
		Polymers (R,F,A)*	No Limit		
207-08-9	Benzo[k]fluoranthene [3,4]	Textile	No intentional use	Sum of substances [3] = 200 ppm	GC-MS
		Leather	No intentional use	Sum of substances [4] = 200 ppm	
		Polymers (R,F,A)*	No Limit		
206-44-0	Fluoranthene [3,4]	Textile	No intentional use	Sum of substances [3] = 200 ppm	GC-MS
		Leather	No intentional use	Sum of substances [4] = 200 ppm	
		Polymers (R,F,A)*	No Limit		
208-96-8	Acenaphthylene [3,4]	Textile	No intentional use	Sum of substances [3] = 200 ppm	GC-MS
		Leather	No intentional use	Sum of substances [4] = 200 ppm	
		Polymers (R,F,A)*	No Limit		
53-70-3	Dibenz[a,h]anthracene [3,4]	Textile	No intentional use	Sum of substances [3] = 200 ppm	GC-MS
		Leather	No intentional use	Sum of substances [4] = 200 ppm	
		Polymers (R,F,A)*	No Limit		
218-01-9	Chrysene [3,4]	Textile	No intentional use	Sum of substances [3] = 200 ppm	GC-MS
		Leather	No intentional use	Sum of substances [4] = 200 ppm	
		Polymers (R,F,A)*	No Limit		
85-01-8	Phenanthrene [3,4]	Textile	No intentional use	Sum of substances [3] = 200 ppm	GC-MS
		Leather	No intentional use	Sum of substances [4] = 200 ppm	
		Polymers (R,F,A)*	No Limit		

Polycyclic Aromatic Hydrocarbons (PAHs)					
CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
83-32-9	Acenaphthene [3,4]	Textile	No intentional use	Sum of substances [3] = 200 ppm	GC-MS
		Leather	No intentional use	Sum of substances [4] = 200 ppm	
		Polymers (R,F,A)*	No Limit		
86-73-7	Fluorene [3,4]	Textile	No intentional use	Sum of substances [3] = 200 ppm	GC-MS
		Leather	No intentional use	Sum of substances [4] = 200 ppm	
		Polymers (R,F,A)*	No Limit		
91-20-3	Naphthalene [3]	Textile	No intentional use	Sum of substances [3] = 200 ppm	GC-MS
		Leather	No intentional use	300 ppm	
		Polymers (R,F,A)*	No Limit		
56-55-3	Benzo[a]anthracene [3,4]	Textile	No intentional use	Sum of substances [3] = 200 ppm	GC-MS
		Leather	No intentional use	Sum of substances [4] = 200 ppm	
		Polymers (R,F,A)*	No Limit		

Total Heavy Metals

Listed metals are banned from intentional use in textile manufacturing/ finishing unless stated differently.
The total heavy metal limits do not apply to products containing a listed metal as an inherent compositional part (e.g. metal-complex colorants, the double salts of certain cationic colourants or extenders like barium sulfate). In these cases, the extractable content of the corresponding metal has to be considered. Alternatively, the total content will be communicated to the customers, who will determine whether their final product will comply with the corresponding RSL(s) requirements.

Potential Uses in Apparel and Footwear Textile Processing

Although typically associated with leather tanning, chromium VI also may be used in the dyeing of wool (after the chroming process).

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
7440-38-2	Arsenic (As)	Textile	No intentional use	50 ppm	Inductively coupled plasma-optical emission spectrometry (ICP-OES), atomic absorption spectroscopy (AAS)
		Leather	No intentional use	50 ppm	
		Polymers (R,F,A)*	No intentional use	50 ppm	
7440-43-9	Cadmium (Cd)	Textile	No intentional use	20 ppm (50 ppm for pigments)	Inductively coupled plasma-optical emission spectrometry (ICP-OES), atomic absorption spectroscopy (AAS)
		Leather	No intentional use	20 ppm (50 ppm for pigments)	
		Polymers (R,F,A)*	No intentional use	20 ppm (50 ppm for pigments)	
7439-97-6	Mercury (Hg)	Textile	No intentional use	4 ppm (25 ppm for pigments)	Inductively coupled plasma-optical emission spectrometry (ICP-OES), atomic absorption spectroscopy (AAS)
		Leather	No intentional use	4 ppm (25 ppm for pigments)	
		Polymers (R,F,A)*	No intentional use	4 ppm (25 ppm for pigments)	
7439-92-1	Lead (Pb)	Textile	No intentional use	100 ppm	Inductively coupled plasma-optical emission spectrometry (ICP-OES), atomic absorption spectroscopy (AAS)
		Leather	No intentional use	100 ppm	
		Polymers (R,F,A)*	No intentional use	100 ppm	
18540-29-9	Chromium (VI)	Textile	No intentional use	10 ppm	Inductively coupled plasma-optical emission spectrometry (ICP-OES), atomic absorption spectroscopy (AAS)
		Leather	No intentional use	10 ppm	
		Polymers (R,F,A)*	No intentional use	10 ppm	
7440-36-0	Antimony	Textile	No intentional use	Dye 50/ Pigment 250 ppm	Acid digestion, ICP
		Leather	No intentional use	Dye 50/ Pigment 250 ppm	
		Polymers (R,F,A)*	No intentional use	Dye 50/ Pigment 250 ppm	
7440-47-3	Chromium	Textile	No intentional use	Dyes and Pigments 100 ppm	Acid digestion, ICP
		Leather	No intentional use	Dyes and Pigments 100 ppm	
		Polymers (R,F,A)*	No intentional use	Dyes and Pigments 100 ppm	

Total Heavy Metals

Listed metals are banned from intentional use in textile manufacturing/ finishing unless stated differently.
The total heavy metal limits do not apply to products containing a listed metal as an inherent compositional part (e.g. metal-complex colorants, the double salts of certain cationic colourants or extenders like barium sulfate). In these cases, the extractable content of the corresponding metal has to be considered. Alternatively, the total content will be communicated to the customers, who will determine whether their final product will comply with the corresponding RSL(s) requirements.

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
7440-39-3	Barium	Textile	No intentional use	Dyes and Pigments 100 ppm	Acid digestion, ICP
		Leather	No intentional use	Dyes and Pigments 100 ppm	
		Polymers (R,F,A)*	No intentional use	Dyes and Pigments 100 ppm	
7782-49-2	Selenium	Textile	No intentional use	Dyes 20/ pigments 100 ppm	Acid digestion, ICP
		Leather	No intentional use	Dyes 20/ pigments 100 ppm	
		Polymers (R,F,A)*	No intentional use	Dyes 20/ pigments 100 ppm	
7440-31-5	Tin	Textile	No intentional use	Dyes 250 ppm	Acid digestion, ICP
		Leather	No intentional use	Dyes 250 ppm	
		Polymers (R,F,A)*	No intentional use	Dyes 250 ppm	
7440-02-0	Nickel	Textile	No intentional use	Dyes 250 ppm	Acid digestion, ICP
		Leather	No intentional use	Dyes 250 ppm	
		Polymers (R,F,A)*	No intentional use	Dyes 250 ppm	
7440-50-8	Copper	Textile	No intentional use	Dyes 250 ppm	Acid digestion, ICP
		Leather	No intentional use	Dyes 250 ppm	
		Polymers (R,F,A)*	No intentional use	Dyes 250 ppm	
7440-48-4	Cobalt	Textile	No intentional use	Dyes 500 ppm	Acid digestion, ICP
		Leather	No intentional use	Dyes 500 ppm	
		Polymers (R,F,A)*	No intentional use	Dyes 500 ppm	
7440-22-4	Silver	Textile	No intentional use	Dyes 100 ppm	Acid digestion, ICP
		Leather	No intentional use	Dyes 100 ppm	
		Polymers (R,F,A)*	No intentional use	Dyes 100 ppm	

UV absorbers

Potential Uses in Apparel and Footwear Textile Processing

These are frequently used in formulations to be stable to the influences of light and UV

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
36437-37-3	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl) phenol (UV-350)	Textile	No intentional use	1000 ppm	Solvent extraction, LC MS/MS, GC MS
		Leather	No intentional use	1000 ppm	
		Polymers (R,F,A)*	No intentional use	1000 ppm	
3846-71-7	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	Textile	No intentional use	1000 ppm	Solvent extraction, LC MS/MS, GC MS
		Leather	No intentional use	1000 ppm	
		Polymers (R,F,A)*	No intentional use	1000 ppm	
3864-99-1	2,4-Di-tert-butyl-6-(5-chlorobenzotriazole-2-yl) phenol (UV-327)	Textile	No intentional use	1000 ppm	Solvent extraction, LC MS/MS, GC MS
		Leather	No intentional use	1000 ppm	
		Polymers (R,F,A)*	No intentional use	1000 ppm	
25973-55-1	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	Textile	No intentional use	1000 ppm	Solvent extraction, LC MS/MS, GC MS
		Leather	No intentional use	1000 ppm	
		Polymers (R,F,A)*	No intentional use	1000 ppm	

Volatile Organic Compounds (VOC)

Potential Uses in Apparel and Footwear Textile Processing

These Volatile Organic Compounds (VOC) should not be used in textile auxiliary chemical preparations. They are associated with solvent-based processes like solvent-based polyurethane coatings and glues/ adhesives. They should not be used for any kind of facility cleaning or spot cleaning.

CASNO	Substance	Applicability	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
71-43-2	Benzene	Textile	No intentional use	50 ppm	GC-MS
		Leather	No intentional use	50 ppm	
		Polymers (R,F,A)*	No intentional use	50 ppm	
95-48-7	o-cresol	Textile	No intentional use	500 ppm	GC-MS
		Leather	No intentional use	500 ppm	
		Polymers (R,F,A)*	No intentional use	500 ppm	
106-44-5	p-cresol	Textile	No intentional use	500 ppm	GC-MS
		Leather	No intentional use	500 ppm	
		Polymers (R,F,A)*	No intentional use	500 ppm	
1330-20-7	Xylene	Textile	No intentional use	500 ppm	GC-MS
		Leather	No intentional use	500 ppm	
		Polymers (R,F,A)*	No intentional use	500 ppm	
108-39-4	m-cresol	Textile	No intentional use	500 ppm	GC-MS
		Leather	No intentional use	500 ppm	
		Polymers (R,F,A)*	No intentional use	500 ppm	