

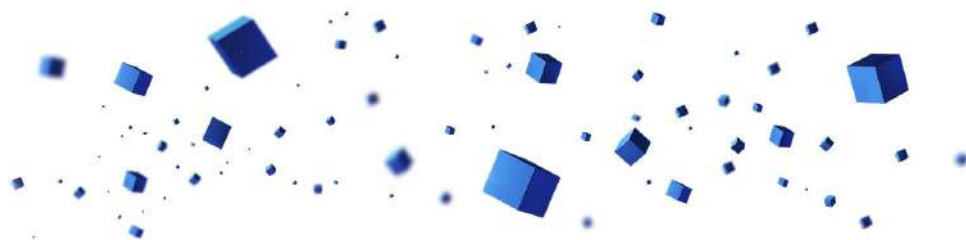
bluesign® system substances list (BSSL)

Consumer safety limits

CHANGES 2023

Version 14.0, 01 July 2023 – compared to Version 13.0, 01 July 2022





Purpose

This document provides an overview of the changes in BSSL version 14.0 compared to version 13.0. Changes are marked in **red**.

Validity of BSSL 14.0

BSSL 14.0 comes into force on 01 July 2023.

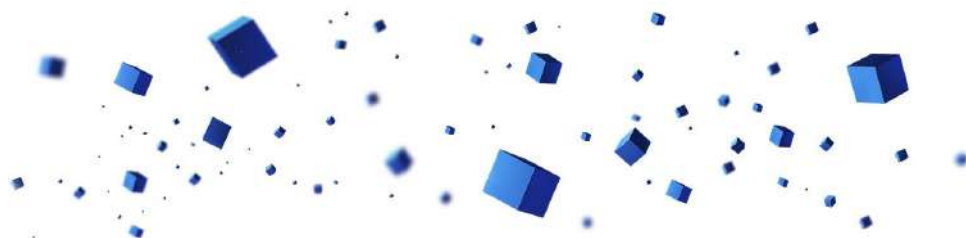
It replaces the bluesign® system substances list (BSSL) version 13.0 from 01 July 2022.

For all bluesign® SYSTEM PARTNERS: Unless otherwise stated, the revised sections will be implemented by 01 July 2024 at the latest.

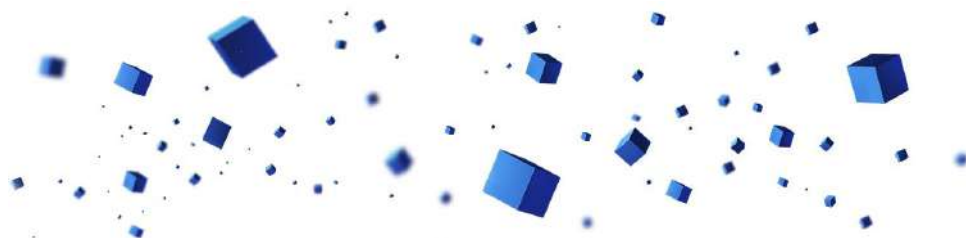
Consumer Safety Limits

pH-Value: **Revised methods and change of pH-range for leather products: 3.2 - 4.5** (Topic 5.1 in BSSL)

Aldehydes						
Chemical Name	CAS Number	Sector of Use	Limit Type	Value A/B/C	Unit	Comment
Glutaraldehyde	111-30-8	Leather	Usage ban	50	mg/kg	Change from Limitation to Usage ban.
Alkylphenoethoxylates (APEOs)						
Chemical Name	CAS Number	Sector of Use	Limit Type	Value A/B/C	Unit	Comment
Alkylphenoethoxylates (APEOs)	Several	All	Usage ban	100	mg/kg	New group limit. For sum of all restricted APEOs. Goal should be 100 for APEOs + APs.
Alkylphenols (APs)						
Chemical Name	CAS Number	Sector of Use	Limit Type	Value A/B/C	Unit	Comment
Alkylphenols (APs)	Several	All	Usage ban	10	mg/kg	New group limit. For sum of all APs.
Group of: Tris(4-nonylphenyl, branched and linear) phosphite	Several	All				The whole group is deleted from BSBL. SVHC restriction is covered by NP.
Amines						
Chemical Name	CAS Number	Sector of Use	Limit Type	Value A/B/C	Unit	Comment
Melamine	108-78-1	All	Usage ban	200	mg/kg	New substance.



Biocides						
Chemical Name	CAS Number	Sector of Use	Limit Type	Value A/B/C	Unit	Comment
Pyriithione sodium	3811-73-2	All	Limitation	50/200/200	mg/kg	New substance in BSSL.
Colorants						
Chemical Name	CAS Number	Sector of Use	Limit Type	Value A/B/C	Unit	Comment
Disperse Blue 124	61951-51-7 15141-18-1	All	Usage ban	200	mg/kg	Additional CAS no. added
Flame Retardants						
Chemical Name	CAS Number	Sector of Use	Limit Type	Value A/B/C	Unit	Comment
Bis(2-ethylhexyl) tetrabromophthalate	26040-51-7	All	Usage ban	5	mg/kg	New substance.
Tribromodiphenyl ether - (TriBDE)	49690-94-0	All	Usage ban	5	mg/kg	New substance.
Metals						
Chemical Name	CAS Number	Sector of Use	Limit Type	Value A/B/C	Unit	Comment
Antimony - as content	7440-36-0	Fibers/yarns	Limitation	260	mg/kg	New comment to clarify: Valid for polyester fibers (also dope dyed), but not for finished polyester textiles.
Barium - as content	7440-39-3	Textiles	Limitation	1000	mg/kg	Extractable metal content. Change of limit for textile, now same limit for all sectors of use.
Monomers						
Chemical Name	CAS Number	Sector of Use	Limit Type	Value A/B/C	Unit	Comment
Tetrafluoroethylene	116-14-3	All	Usage ban	1.0	mg/kg	Moved from group PFCA (is not PFAS) to Monomers. No change of limit.
Other Chemical Substances						
Chemical Name	CAS Number	Sector of Use	Limit Type	Value A/B/C	Unit	Comment
Azodicarbonamide (ADCA)	123-77-3	All	Usage ban	100/200/200	mg/kg	Change from Limitation to Usage ban.
Bisphenol AF	1478-61-1	All	Usage ban	100	mg/kg	Change from Monitoring to Usage ban.
Bisphenol F	620-92-8	All	Usage ban	100	mg/kg	Change from Monitoring to Usage ban.
Bisphenol S	80-09-1	All	Usage ban	100	mg/kg	Change from Monitoring to Usage ban. Specific limit for leather tanning and textile aftertreatment: 500 ppm.



Other Chemical Substances						
Chemical Name	CAS Number	Sector of Use	Limit Type	Value A/B/C	Unit	Comment
Barium diboron tetraoxide	13701-59-2	All	Usage ban	100	mg/kg	New substance.
2-Butanone oxime	96-29-7	All	Usage ban	1/10/10	mg/kg	New: Usage ban and limits.
3,5-Dimethylpyrazole	67-51-6	All	Limitation	50/200/200	mg/kg	Change from Monitoring to Limitation.
Formamide	75-12-7	All	Usage ban	50/50/200	mg/kg	Higher limit for C (from 100).
Phenol	108-95-2	All	Limitation	20/50/100	mg/kg	Higher limit for A (from 10).
D5-Siloxane	541-02-6	All	Usage ban	200	mg/kg	Higher limit (from 50).
D6-Siloxane	540-97-6	All	Usage ban	200	mg/kg	Higher limit (from 50).
Perfluoroalkyl Carboxylic Acids and Derivatives - PFCA						
Perfluoroalkyl Sulfonic Acids and Derivatives - PFSA						
Both groups are merged to a new group: PFAS (Poly- and perfluoroalkyl substances)						
PFAS (Poly- and perfluoroalkyl substances)						
Chemical Name	CAS Number	Sector of Use	Limit Type	Value A/B/C	Unit	Comment
PFAS (Poly- and perfluoroalkyl substances)	Several	All	Usage ban	50	mg/kg	New group. Limit refers to total fluorine content. See also "Guidance Sheet PFAS phase out" and PFAS statement in section 6.
Perfluorocarboxylic acids and its salts	Several	All				Entry deleted because of new structure and limits.
Perfluorohexanoic acid and its salts	Several	All	Usage ban	25	µg/kg	New limit value.
Perfluorocarboxylic acid (C9-C14) and its salts	Several	All	Usage ban	25	µg/kg	New defined group, legal limit.
Perfluorobutanoic acid related substances	Several	All	Usage ban	1	mg/kg	New defined group.
4:2 Fluorotelomer alcohol (4:2 FTOH)	2043-47-2	All	Usage ban			New substance, alignment MRSL. Limit on group level.
Perfluorocarboxylic acid (C9-C14) related substances	Several	All	Usage ban	260	µg/kg	New defined group, legal limit.
Perfluorodecanoic acid related substances	Several	All	Usage ban			New subgroup, limit on higher level.
10:2 Fluorotelomer alcohol (10:2 FTOH)	865-86-1	All	Usage ban			New substance, align MRSL. Limit on group level.
Perfluorodecane sulfonic acid	335-77-3	All	Usage ban			New substance. Limit on group level.



Solvents						
Chemical Name	CAS Number	Sector of Use	Limit Type	Value A/B/C	Unit	Comment
DMF	68-12-2	Textile/ solvent coating	Limitation	50/50/250	mg/kg	Change of exceptional limit for solvent coating for usage range C: 250 mg/kg (from 50). Requirement to re-check in 2025.
2-Pyrrolidone	616-45-5	All	Usage ban	50/100/100	mg/kg	New: Usage ban.
Xylene, all isomers	1330-20-7	All	Usage ban	50/100/100	mg/kg	Clarification of exception: Usage ban not valid for solvent coating, laminating and painting/lacquering. Limits valid for all articles.
Tin-organic Compounds						
Chemical Name	CAS Number	Sector of Use	Limit Type	Value A/B/C	Unit	Comment
Monobutyltin-tris-(ethylhexanoate)	23850-94-4	All	Usage ban			New substances, limit on group level.
Dibutyltin bis (2-ethylhexanoate)	2781-10-4	All	Usage ban			
Dibutyltin di(acetate)	1067-33-0	All	Usage ban			

Revised test methods

Substances	Revision	Comment
Arylamines	BSSL, Leather: Use new version of method EN ISO 17234-1:(2020).	New version
Chlorinated Phenols	Add method for leather (EN ISO 17070).	
Colorants	Update version for all colorants: DIN 54231 (2022).	New version
Cr VI (for leather)	Add to BSSL comment: Thermal pre-ageing test required in advance: ISO 10195:2018.	Thermal pre-ageing
Several solvents (2-Pyrrolidone, NEP, NMP, DMF, DMAc)	Replace CEN ISO 16189 (2013) by ISO 16189 (2021).	
Cyclic Siloxanes (D4-, D5-, D6-)	Reference to updated version: TEGEWA method (2021).	New version
Polyaromatic hydrocarbons (PAHs)	Add EN17132 or ISO 16190 as alternative methods.	
PVC	Total chlorine (EN 14582) // FTIR (when chlorine detected)	Based on problems with quantification
UV Stabilizers	Align BSSL with AFIRM: ISO 24040 // Extraction with Tetrahydrofuran // GC-MS.	Align with AFIRM