



Restricted Substances List

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1. Approach

BENETTON GROUP RESTRICTED SUBSTANCES LIST (RSL)

Benetton Group is committed to fair and sustainable business practices.

The Company requires all its business partners, including suppliers and subsuppliers, to sign and implement the Benetton Group Code of Conduct which includes the following domains:

- International Labor Standards and a Safe Place to Work
- Protection of the Environment
- Transparency
- Supply chain and compliance.

Within its approach to sustainability, Benetton Group strives to ensure the highest product safety standards and to minimize the impact of all its business activities on the environment.

All Benetton Group's suppliers and subsuppliers are provided with a document named "Technical Safety Specifications", which includes the Restricted Substances List (RSL).

All suppliers and subsuppliers are required to carefully study, understand and communicate the content of this document to their internal sourcing and production departments.

PRODUCT SAFETY

In order to achieve a high quality production process and an efficient prevention of non-compliances, the knowledge of the entire supply chain, including that of Benetton Group's suppliers, is fundamental.

All suppliers are therefore requested to disclose information on all the treatment facilities, as well as on the source of materials and components used in the manufacturing of Benetton Group's products.

It is mandatory that each and every order placed is delivered by the suppliers in compliance with the Company's RSL.

Benetton Group performs a considerable number of chemical tests in order to eliminate or minimize every potential hazard and ensure that mandatory requirements are met, so that safe products reach the market.

Accredited chemical laboratories are in charge of conducting tests on Benetton Group's products, in accordance with the RSL and based on a seasonal testing plan developed on three levels:

- Basic
- Advanced
- Critical

The Basic Testing Plan aims to evaluate the reliability of each and every supplier and subsupplier.

The Advanced Testing Plan targets materials, suppliers, processes and substances of highest concern, based on a risk-database and on technical knowledge.

This program takes into consideration also the frequency and the quantity used for every single material, component and process.

The Critical Testing Plan focuses on suppliers and processes in which the achievement of RSL compliance was proven critical in the previous season.

Critical sources (suppliers, materials, processes etc.) undergo preventive and deeper testing before and during production, to monitor the improvements and ensure full compliance with the RSL.

ENVIRONMENT

Benetton Group has a relevant experience on environmentally responsible business practices and is putting significant resources and passion on its environmental program, with the objective to minimize the impact of all its activities and preserve natural resources for present and future generations.

An internal CSR Committee, operating under the supervision of the Company's CEO, sponsors and supervises the progress of the environmental program, establishing the resources and measuring the achievements according to Benetton Group Code of Conduct.

The Code of Conduct includes general provisions relating to the implementation of the precautionary principle and of due diligence and foresees clauses dedicated to handling chemicals and hazardous substances, as well as to waste and water management.

Benetton Group's RSL is intended to put into practice the general environmental provisions included in the Code of Conduct.

The RSL is applicable to all tiers of the manufacturing processes involved in the apparel production.

ENVIRONMENTAL – AUDIT & WATER TEST PROCESS

The manufacturing units/suppliers expected to have an intensive use of chemicals, are audited by independent external experts engaged by Benetton Group, taking into consideration the best procedures available by relevant Companies.

The audit aims to highlight any existing or potential chemical risk, according to the following chemical management audit criteria:

- Chemical Supply & Policy
- Chemical Management Practices
- Health & Safety
- Storage & Handling
- Waste & Disposal
- Chemical Impact Reduction
- Environmental Permits and Legal Requirements
- Sustainable Resources Use (Energy, Water, etc.)

Environmental audits are meant to provide highly pragmatic environmental assessment tools and capacity-building resources, that facilitate suppliers' efforts in improving their environmental performance.

Water Tests based on the 11 priority groups of hazardous chemical substances are performed as well by independent third party service providers.

In practice, samples of incoming water, untreated waste water and treated effluent water are collected and analyzed following the best available methods.

Applying this procedure in the effort to reach the objective of zero discharges of hazardous substances by 2020, Benetton Group adopts limits that are far more strict than the ones set forth by local legislations, including those of the so-called "Global North" countries of the world.

The elimination of hazardous substances will be achieved by focusing initially on few groups of chemicals, progressively including the remaining groups and lowering the limits.

The exclusion from the Company's supply chain of non-compliant suppliers will contribute to the elimination of hazardous substances from production processes.

Benetton Group's RSL will be regularly reviewed and updated according to future information on hazardous substances, using an intrinsic hazard approach, including other chemicals selected from the most credible sources of chemical hazard assessment, such as the European Chemicals Agency, OECD, Chem Portal, KEMI Prio, ESIS, etc.

2. Product RSL

Categories (substances listed in chapter 4)	Detail (substances listed in chapter 4)	Limit Value 0-14 years [mg/Kg]	Limit Value above 14 years [mg/Kg]	Methods
<i>Alkylphenols</i> ⁱ	NP, OP	n.d. USAGE BAN		Solvent extraction and analysis by LC-MS-MS MS/GC-MS
<i>Alkylphenols Ethoxylates</i> ⁱ	NPEs, OPEs	100 ^{at} USAGE BAN		Solvent extraction and analysis by LC-MS-MS MS/GC-MS
<i>Asbestos</i>	Asbestos and his compounds	n.d. USAGE BAN		Microscopic examination (SEM)
<i>Biocides</i>	Referring to (UE) 528/2012	n.d. USAGE BAN		Solvent extraction and analysis by GC-MS
<i>Chlorinated Benzenes and Toluenes</i>	Chlorinated Toluenes, Monochlorobenzene, Dichlorobenzenes	SUM ≤ 2 ^{at} USAGE BAN		DIN 54232:2010
	Trichlorobenzenes, Tetrachlorobenzenes, Pentachlorobenzene, Hexachlorobenzene	n.d. USAGE BAN		
<i>Chlorinated Phenols</i>	PCP and its salts	n.d.(≤ 0.05) ^g USAGE BAN		KOH extraction + BVL B 82.02.8 KOH extraction + ISO 17070:2006 (Leather)
	Each TeCP			
	Each TCP			
<i>Colorants</i>	Cleavable Arylamines/Arylamines (Azo)	20 ^{at} USAGE BAN		EN 14362-1 e 3 :2012; ISO 17234-1:2012 and 2:2011 (Leather)
	Carcinogenic	n.d.(≤ 10)		DIN 54231:2005
	Allergenic	n.d.(≤ 10)		
	Others	n.d.(≤ 10)		
<i>Dimethyl Fumarate</i>	DMFu	≤ 0,1		ISO/ TS 16186:2012
<i>Flame Retardants</i> (Substances mainly used as flame retardants but not exclusively)	PBBs, TBPP, TEPA, TCEP, pentaBDE, DecaBDE, HBCDD, o-TCP, BIS-BP	n.d. USAGE BAN		GB/T 24279 or Solvent extraction and analysis by GC-MS or LC-MS; TEPA: KOH or NaOH diges- tion + GC-MS headspace analysis for ethylene- neimine EN ISO 18219
	octaBDE	n.d. USAGE BAN		
	Short Chain Chlorinated Paraffins (SCCP)	n.d. ⁱ USAGE BAN		
	Medium Chain Chlorinated Paraffins (MCCP)	n.d. ⁱ USAGE BAN		
<i>Formaldehyde</i>	Formaldehyde	n.d.(≤ 16)	≤ 75, ≤ 300 (not in con- tact with skin)	Japan Law 112: JIS L 1041; ISO 17226-1 or -2 (Leather); EN 717-3 (Wood)
<i>Heavy Metals</i>	Pb (Total/Substrate and Coatings)	90 ^{at} USAGE BAN		CPSC-CH-E1003-09.1 (Coatings), CPSC-CH-E1001-08.2, CPSC-CH-E1002-08.2
	Hg	n.d. USAGE BAN		
	As (in wood)	n.d.		
	Cd (Total/Substrate and Coatings)	40 ^{at} USAGE BAN		
<i>Heavy Metals (Extractable)</i>	Cr(VI)	n.d. (< 0.5; < 3 leather using ISO 17075) USAGE BAN		DIN 54233 - 3 : 2010 (based on ISO 105 E-04); ISO 17075:2008 (Leather)
	Cr	≤ 1.0 ^h	≤ 2.0 ^h	DIN 54233 - 3 : 2010 (based on ISO 105 E-04); ISO 17072 - 1 : 2011 (leather)
	As	≤ 0.2	≤ 1.0	
	Pb	≤ 0.2; ≤ 0.8 leather USAGE BAN	≤ 1.0 USAGE BAN	
	Cd	≤ 0.1 USAGE BAN		
	Sb	≤ 30		
	Co	≤ 1.0	≤ 4.0	
	Cu	≤ 25 ^a	≤ 50 ^a	
	Ni	≤ 1.0	≤ 4.0	
Hg	≤ 0.02 ^c ; ≤ 0.05 leather USAGE BAN			

Categories (substances listed in chapter 4)	Detail (substances listed in chapter 4)	Limit Value 0-14 years [mg/Kg]	Limit Value above 14 years [mg/Kg]	Methods
Heavy Metals (Toys) ^e	Cr(VI)	0,02	N.A.	EN 71-3:2013
	Cr(III)	37,5		
	As	3,8		
	Pb	13,5 ^{at} USAGE BAN		
	Cd	1,9 ^{at}		
	Sb	45		
	Hg	7,5 ^{at} USAGE BAN		
	Ba	1500		
	Se	37,5		
Microbiological activity ^d	Microbiological activity	no activity		EN 12935:2001
Nickel	Ni Release	0.5 µg/cm ² /week		EN 12472:2005 + A1:2009 & EN 1811:2011
	Ni Release (piercing)	0.2 µg/cm ² /week		
N-Nitrosamine ^f	N-Nitrosamine	n.d. (≤ 0.5)		GB/T 24153-2009
Oils	Oils (wood)	n.d.		EN 13991
Organotin Compounds	TBT	≤ 10 ^{at}		ISO 17353:2004, ISO/TS 16179:2012
	TPhT	≤ 10 ^{at}		
	DBT	≤ 10 ^{at}		
	DOT	≤ 10 ^{at}		
	MBT	≤ 10 ^{at} USAGE BAN		
	TeBT	≤ 10 ^{at} USAGE BAN		
	TCyHT	≤ 10 ^{at}		
	TOT	≤ 10 ^{at}		
	TPT	≤ 10 ^{at} USAGE BAN		
Pesticides	Sum	≤ 0.5		EPA 8081 - 8141 e 8151
PFCs	PFOS, PFOA	≤ 1 µg/m ² USAGE BAN		CEN/TS 15968 : 2010, Solvent Extraction GC-MS/LC-MS analysis
	Others	≤ 1 µg/m ² USAGE BAN		
pH	pH	4.0 - 7.5 ^b	4.0 - 9.0 ^b	ISO 3071:2005, ISO 4045:2008 (Leather)
		3.2 - 7.5 (Leather)		
Phthalates	Sum of DEHP, DBP, BBP, DIBP	≤ 1000 ^{at} USAGE BAN		CPSC-CH-C1001-09.3
	Sum of DINP, DIDP, DNOP	≤ 1000 ^{at} USAGE BAN		
	DIHP, DHNUP, DMEP, DIPP, DnHP, nPIP, DnPP, DPP, DMP, DEP	≤ 1000 ^{at} USAGE BAN		
Polycyclic Aromatic Hydrocarbons	PAHs	≤ 1		ZEK 01.4-08
Restrictions for Packaging	Sum of Cd , Cr (VI), Pb, Hg	≤ 100 ^{at} USAGE BAN		CPSC-CH-E1003-09.1 (Coatings), CPSC-CH-E1001-08.3, CPSC-CH-E1002-08.3
	Formaldehyde	≤ 75		JIS L 1041
	Sum of Phthalates	≤ 1000 ^{at} USAGE BAN		CPSC-CH-C1001-09.3
	Odor	odorless (<4)		SNV 195651
Solvents	Others (sum)	≤ 0.1		Solvent extraction and analysis by GC-MS
	Chlorinated Solvents (sum)	≤ 0.1 ^{at} USAGE BAN		

LEGEND

ID	Description
a	No requirements for accessories made from inorganic materials
b	The Products that must be wet treated during the further processing can have a pH value within 4.0 and 10.5
c	N.d. for ink and dyes
d	<p>The following points must be respected for feather/down:</p> <ul style="list-style-type: none"> - D.P.R.(Decree by the President of the Republic) 23.01.1975 n.845 establishing that feather and down filled products and products filled with any other kind of material of animal origin must carry an irremovable and inerasable label containing the following information: <ul style="list-style-type: none"> 1. Name and location of the producer and of the selling company 2. Declaration certifying that the material has been sanitized and hygienically treated as set out in the existing regulations. - D.M. (Minister's Decree) 10.11.1976 n.315 establishing that feather and down and other filling materials must be sanitized as follows: <ul style="list-style-type: none"> 1. Sorting 2. De-dusting 3. Washing 4. Centrifuging 5. Steam-drying (drying temperature: 120-140°C, steaming pressure: 2-3 atmospheres for no less than 60 minutes). <p>[see www.assopiuma.org/index_en.htm]</p> <ul style="list-style-type: none"> - It is NOT permitted to use/buy material that has been plucked from live birds
e	Toys shall respect the EC Type Certification
f	It applies to all footwear parts from vulcanized rubber
g	Not applicable to PCP contaminated recycled materials for which the legal limit of each country of sale applies
h	It does not apply to leather
i	Not applicable to AP-APEO contaminated recycled materials for which the limit is 100 for AP and 1000 for APEO
l	Applicable to all textiles including functional finishings
at	Allowable Trace: The trace amount represents the permitted unavoidable trace presence of a substance that is allowed to be found on the garment when the substance has been prohibited from use
USAGE BAN	A prohibition of intentional use of a substance during any and all stages of product manufacturing. However, the RSL identifies an allowable trace amount of some substances due to unavoidable contamination.

3. Manufacturing RSL

Categories (substances listed in chapter 4)	Detail (substances listed in chapter 4)	Detection Limits		Methods		Limits
		water µg/L	sludge mg/Kg	water	sludge	
Alkylphenols + Alkylphenols Ethoxylates	NP, OP	1	0,2	Reference to ASTM D7065	Reference to ASTM D5369, EPA 3540C & ASTM D7065	USAGE BAN
	NPEs, OPEs	1	0,2			
Chlorinated Benzenes	Chlorinated Benzenes	0,02	0,1	Reference to EPA 8260B & EPA 8270D	Reference to ASTM D5369, EPA 3540C, EPA 8260B & EPA 8270D	USAGE BAN
Chlorinated Phenols	PCP	0,5	0,025	Reference to EPA 8270D	Reference to ASTM D5369, EPA 3540C & EPA 8270D	USAGE BAN
	TeCP	0,5	0,025			
	TCP	0,5	0,025			
Colorants	Cleavable Arylamines/Arylamines (Azo)	0,1	0,1	Reference to DIN 38407- 16 and EN 14362-1 & 3	Reference to DIN 38407-16, EN 14362-1 & 3	USAGE BAN
Flame Retardant Products	PBBs, pentaBDE, octaBDE, DecaBDE, TCEP, TEPA	0,05	0,3	Reference to EPA 527 & EPA 8321B	Reference to ASTM D5369, EPA 3540C, EPA 527 & EPA 8321B	USAGE BAN
	BIS-BP, HBCDD, TBPP	0,5	0,25	Reference to EPA 527 & EPA 8321B	Reference to ASTM D5369, EPA 3540C, EPA 527 & EPA 8321B	
Short Chain Chlorinated Paraffins	Short Chain Chlorinated Paraffins	0,4	0,03	Reference to ISO/PRF 12010	Reference to ASTM D5369, EPA 3540C & ISO/PRF 12010	USAGE BAN
Heavy Metals	Pb	1	1	Reference to EPA 3015A & 6020A	Reference to EPA 3051A, 6020A	USAGE BAN
	Hg	0,05	0,02			
	Cd	0,1	1			
	Cr(VI)	1	1			
Organotin Compounds	TBT	0,01	0,01	Reference to EN ISO17353:2005	Reference to ASTM D5369, EPA 3540C & DS/EN ISO 23161	USAGE BAN
	TPhT	0,01	0,01			
	DBT	0,01	0,01			
	DOT	0,01	0,01			
	Monobutyltin	0,01	0,01			
	Tetrabutyl tin	0,01	0,01			
	Tricyclohexyltin (TCyHT)	0,01	0,01			
	Trioctyltin (TOT)	0,01	0,01			
Tripropyltin (TPT)	0,01	0,01				
PFCs	PFCs	0,01	0,001	LC-MS-MS	Reference to ASTM D5369, EPA 3540C & LC-MS-MS	USAGE BAN
Phthalates	Phthalates	1	0,3	Reference to EPA 8270D	Reference to ASTM D5369, EPA 3540C & EPA 8270D	USAGE BAN
Solvents	Chlorinated solvents	1	0,3	Reference to EPA 8260B	Reference to EPA 5021, 8021B & EPA 8260B	USAGE BAN

Chemicals use best practices are available at the following link: <http://www.roadmaptozero.com> we suggest you keep visiting it on a regular basis.

In addition to the above, we remind you that within its commitment to zero discharges, **Benetton Group banned Alkylphenols (APs), Alkylphenol ethoxylates (APEOs), Per- and Polyfluorinated chemicals (PFCs)** from all industrial processes involving any product or material, independently from the quality of the water treatment plant available in your facilities. Consequently, Benetton Group requests you and your supply chain to use only sustainable **APs-FREE, APEOs-FREE, PFCs-FREE** chemicals (where FREE means zero).

The MRSL does not replace applicable national environmental or workplace safety restrictions.

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4. Substances List

ALKYLPHENOLS + ALKYLPHENOLS ETHOXYLATES *

Name	CAS-Nr.	Abbreviation
Nonylphenol ethoxylates	Various	NPEs [1 - 20]
Nonylphenol	Various	NP
Octylphenol ethoxylates	Various	OPEs
Octylphenol	Various	OP

* Branched and linear alkyl chain

ASBESTOS AND ITS COMPOUNDS

Name	CAS-Nr.
Actinolite	77536-66-4
Amosite	12172-73-5
Anthophyllite	77536-67-5
Chrysotile	12001-29-5; 132207-32-0
Crocidolite	12001-28-4
Tremolite	77536-68-6

CHLORINATED BENZENES AND TOLUENES

Name	CAS-Nr.
Monochlorobenzene	108-90-7
Dichlorobenzenes	541-73-1; 106-46-7; 95-50-1
Chlorotoluenes	95-49-8; 108-41-8; 106-43-4
Dichlorotoluenes	95-73-8; 19398-61-9; 118-69-4; 32768-54-0; 95-75-0
Hexachlorobenzene	118-74-1
Pentachlorobenzene	608-93-5
Pentachlorotoluene	877-11-2
Tetrachlorobenzenes	95-94-3; 634-66-2
Tetrachlorotoluenes	5216-25-1; 2136-89-2; 81-19-6
Trichlorobenzenes	108-70-3; 120-82-1; 87-61-6
Trichlorotoluenes	98-07-7; 2077-46-5

CHLORINATED PHENOLS

Name	CAS-Nr.	Abbreviation
Pentachlorophenol	87-86-5	PCP
2,3,5,6-Tetrachlorophenol	935-95-5	TeCP
2,3,4,6-Tetrachlorophenol	58-90-2	TeCP
2,3,4,5-Tetrachlorophenol	4901-51-3	TeCP
2,4,6-trichlorophenol	88-06-2	TCP
2,4,5-trichlorophenol	95-95-4	TCP
2,3,4-trichlorophenol	15950-66-0	TCP
2,3,5-trichlorophenol	933-78-8	TCP
3,4,5-trichlorophenol	609-19-8	TCP
2,3,6-trichlorophenol	933-75-5	TCP

COLORANTS

CLEAVABLE ARYLAMINES / ARYLAMINES (AZO)

Name	CAS-Nr.
4-Aminobiphenyl	92-67-1
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'-Methylenebis(2-chloroaniline)	101-14-4
4,4'-Oxydianiline	101-80-4
4,4'-Thiodianiline	139-65-1
o-Toluidine	95-53-4
2,4-Toluenediamine	95-80-7
2,4,5-Trimethylaniline	137-17-7
o-Anisidine	90-04-0
2,4-Xylidine	95-68-1
2,6-Xylidine	87-62-7
4-Aminoazobenzene	60-09-3

CARCINOGENIC DYESTUFFS

Name	Structure Number	CAS-Nr.
Acid Red 26	C.I. 16 150	3761-53-3
Basic Red 9	C.I. 42 500	569-61-9
Basic Violet 14	C.I. 42 510	632-99-5
Direct Black 38	C.I. 30 235	1937-37-7
Direct Blue 6	C.I. 22 610	2602-46-2
Direct Red 28	C.I. 22 120	573-58-0
Disperse Blue 1	C.I. 64 500	2475-45-8
Disperse Orange 11	C.I. 60 700	82-28-0
Disperse Yellow 3	C.I. 11 855	2832-40-8
Solvent Yellow 2	-	60-11-7

Name	Structure Number	CAS-Nr.
Solvent Yellow 3	-	97-56-3
Basic Violet 1	-	8004-87-3
Basic Violet 3	-	548-62-9
Acid Violet 49	-	1694-09-3
Direct Brown 95	C.I. 30 145	16071-86-6
Solvent Yellow 1	C.I. 11 000	60-09-3

ALLERGENIC DYESTUFFS

Name	Structure Number	CAS-Nr.
Disperse Blue 1	C.I. 64 500	2475-45-8
Disperse Blue 3	C.I. 61 505	2475-46-9
Disperse Blue 7	C.I. 62 500	3179-90-6
Disperse Blue 26	C.I. 63 305	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	C.I. 11 080	2581-69-3
Disperse Orange 3	C.I. 11 005	730-40-5
Disperse Orange 37/76/59	C.I. 11 132	13301-61-6
Disperse Red 1	C.I. 11 110	2872-52-8
Disperse Red 11	C.I. 62 015	2872-48-2
Disperse Red 17	C.I. 11 210	3179-89-3
Disperse Yellow 1	C.I. 10 345	119-15-3
Disperse Yellow 3	C.I. 11 855	2832-40-8
Disperse Yellow 9	C.I. 10 375	6373-73-5
Disperse Yellow 39	-	12236-29-2
Disperse Yellow 49	-	54824-37-2

OTHER BANNED DYESTUFFS

Name	Structure Number	CAS-Nr.
Disperse Orange 149	-	85136-74-9
Disperse Yellow 23	C.I. 26 070	6250-23-3
Navy Blue (Blue colorant)		
Component 1: C ₃₉ H ₂₃ ClCrN ₇ O ₁₂ S ₂ .2Na	Index number 611-070-00-2	Component 1: 118685-33-9
Component 2: C ₄₆ H ₃₀ CrN ₁₀ O ₂₀ S ₂ .3Na		

FLAME RETARDANTS (substances mainly used as flame retardants but not exclusively)

Name	CAS-Nr.	Abbreviation
Polybrominated biphenyls	Various	PBBs
Tri-(2,3-dibromopropyl)-phosphate	126-72-7	TBPP
Tris(aziridinyl)phosphineoxide	5455-55-1	TEPA
Pentabromodiphenyl ether	32534-81-9	pentaBDE
Octabromodiphenyl ether	32536-52-0	octaBDE
Decabromodiphenyl ether	1163-19-5	decaBDE
Hexabromocyclododecane	25637-99-4; 3194-55-6	HBCDD
Tri-o-cresyl phosphate	78-30-8	o-TCP
Tris(2-chloroethyl) phosphate	115-96-8	TCEP
Short Chain Chlorinated Paraffins C10 to C13	85535-84-8	SCCP
Medium Chain Chlorinated Paraffins C14 to C17	85535-85-9	MCCP
Bis (2,3-dibromopropyl) phosphate	5412-25-9	BIS-BP
Tris(1,3-dichloro-2-propyl) phosphate	13674-87-8	TDCPP

N-NITROSAMINE

Name	CAS-Nr.
N-nitrosodimethylamine	62-75-9
N-nitrosodiethylamine	55-18-5
N-nitrosodipropylamine	621-64-7
N-nitrosodibutylamine	924-16-3
N-nitrosopiperidine	100-75-4
N-nitrosopyrrolidine	930-55-2
N-nitrosomorpholine	59-89-2
N-nitroso-N-methylaniline	614-00-6
N-nitroso-N-ethylaniline	612-64-6

OILS

Name
Acenaphthene fractions
Alkaline extracts
Cresote (wash oil)
Cresote (wood)
Cresote oil (wash oil)
Distillates (coal tar)
Distillates (coal tar) upper,
Extract residues (coal)
heavy anthracene oil
Low temperature coal tar alkaline oil
Naphthalene oils
Tar acids, coal, crude, crude phenols

ORGANOTIN COMPOUNDS

Name	CAS-Nr.	Abbreviation
Monobutyltin	Various	MBT
Dibutyltin	14488-53-0	DBT
Diocetyl tin	Various	DOT
Tributyltin	36643-28-4	TBT
Triphenyltin	668-34-8	TPhT
Tetrabutyl tin	1461-25-2	TeBT
Tricyclohexyltin	Various	TCyHT
Triocetyl tin	250252-89-2	TOT
Tripropyltin	Various	TPT

PESTICIDES

Name	CAS-Nr.
2,4,5-T	93-76-5
2,4-D	94-75-7
Azinphos-methyl	86-50-0
Azinphos-ethyl	2642-71-9
Aldrin	309-00-2
Bromophos-ethyl	4824-78-6
Captafol	2425-06-1
Carbaryl	63-25-2
Chlordane	57-74-9
Chlordimeform	6164-98-3
Chlorfenvinphos	470-90-6
Coumaphos	56-72-4
Cyfluthrin	68359-37-5
Cyhalothrin	91465-08-6
Cypermethrin	52315-07-8
DEF	78-48-8
Deltamethrin	52918-63-5
DDD	53-19-0, 72-54-8
DDE	3424-82-6, 72-55-9
DDT	789-02-6; 50-29-3
Diazinon	333-41-5
Dichlorprop	120-36-5
Dicrotophos	141-66-2
Dieldrin	60-57-1
Dimethoate	60-51-5
Dinoseb and salts	Various
α - Endosulfan	959-98-8
β - Endosulfan	33213-65-9

Name	CAS-Nr.
Hexachlorobenzene	118-74-1
Endrin	72-20-8
Esfenvalerate	66230-04-4
Fenvalerate	51630-58-1
Heptachlor	76-44-8
Heptachlorepoxide	1024-57-3
α - Hexachlorocyclohexane	319-84-6
β - Hexachlorocyclohexane	319-85-7
δ - Hexachlorocyclohexane	319-86-8
Isodrin	465-73-6
Kelevan	4234-79-1
Kepone	143-50-0
Lindane	58-89-9
Malathion	121-75-5
MCPA	94-74-6
MCPB	94-81-5
Mecoprop	93-65-2
Methamidophos	10265-92-6
Methoxychlor	72-43-5
Mirex	2385-85-5
Monocrotophos	6923-22-4
Parathion	56-38-2
Parathion-methyl	298-00-0
Perthan	72-56-0
Mevinphos	7786-34-7
Propetamphos	31218-83-4
Profenofos	41198-08-7
Quinalphos	13593-03-8
Strobane	8001-50-1
Telodrin	297-78-9
Toxaphene	8001-35-2
Trifluralin	1582-09-8

PFCs

Name	CAS-Nr.	Abbreviation
Perfluorooctane sulfonate and related substances	Various	PFOS
Perfluorooctanesulfonamide	754-91-6	PFOSA
N-Methyl-Perfluorooctanesulfonamide	31506-32-8	N-Me-FOSA
N-Ethyl-Perfluorooctanesulfonamide	4151-50-2	N-Et-FOSA
N-Methyl-Perfluorooctanesulfonamidoethanol	24448-09-7	N-Me-FOSE
N-Ethyl-Perfluorooctanesulfonamidoethanol	1691-99-2	N-Et-FOSE
7H-Dodecafluoroheptanoic acid	1546-95-8	HPFHpA
2H,2H-Perfluorodecanoic acid	882489-14-7	H2PFDA
Perfluorooctanoic acid	335-67-1	PFOA
Perfluorobutanoic acid	375-22-4	PFBA
Perfluoropentanoic acid	2706-90-3	PFPeA
Perfluorohexanoic acid	307-24-4	PFHxA
Perfluoroheptanoic acid	375-85-9	PFHpA
Perfluorononanoic acid	375-95-1	PFNA
Perfluorodecanoic acid	335-76-2	PFDA
Perfluoroundecanoic acid	2058-94-8	PFUnA
Perfluorododecanoic acid	307-55-1	PFDoA
Perfluorotridecanoic acid	72629-94-8	PFTrA
Perfluorotetradecanoic acid	376-06-7	PFTeA
Perfluorobutanesulfonate K-salt	29420-49-3	L-PFBS
Perfluorohexanesulfonate Na-salt	82382-12-15	L-PFHxS
Perfluoroheptanesulfonate Na-salt	68555-66-8	L-PFHpS
Perfluorodecanesulfonate Na-salt	2806-15-7	L-PFDS
Perfluorobutane sulfonic acid	375-73-5	PFBS
Perfluorohexane sulfonic acid	355-46-4	PFHxS
Perfluoroheptane sulfonic acid	375-92-8	PFHpS
Perfluorodecane sulfonic acid	335-77-3	PFDS
Perfluoro-3,7-dimethyloctanoic acid	172155-07-6	PF-3,7-DMOA
1H,1H,2H,2H-Perfluorooctane sulfonic acid	27619-97-2	1H,1H,2H,2H-PFOS
2H,2H,3H,3H-Perfluoroundecanoic acid	34598-33-9	H4PFUnA
1H,1H,2H,2H-Perfluorohexane-1-ol	2043-47-2	4:2 FTOH
1H,1H,2H,2H-Perfluoro-1-octanol	647-42-7	6:2 FTOH
1H,1H,2H,2H-Perfluoro-1-decanol	678-39-7	8:2 FTOH
1H,1H,2H,2H-Perfluorododecane-1-ol	865-86-1	10:2 FTOH
1H,1H,2H,2H-Perfluorooctylacrylate	17527-29-6	6:2 FTA
1H,1H,2H,2H-Perfluorodecylacrylate	27905-45-9	8:2 FTA
1H,1H,2H,2H-Perfluorododecylacrylate	17741-60-5	10:2 FTA

PHTHALATES

Name	CAS-Nr.	Abbreviation
Diisononylphthalate	28553-12-0; 68515-48-0	DINP
Dioctylphthalate	117-84-0	DNOP
Bis(2-ethylhexyl)phthalate	117-81-7	DEHP
Diisodecylphthalate	26761-40-0; 68515-49-1	DIDP
Benzylbutylphthalate	85-68-7	BBP
Dibutylphthalate	84-69-5	DBP
Di-n-hexyl phthalate	84-75-3	DnHP
Di-iso-butylphthalate	84-74-2	DIBP
1,2-Benzenedicarboxylic acid, di-C6-8- branched alkyl esters, C7-rich	71888-89-6	DIHP
1,2-Benzenedicarboxylic acid, di-C7-11- branched and linear alkyl esters	68515-42-4	DHNUP
Bis(2-methoxyethyl) phthalate	117-82-8	DMEP
Di-iso-pentylphthalate	605-50-5	DIPP
N-pentyl-isopentylphthalate	776297-69-9	nPIP
1,2-benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	DnPP
Dipentyl phthalate	131-18-0	DPP
Dimethyl phthalate	131-11-3	DMP
Diethyl phthalate	84-66-2	DEP

SOLVENTS

Name	CAS-Nr.
Pentachloroethane	76-01-7
Carbon tetrachloride	56-23-5
1,1,1,2-Tetrachloroethane	630-20-6
1,1,1,2,2-Tetrachloroethane	79-34-5
Trichloromethane	67-66-3
1,1,2-Trichloroethane	79-00-5
1,1-Dichloroethylene	75-35-4
1,1,1-Trichloroethane	71-55-6
Tetrachloroethylene	127-18-4
Trichloroethylene	79-01-6
1,2-Dichloroethane	107-06-2
Dichloromethane	75-09-2
Benzyl chloride	100-44-7
Hexachloroethane	67-72-1
N,N-Dimethylformamide	68-12-2
N,N - Dimethylacetamide	127-19-5
1-Methyl-2-pyrrolidone	872-50-4

PAHs

Name	CAS-Nr.
Benzo[a]anthracene	56-55-3
Benzo[a]pyrene	50-32-8
Benzo[b]fluoranthene	205-99-2
Benzo[e]pyrene	192-97-2
Benzo[j]fluoranthene	205-82-3
Benzo[k]fluoranthene	207-08-9
Chrysene	218-01-9
Dibenzo[a,h]anthracene	53-70-3
Naphthalene	91-20-3
Acenaphthylene	208-96-8
Acenaphthene	83-32-9
Fluorene	86-73-7
Phenanthrene	85-01-8
Anthracene	120-12-7
Fluoranthene	206-44-0
Pyrene	129-00-0
Indeno[1,2,3-cd]pyrene	193-39-5
Benzo[g,h,i]perylene	191-24-2

REACH AND SVHCs

All suppliers must regularly visit the ECHA web page and must always be up-to-date about REACH (reg. EC 1907/2006) requirements, the SVHC list and the potential SVHC list.

ECHA homepage: <http://echa.europa.eu>

ECHA SVHC list: <http://echa.europa.eu/web/guest/candidate-list-table>

ECHA registry of SVHC intentions: <http://echa.europa.eu/en/web/guest/registry-of-current-svhc-intentions>

Besides respecting this Technical Safety Specifications, suppliers must immediately inform Benetton Group whenever any SVHC exceeds the 0.1 w-% of a product. They must replace the SVHC with nonhazardous substitutes. Benetton Group doesn't accept products containing SVHC's over 0.1 w-%.