

 ASSOCIATION POUR L'ASSURANCE QUALITÉ DES FABRICANTS DE BRACELETS CUIR	DOC nb LIS001_16
Replace LIS001_15	

RESTRICTED SUBSTANCES LIST FOR LEATHER

Application date: 03Mar25		Page 1/9
Written by	Quality review (signature/date)	Process owner (signature/date)
Sébastien Bagot Technical & Quality Manager	 24-Feb-2025	 24-Feb-2025

Change log

Version	Date	Modification
15	16Jan25	Revision – Decision AQC 15Jan24 (action CQI-25-164) PFAS: Add of limit of 100 mg/kg of total Fluorine (California Bill 1817)
16	03Mar25	Revision – Validation TWG 19Feb25 – Action CQI-25-179 Bisphenols : Precision of CAS numbers to cover all isomers of BPS and BPF and addition of a note Metals : Correction of typo in CAS number of Cobalt PFAS : PFHxA back in the list after REACH annex XVII entry – Addition of PFHxA salts and related substances PFAS : C9-C14 PFAS and related substances back in the list PFAS : Reorganisation of the table for short chain PFAS (C4 to C6) PFAS : precision of method for total fluorine determination SVHC : addition of 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine (entry 19Dec2012) SVHC : addition of Octamethyltrisiloxane (entry 21Jan25)

Associated document (level 1)

Document	Title
MAQ016	Chemical Compliance Process

Associated document (level 2)

Document	Title
PRO002	Management of AQC Quality Control for leather
PRO007	Management of AQC Quality Control for insides

Associated document (level 3)*

Document	Title
-	-

* Internal documents – not disclosed.



ASSOCIATION POUR L'ASSURANCE QUALITÉ
DES FABRICANTS DE BRACELETS CUIR

LIS001_16

RESTRICTED SUBSTANCES LIST FOR LEATHER

Page 2/9

Scope of the document

This document defines the list of restricted dangerous chemical substances and testing requirements for leather compliance as specified by AQC.

To define the limits present in this Restricted Substances List (RSL), AQC takes into consideration all the current international regulations for dangerous substances available and select the strictest limit. The list of chemicals present in this document has been selected on a risk-based approach completed by AQC experience and knowledge.

This document applies to grain leather and split.

Synderme is a material made of leather particles bonded with a resin (also call latex even if not from natural source). Some synderme could be produced internally (e.g. LIM) from leather particles from traceable sources bonded with a synthetic bonding agent.

Per ISO 15115 Leather - Vocabulary, synderme materials cannot be designated as leather.

Nevertheless, taking into consideration that Synderme (commercial or internally produced) are mainly composed of leather particles, requirements present in this document also applies to those materials.

International regulations mentioned in this document are:

Abbreviation	Regulation	Country	Comment
16CFR1303	Ban of lead-containing paint and certain consumer products bearing lead-containing paint	USA	-
AGEC	"anti-waste for a circular economy law" of February 10, 2020	France	SVHC substances in the "Arrêté du 30 août 2023"
Bill 1817	Product safety: textile articles: perfluoroalkyl and polyfluoroalkyl substances (PFAS).	USA (California)	-
EU 2016/425	Regulation (EU) 2016/425 of the European Parliament and of the council of 9 March 2016 on Personal Protective Equipment	European Union	pH limits present in NF EN 420 norm Protective gloves - General requirements and test methods - Gants de protection
EU POP	Regulation (EU) 2019/1021 of the European Parliament and of the Council on persistent organic pollutants	European Union	-
GB 20400-2006	Leather and fur—Limit of harmful matter	China	-
JP 112	Law on Control of Household Products Containing Harmful Substances	Japan	-
OChim	Ordinance on Protection against Dangerous Substances and Preparations	Switzerland	-
ORRChim	Ordinance on the Reduction of Risks relating to the Use of Certain Particularly Dangerous Substances, Preparations and Articles	Switzerland	-
Prop 65	Proposition 65 Safe Drinking Water and Toxic Enforcement Act	USA (California)	-
QB/T 2540	Leather Bracelets	China	Voluntary norm
REACH XIV	Regulation (EC) no 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)	European Union	Annex XIV Substances subject to authorization
REACH XVII			Annex XVII Substances subject to restriction
REACH SVHC			Substances of Very High Concern

 ASSOCIATION POUR L'ASSURANCE QUALITÉ DES FABRICANTS DE BRACELETS CUIR	LIS001_16
RESTRICTED SUBSTANCES LIST FOR LEATHER	Page 3/9

Extra-legal AQC limits

In the column for regulation, "AQC" stands for extra-legal limit set by AQC in a pro-active way.

- "AQC" alone is applied for substances without known regulation. For some substances, AQC generally performs testing without limit (for information).
- (AQC) after a regulation indicate that the scope has been enlarged to leather by AQC or that the limit applied by AQC is lower than requested by the more stringent regulation.

Limit for REACH and AGEC SVHCs

Article 33(1) of REACH requires that a supplier of articles containing a SVHC included in the Candidate List for authorization in a concentration above 0.1% (w/w) has to provide relevant safety information to the recipients of these articles (Watch Brands). Upon request of a consumer, Watch Brands have to provide relevant safety information about the SVHC to this consumer (Article 33(2) of REACH).

This requirement is also present in Swiss ordinance OChim, article 71.

In article L451-9-1 of AGEC law, it is requested to inform consumers through a labelling of the product, any presence of dangerous substance (also called SVHCs in this document for practical reasons).

Limit concentration for information of the consumer is 0.1% (w/w).

There is no regulatory requirement to limit SVHCs content in articles to 1'000 mg/kg. Nevertheless, AQC Bracelet manufacturers limit all SVHC listed substances to 1'000 mg/kg in leather bracelet and its components before manufacturing.

Limits for Proposition 65

For substances listed in the Proposition 65 California, AQC limits take into account the limit in articles present in the case law of Proposition 65 and more precisely the limits indicated in the reformulation injunctions of settlements and judgements.

AQC considers in case law leather articles and related articles to the watch bracelet but also any other article with a similar exposure scenario (skin contact).

For substances without any indication of a limit in articles, AQC performs testing of a risk-based selection of substances potentially used for leather production and keeps available for Watch Brands all the data as a support for labelling decision.

Limits for EU POP

AQC limits for substances present in EU POP regulation are in full accordance with the terms detailed for each substance within the annex.

Rules for PFOS & related substances result management for coated and non-coated leather applied in this list are compliant with ECHA Q&A ID 1851 V1.0 of 23/09/2021).

per Directive 94/11/EC and ISO 15115 Leather - Vocabulary,

- Coated leather is defined as a leather with a finish layer thickness in excess of 0.15 mm.
- (non-coated) Leather is defined as a leather with a finish layer not thicker than 0.15 mm.

AQC requirements for laboratory testing

- Sample picture

Picture of leather samples received by the laboratory must be taken **without** plastic bag.

- Sample preparation

Leather sample preparation requested by AQC is the one indicated in the chapter "Sampling and sample preparation" of each testing methods indicated in the present RSL. By default, ISO 4044 shall prevail.

For Chromium (VI), AQC requires no conditioning of the sample before testing.



LIS001_15

ASSOCIATION POUR L'ASSURANCE QUALITÉ
DES FABRICANTS DE BRACELETS CUIR

RESTRICTED SUBSTANCES LIST FOR LEATHER

Page 4/9

Substance family	Substance Name	Abbr.	CAS Number	AQC limit	Strictest Regulation	Test Method
Aldehydes	Formaldehyde	-	50-00-0	75 mg/kg	GB 20400-2006	ISO 17226-1
Aromatic amines	Biphenyl-4-ylamine	-	92-67-1	< 30 mg/kg each	REACH XVII entries 43 & 72 ¹ & GB 20400-2006	ISO 17234
	Benzidine	-	92-87-5			
	4-chloro-o-toluidine ¹	-	95-69-2			
	2-naphthylamine ¹	-	91-59-8			
	4-o-tolylazo-o-toluidine	-	97-56-3			
	5-nitro-o-toluidine	-	99-55-8			
	4-chloroaniline	-	106-47-8			
	4-methoxy-m-phenylenediamine ¹	-	615-05-4			
	4,4'-methylenedianiline	MDA	101-77-9			
	3,3'-dichlorobenzidine	-	91-94-1			
	3,3'-dimethoxybenzidine	-	119-90-4			
	4,4'-bi-o-toluidine	-	119-93-7			
	4,4'-methylenedi-o-toluidine	-	838-88-0			
	6-methoxy-m-toluidine	-	120-71-8			
	4,4'-methylenebis[2-chloroaniline]	MOCA	101-14-4			
	4,4'-oxydianiline	-	101-80-4			
	4,4'-thiodianiline	-	139-65-1			
	o-toluidine	-	95-53-4			
	4-methyl-m-phenylenediamine	-	95-80-7			
	2,4,5-trimethylaniline ¹	-	137-17-7			
	o-anisidine	-	90-04-0			
	4-aminoazobenzene	-	60-09-3			
	2,6-xylidine	-	87-62-7			
	2,4-xylidine	-	95-68-1			
	p-phenylenediamine	PPD	106-50-3	for information	REACH XVII proposal Prop 65 (only for aniline)	ISO 17234-1 Annex F (w/o reduction)
	Aniline	-	62-53-3			
	p-phenylenediamine (free)	PPD	106-50-3			
	Aniline (free)	-	62-53-3			
Biocides	Dimethylfumarate	DMFu	624-49-7	0.1 mg/kg	REACH XVII entry 61 ORRChim	ISO 16186
Bisphenols	Sulphonyldiphenol (bisphenol S)	BPS	80-09-1 (4,4') 5397-34-2 (2,4')	1'000 mg/kg	REACH SVHC	ISO 11936
	Methylenediphenol (bisphenol F)	BPF	1333-16-0 ³	For information	AQC	
Chlorophenols	Pentachlorophenols	PCP	87-86-5	0.5 mg/kg	ORRChim	ISO 17070
	Tetrachlorophenols 2,3,4,5- 2,3,4,6- 2,3,5,6-	TeCP	25167-83-3 4901-51-3 58-90-2 935-95-5	0.5 mg/kg		
Chlorine compounds	Alkanes, C10-13, Chloro	SCCP	85535-84-8	1'000 mg/kg	REACH SVHC ORRChim	ISO 18219-1
	Alkanes, C14-17, Chloro	MCCP	85535-85-9 198840-65-2 1372804-76-6	1'000 mg/kg	REACH SVHC	ISO 18219-2



ASSOCIATION POUR L'ASSURANCE QUALITÉ
DES FABRICANTS DE BRACELETS CUIR

LIS001_15

RESTRICTED SUBSTANCES LIST FOR LEATHER

Page 5/9

Substance family	Substance Name	Abbr.	CAS Number	AQC limit	Strictest Regulation	Test Method	
Metals	Chromium (VI) and its related substances ³	Cr(VI)	18540-29-9	3 mg/kg of dry matter	REACH XVII entry 47	ISO 17075-2 w/o conditioning	
	Cadmium	Cd	7440-43-9	100 mg/kg	REACH XVII entry 23	ISO 17072-2	
	Lead	Pb	7439-92-1	90 mg/kg	16CFR1303 (AQC)		
	Mercury	Hg	7439-97-6	1 mg/kg	JP 112 (AQC)		
	Chromium	Cr	7440-47-3	for information	AQC	ISO 17072-1	
	Cobalt extractable	Co	7440-48-4		REACH XVII proposal (AQC)		
	Nickel extractable	Ni	7440-02-0		REACH XVII entry 72	ISO 17072-1	
	Arsenic extractable	As	7440-38-2	1 mg/kg			
	Cadmium extractable	Cd	7440-43-9	1 mg/kg			
	Lead extractable	Pb	7439-92-1	1 mg/kg			
	Antimony extractable	Sb	7440-36-0	30 mg/kg	QB/T 2540		
Phenols	Nonyphenols - 4-Nonylphenol, branched and linear - Isononylphenol	NP 4-NP -	25154-52-3 several CAS 11066-49-2	100 mg/kg (sum NP+NPEO)	REACH SVHC (AQC because REACH XIV)	ISO 18218	
	Nonylphenol Ethoxylates - 4-Nonylphenol, branched and linear, ethoxylated Incl. isononylphenol ethoxylated	NPEO (4-NPEO) -	- several CAS 37205-87-2				
Phthalates	Diisobutyl phthalate	DIBP	84-69-5	1'000 mg/kg (sum)	REACH XVII entry 51	ISO 16181	
	Dibutyl phthalate	DBP	84-74-2				
	Benzyl butyl phthalate	BBP	85-68-7				
	Bis(2-ethylhexyl) phthalate	DEHP	117-81-7				
	Bis(2-methoxyethyl) phthalate	DMEP	117-82-8	1'000 mg/kg (each)	REACH SVHC		
	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	DHNUP (L&R)	68515-42-4				
	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	-	71888-89-6				
	Di-isopentyl phthalate	DIPP	605-50-5				
	Di-n-pentyl phthalate	DnPP	131-18-0				
	N-pentyl-isopentylphthalate	nPIPP	776297-69-9				
	1,2-Benzenedicarboxylic acid, dipentyl ester, branched and linear	DNIPP (L&R)	84777-06-0				
	Di-n-hexyl phthalate	DnHP	84-75-3				
	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	DIHxP (L&R)	68515-50-4				
	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters	-	68648-93-1 68515-51-5				
	Dicyclohexyl phthalate	DHCP	84-61-7				
	Diisohexyl phthalate	DIHP	71850-09-4				
	Di-n-octyl phthalate	DNOP	117-84-0				
	Di-“isononyl” phthalate	DINP	28553-12-0 68515-48-0		REACH XVII entry 52 (AQC)		
	Di-“iso-decyl” phthalate	DIDP	26761-40-0 68515-49-1				
	Diisoctyl phthalate	DIOP	27554-26-3	1'000 mg/kg	AGEC SVHC		



ASSOCIATION POUR L'ASSURANCE QUALITÉ
DES FABRICANTS DE BRACELETS CUIR

LIS001_15

RESTRICTED SUBSTANCES LIST FOR LEATHER

Page 6/9

Substance family	Substance Name	Abbr.	CAS Number	AQC limit	Strictest Regulation	Test Method
PFAS	Total Fluorine	TF	7782-41-4	100 mg/kg	Bill 1817 California	ASTM D7359
C4-C5 PFAS	Perfluorobutane sulfonic acid ⁴	PFBS	375-73-5	1'000 mg/kg	REACH SVHC	ISO 23702-1
	Perfluoroheptanoic acid ⁴	PFHpA	375-85-9	1'000 mg/kg		
PFOS, its salts and related substances	Perfluorooctanesulfonic acid	PFOS	1763-23-1	coated leather < 1 µg/m ² (sum)	EU POP ORRChim	ISO 17186 (finish measurement) ISO 23702-1 (PFOS & related substances)
	Perfluorooctanesulfonic acid, potassium salt	PFOS-K	2795-39-3			
	Perfluorooctanesulfonic acid, lithium salt	PFOS-Li	29457-72-5			
	Perfluorooctanesulfonic acid, ammonium salt	PFOS-NH ₄	29081-56-9			
	Perfluorooctanesulfonic acid, diethanolamine salt	PFOS-NH(OH) ₂	70225-14-8			
	Perfluorooctanesulfonic acid, tetraethylammonium salt	PFOS-N(C ₂ H ₅) ₄	56773-42-3			
	N-Ethylperfluoro-1-octanesulfonamide	N-Et-FOSA	4151-50-2			
	N-Methylperfluoro-1-octanesulfonamide	N-Me-FOSA	31506-32-8			
	2-(N-Ethylperfluoro-1-octanesulfonamido)-ethanol	N-Et-FOSE	1691-99-2			
	2-(N-Methylperfluoro-1-octanesulfonamido)-ethanol	N-Me-FOSE	24448-09-7			
PFOA and its salts	Perfluoro-1-octanesulfonyl fluoride	POSF	307-35-7	0.025 mg/kg (sum)	EU POP ORRChim	ISO 23702-1
	Perfluoroctane sulfonamide	PFOSA	754-91-6			
	1-Decanaminium, N-decyl-N,N-dimethyl-, salt with heptadecafluoroctane-1-sulfonic acid (1:1)	-	251099-16-8			
PFOA related substances	Perfluorooctanoic acid	PFOA	335-67-1			
	Perfluorooctanoic acid, sodium salt	PFOA-Na	335-95-5			
	Perfluorooctanoic acid, potassium salt	PFOA-K	2395-00-8			
	Perfluorooctanoic acid, silver salt	PFOA-Ag	335-93-3			
	Perfluorooctanoic acid, fluorine salt	PFOA-F	335-66-0			
PFHxS, its salts & related substances	Ammonium pentadecafluoroctanoate	APFO	3825-26-1	1 mg/kg (sum)	EU POP ORRChim	ISO 23702-1
	Chromium(3+) perfluoroctanoate	-	68141-02-6			
	Ethanaminium, N,N,N-triethyl-, salt with pentadecafluoroctanoic acid (1:1)	-	98241-25-9			
PFHxA, its salts & related substances	1H,1H,2H,2H-Perfluorodecanesulfonic acid	8:2 FTS	39108-34-4			
	Methyl perfluorooctanoate	Me-PFOA	376-27-2			
	Ethyl perfluorooctanoate	Et-PFOA	3108-24-5			
	2-Perfluorooctylethanol	8:2 FTOH	678-39-7			
	1H,1H,2H,2H-Perfluorodecyl acrylate	8:2 FTA	27905-45-9	0.025 mg/kg (sum)	EU POP ORRChim	REACH XVII Entry 79
	1H,1H,2H,2H-Perfluorodecyl methacrylate	8:2 FTMA	1996-88-9			
	2H,2H-Perfluorodecanoic acid	H2PFDA	27854-31-5			
	Perfluorohexane-1-sulphonic acid	PFHxS	355-46-4			
	Perfluorohexane-1-sulphonic acid, potassium salt	PFHxS-K	3871-99-6	1 mg/kg (sum)		
	Perfluorohexane-1-sulphonic acid, lithium salt	PFHxS-Li	55120-77-9			
	Perfluorohexane-1-sulphonic acid, ammonium salt	PFHxS-NH ₄	68259-08-5			
	Perfluorohexane-1-sulphonic acid, sodium salt	PFHxS-Na	82382-12-5			
	Perfluorohexane sulfonyl fluoride	PFHxSF	423-50-7			
	Potassium N-ethyl-N-[(tridecafluorohexyl)sulphonyl]glycinate	-	67584-53-6			
	Tridecafluoro-N-methylhexanesulphonamide	-	68259-15-4			
	Perfluorohexanesulfonamide	-	41997-13-1			
	Undecafluorohexanoic acid	PFHxA	307-24-4	0.025 mg/kg (sum)		
	Undecafluorohexanoic acid, ammonium salt	APFHx	21615-47-4			
	Undecafluorohexanoic acid, sodium salt	-	2923-26-4			
	1 H,1H,2H,2H-Perfluorooctane sulfonic acid	6:2 FTS	27619-97-2			
	1H,1H,2H,2H-Perfluoro-1-octanol	6:2 FTOH	647-42-7			
	1H,1H,2H,2H-Perfluoroctyl methacrylate	6:2 FTMA	2144-53-8			
	1H,1H,2H,2H-Perfluoroctyl acrylate	6:2 FTA	17527-29-6	1 mg/kg (sum)		



ASSOCIATION POUR L'ASSURANCE QUALITÉ
DES FABRICANTS DE BRACELETS CUIR

LIS001_15

RESTRICTED SUBSTANCES LIST FOR LEATHER

Page 7/9

Substance family	Substance Name	Abbr.	CAS Number	AQC limit	Strictest Regulation	Test Method
C9-C14 PFCAs, their salts and related substances	Perfluorononanoic Acid	PFNA	375-95-1	0.025 mg/kg (sum)	REACH XVII Entry 68 (AQC)	ISO 23702-1
	Perfluorononanoic Acid, sodium salt	PFNA-Na	21049-39-8			
	Perfluorononanoic Acid, ammonium salt	PFNA-NH4	4149-60-4			
	Perfluorodecanoic Acid	PFDA	335-76-2			
	Perfluorodecanoic Acid, sodium salt	PFDA-Na	3830-45-3			
	Perfluorodecanoic Acid, ammonium salt	PFDA-NH4	3108-42-7			
	Perfluoroundecanoic Acid	PFUnA	2058-94-8			
	Perfluorododecanoic Acid	PFDoA	307-55-1			
	Perfluorotridecanoic Acid	PFTrDA	72629-94-8			
	Perfluorotetradecanoic Acid	PFTeDA	376-06-7			
	Perfluoro-3-7-dimethyloctanecarboxylate	PF-3,7-DMOA	172155-07-6	0.260 mg/kg (sum)		
	1H,1H,2H,2H-Perfluorododecyl acrylate	10:2 FTA	17741-60-5			
	1H,1H,2H,2H-Perfluorododecyl methacrylate	10:2 FTMA	2144-54-9			
	1H,1H,2H,2H-Perfluorododecanol	10:2 FTOH	865-86-1			
	2H,2H,3H,3H-Perfluoroundecanoic acid	H4PFUnA	34598-33-9			
	1H,1H,2H,2H-perfluorotetradecan-1-ol	12:2 FTOH	39239-77-5			
	1H,1H,2H,2H-Perfluorododecanesulphonic acid	10:2 FTS	120226-60-0			
	1H,1H,2H,2H-Perfluorododecyl iodide	10:2 FTI	2043-54-1			
	1H,1H,2H,2H-Perfluorotetradecyl iodide	12:2 FTI	30046-31-2			



ASSOCIATION POUR L'ASSURANCE QUALITÉ
DES FABRICANTS DE BRACELETS CUIR

LIS001_15

RESTRICTED SUBSTANCES LIST FOR LEATHER

Page 8/9

Substance family	Substance Name	Abbr.	CAS Number	AQC limit	Strictest Regulation	Testing Method
Physical	Hydrogen ion	pH	-	3.5 - 9.5	EU 2016/425 (AQC)	ISO 4045
Polycyclic Aromatic Hydrocarbons (PAHs)	Benzo(a)pyrene	BaP	50-32-8	1 mg/kg	REACH XVII entry 50 ORRChim	AfPS-GS-2019-01-PAK
	Benzo(a)anthracene	BaA	56-55-3	1 mg/kg		
	Benzo(b)fluoranthene	BbF	205-99-2	1 mg/kg		
	Benzo(e)pyrene	BeP	192-97-2	1 mg/kg		
	Benzo(j)fluoranthene	BjF	205-82-3	1 mg/kg		
	Benzo(k)fluoranthene	BkF	207-08-9	1 mg/kg		
	Chrysene	CHR	218-01-9	1 mg/kg		
	Dibenzo(a,h)anthracene	DBA	53-70-3	1 mg/kg		
(organoo) stannic compounds	Tributyltin and related compounds Incl. TBT metacrylate	TBT	several CAS incl. 2155-70-6	1'000 mg/kg	REACH XVII entry 20	ISO 16179
	Triphenyltin and related compounds Incl. TPT hydroxide	TPT	several CAS incl. 76-87-9	1'000 mg/kg		
	All other tri-substituted tin compounds	-	Several CAS	1'000 mg/kg		
	Dibutyltin and related compounds	DBT	several CAS incl. 683-18-1	1'000 mg/kg		
	Diocetyltin and related compounds	DOT	several CAS	1'000 mg/kg		
	Di- μ -oxo-di-n-butylstanniohydroxyboran (Dibutyltin hydrogen borate)	DBB	75113-37-0	1'000 mg/kg		
SVHCs	N,N-dimethylformamide	-	68-12-2	1'000 mg/kg	REACH SVHC Ochim	ISO 16189
	2-ethoxyethanol	EGEE	110-80-5	1'000 mg/kg		
	N-(hydroxymethyl)acrylamide	-	924-42-5	1'000 mg/kg		
	Melamine	-	108-78-1	1'000 mg/kg		
	Barium diboron tetraoxide	-	13701-59-2	1'000 mg/kg		
	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	-	143860-04-2	1'000 mg/kg		
	Octamethyltrisiloxane	-	107-51-7	1'000 mg/kg		
	1,3-benzènediol (Resorcinol)	-	108-46-3	1'000 mg/kg		

OPTION FOR METAL FREE LEATHER

Substance family	Substance Name	Abbr.	CAS Number	AQC limit	Regulation	AQC required Method
Tanning metals	Chromium	Cr	7440-47-3	1'000 mg/kg (Sum)	ISO 15115	ISO 17072-2 Annex B
	Aluminum	Al	7429-90-5			
	Titanium	Ti	7440-32-6			
	Iron	Fe	7439-89-6			
	Zirconium	Zr	7440-67-7			
Aldehyde	Glutaraldehyde	-	111-30-8	1'000 mg/kg	REACH SVHC	adapted ISO 17226-1

OPTION FOR VEGETAL TANNED LEATHER

Substance family	Substance Name	Abbr.	CAS Number	AQC limit	Regulation	AQC required Method
Tanning metals	Chromium	Cr	7440-47-3	3'000 mg/kg (Sum)	ISO 15115	ISO 17072-2 Annex B
	Aluminum	Al	7429-90-5			
	Titanium	Ti	7440-32-6			
	Iron	Fe	7439-89-6			
	Zirconium	Zr	7440-67-7			
Aldehyde	Glutaraldehyde	-	111-30-8	1'000 mg/kg	REACH SVHC	adapted ISO 17226-1

RESTRICTED SUBSTANCES LIST FOR LEATHER

Page 9/9

NOTES
¹ Analytical equivalence between aromatic amines listed in entry 43 and entry 72 of REACH Annex XVII

Entry 43			Entry 72		
Substance name	CAS number	Formula	Substance name	CAS number	Formula
4-chloro-o-toluidine	95-69-2		4-chloro-o-toluidinium chloride	3165-93-3	
2-naphthylamine	91-59-8		2-naphtylammoniumacetate	553-00-4	
4-methoxy-m-phenylenediamine	615-05-4		4-methoxy-m-phenylenediammonium sulphate	39146-41-7	
2,4,5-trimethylaniline	137-17-7		2,4,5-trimethylaniline hydrochloride	21436-97-5	

² Chromium (VI) related substances stand for the following substances:

- Sodium chromate (CAS 7775-11-3)
- Sodium dichromate (CAS 7789-12-0, CAS 10588-01-9)
- Potassium chromate (CAS 7789-00-6)
- Potassium dichromate (CAS 7778-50-9)
- Ammonium dichromate (CAS 7789-09-5)
- Chromium trioxide (CAS 1333-82-0)
- Chromic acid (CAS 7738-94-5)
- Oligomers of chromic acid and dichromic acid and strontium chromate (CAS 7789-06-2)
- Potassium hydroxyoctaoxodizincatedichromate (1-) (CAS 11103-86-9)
- Pentazinc chromate octahydroxide (CAS 49663-84-5)
- Dichromium tris(chromate) (CAS 24613-89-6)

³ CAS 1333-16-0 includes the 3 isomers of bisphenol F

- 2,2'-methylenediphenol (CAS 2467-02-9)
- 4,4'-methylenediphenol (620-92-8)
- 2,4'-methylenediphenol (CAS 2467-03-0)

From T. Takeichi, N. Furukawa, in Polymer Science: A Comprehensive Reference, 2012, the isomer 2,4' is predominant, followed by 4,4' isomer and 2,2' isomer the lowest.

⁴ for the PFAS and their salts only present in the SVHC list, only the acid radical testing result is reported.

LIS001_16_AQC RSL for leather

Final Audit Report

2025-02-24

Created:	2025-02-24
By:	David Astier (david.astier@aqc-asso.ch)
Status:	Signed
Transaction ID:	CBJCHBCAABAA9lw1hPkei1Rj-jw5MQt2vz0R3PV8o14W

"LIS001_16_AQC RSL for leather" History

- Document created by David Astier (david.astier@aqc-asso.ch)
2025-02-24 - 8:15:52 AM GMT- IP address: 178.193.90.228
- Document emailed to David Astier (david.astier@aqc-asso.ch) for signature
2025-02-24 - 8:15:58 AM GMT
- Document emailed to Sébastien Bagot (sebastien.bagot@aqc-asso.ch) for signature
2025-02-24 - 8:15:58 AM GMT
- Email viewed by David Astier (david.astier@aqc-asso.ch)
2025-02-24 - 8:18:31 AM GMT- IP address: 178.193.90.228
- Document e-signed by David Astier (david.astier@aqc-asso.ch)
Signature Date: 2025-02-24 - 8:18:40 AM GMT - Time Source: server- IP address: 178.193.90.228
- Email viewed by Sébastien Bagot (sebastien.bagot@aqc-asso.ch)
2025-02-24 - 12:40:00 PM GMT- IP address: 178.193.90.228
- Document e-signed by Sébastien Bagot (sebastien.bagot@aqc-asso.ch)
Signature Date: 2025-02-24 - 12:40:40 PM GMT - Time Source: server- IP address: 178.193.90.228
- Agreement completed.
2025-02-24 - 12:40:40 PM GMT



Adobe Acrobat Sign