

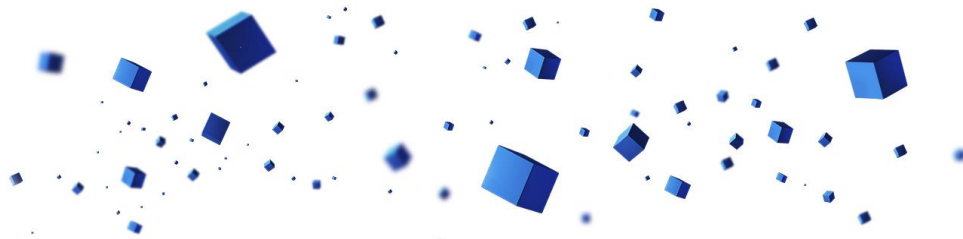
bluesign® system black limits (BSBL)

CHANGES 2020

Threshold limits for chemical substances in chemical products

Version 2.0, December 1, 2020 – compared to Version 1.0, July 1, 2019





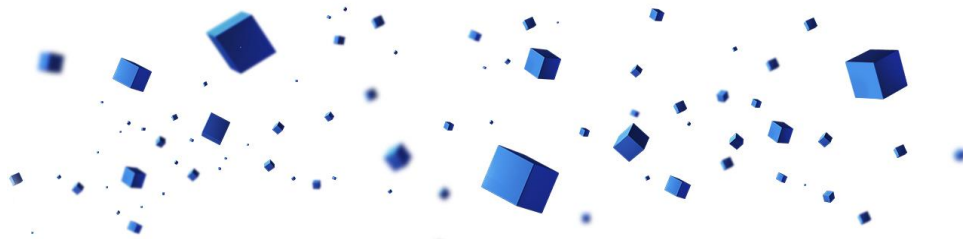
Purpose

This document gives an overview about the relevant changes in BSBL version 2.0 compared to version 1.0. Changes are marked in red color.

Threshold limit values

Aldehydes			
Chemical Substances	CAS Number	Threshold Limit Value [mg/kg]	Comments
Acetaldehyde	75-07-0	500	New in BSBL, new classified as carcinogenic by ECHA

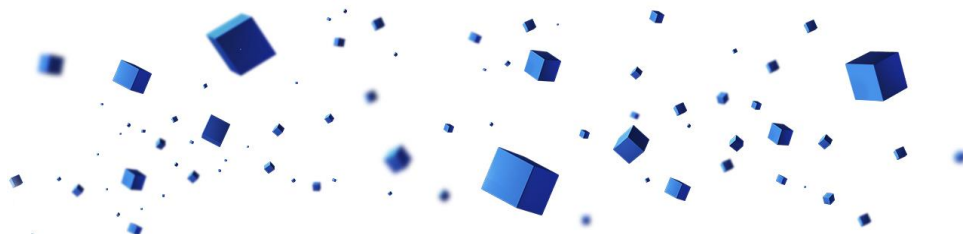
Alkylphenols and Alkylphenoethoxylates			
Chemical Substances	CAS Number	Threshold Limit Value [mg/kg]	Comments
Alkylphenols (APs)			
Tris(4-nonylphenyl, branched and linear) phosphite	Several	100 (for sum of group)	New group, based on new SVHC entry
Tris(4-nonylphenyl, branched) phosphite			
Tris(nonylphenyl) phosphite	26523-78-4		
Phenol, 4-nonyl-, phosphite (3:1)	3050-88-2		
4 tert. Butylphenol	98-54-4	100	New, based on new SVHC entry



Biocides			
Chemical Substances	CAS Number	Threshold Limit Value [mg/kg]	Comments
5-Chloro-2-methyl-4-isothiazolin-3-one (CIT)	26172-55-4	100	Removed from BSBL No general usage ban, because substances are needed as in-cane preservatives for water-based preparations Relevant is rather the concentration in application than the concentration in a chemical product Strict consumer safety limits must be followed
2-Methyl-4-isothiazolin-3-one (MIT)	2682-20-4	1000	
Mixture (3:1) of CIT and MIT	55965-84-9	100	
2-n-Octyl-4-isothiazolin-3-one (OIT)	26530-20-1	1000	
1,2-Benzisothiazol-3(2H)-one (BIT)	2634-33-5	1000	
o-Phenylphenol and its salts		Textiles: 5000 (for the sum of group)	New as group, alignment with ZDHC MRSL 2.0
o-Phenylphenol			New, as members of group
Sodium 2-biphenylate			
Dimethylfumarate	624-49-7	10	Higher limit, based on new assessment, moved to Biocides

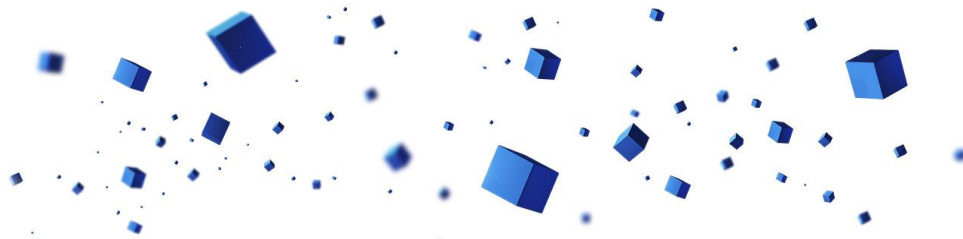
Colorants			
Colorants with carcinogenic potential			
Chemical Substances	CAS Number	Threshold Limit Value [mg/kg]	Comments
Solvent Violet 8 – with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)	561-41-1	200	New, is in SVHC candidate list

Flame Retardants			
Chemical Substances	CAS Number	Threshold Limit Value [mg/kg]	Comments
Tricresylphosphate	1330-78-5	50	New, for completion of substance group
Polybrominated diphenyl ethers (PBDE)	Several		
Monobromodiphenyl ether (MonoBDE)	Several	50	New, substance alignment with ZDHC MRSL 2.0



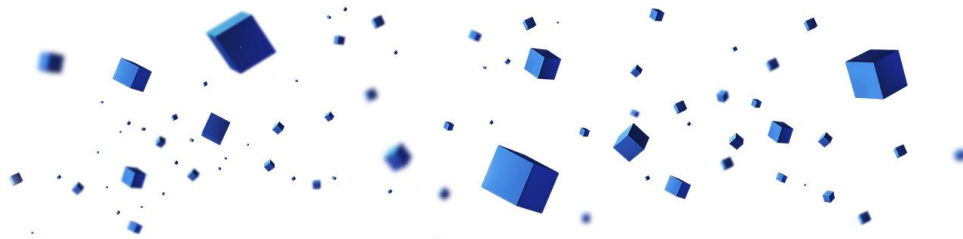
Fluorinated Substances			
Chemical Substances	CAS Number	Threshold Limit Value [mg/kg]	Comments
Perfluorooctanoic acid (PFOA) and its salts	Several	25 [µg/kg] (for the sum of PFOA and salts)	PFOA changed to group, salts included, for alignment with EU regulation 2 new entries added
Sodium pentadecafluorooctanoate	335-95-5		
Potassium perfluorooctanoate	2395-00-8		
PFOA-related substances	Several	1000 [µg/kg] (for the sum of all PFOA-related substances)	3 new substances, to fill existing substance group
Octanoyl fluoride, 2,2,3,3,4,4,5,5,6,6,7,7, 8,8,8-pentadecafluoro-	335-66-0		
Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7, 8,8,8-pentadecafluoro-, methyl ester	376-27-2		
Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7, 8,8,8-pentadecafluoro-, ethyl ester	3108-24-5		
Perfluoroalkyl compounds, branched	Several		New group, to cover below substances
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides	Several	2000 [µg/kg] (for the sum of all group members)	New group of substances, based on new SVHC entry
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid	13252-13-6		
Ammonium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate	62037-80-3		
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionyl fluoride	2062-98-8		
Potassium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionate	67118-55-2		

Halogenated Biphenyls, halogenated Terphenyls and halogenated Naphthalenes			
Chemical Substances	CAS Number	Threshold Limit Value [mg/kg]	Comments
Polybrominated biphenyls (PBBs)	59536-65-1	10 (for the sum of all PBBs)	
Monobromobiphenyl	26264-10-8		New, substance alignment with ZDHC MRS L 2.0



Other Chemical Substances			
Chemical Substances	CAS Number	Threshold Limit Value [mg/kg]	Comments
Benzyl chloride	100-44-7	50 For dyestuffs: 100	Lower limit, alignment with ZDHC MRSL 2.0
Boric acid and derivatives	Several	For every single entry: 250	Lower limit, alignment with ZDHC MRSL 2.0
Boron zinc oxide	12767-90-7	250	New, for completion of substance group
Colophony (Rosin)	8050-09-7	500	Higher limit, based on new assessment
Terpene hydrocarbons	Several		Higher limit, based on new assessment
D-Limonene	5989-27-5	500	
DL-Limonene	138-86-3	500	
L-Limonene	5989-54-8	500	

Pesticides			
Chemical Substances	CAS Number	Threshold Limit Value [mg/kg]	Comments
Pesticides (Single substances listed in Annex I)	Several	For sum of all pesticides: 5	This substance group is removed from BSBL due to the fact, that pesticides are usually not used in the chemical manufacturing process and that no relevant risk for occupational health and the environment from pesticides is caused by chemical products. The probable path for pesticides to enter the textile supply chain are the substrates like cotton, consequently pesticides are regulated by BSSL to protect the consumers



Solvents			
Chemical Substances	CAS Number	Threshold Limit Value [mg/kg]	Comments
Xylene, all isomers	1330-20-7	Sum of all xylenes: 100 for textile, leather, plastic and rubber	Higher limit, based on new assessment
m-Xylene	108-38-3		
o-Xylene	95-47-6		
p-Xylene	106-42-3		

Substances with usage restrictions but no consumer safety limits			
Chemical Substances	CAS Number	Threshold Limit Value [mg/kg]	Comments
Trisodium hydrogen ethylenediaminetetraacetate (EDTA)	150-38-9		New, for completion of EDTA group

Annex I Compilation of single substances

Chlorinated Benzenes and Toluenes		
Chemical Substances	CAS Number	Comments
2,3,4,5-Tetrachlorotoluene	1006-32-2	CAS number corrected
2,3,5,6-Tetrachlorotoluene	1006-31-1	CAS number corrected