

 ASSOCIATION POUR L'ASSURANCE QUALITÉ DES FABRICANTS DE BRACELETS CUIR		DOC n° LIS005_11
		Replace LIS005_10
RESTRICTED SUBSTANCES LIST FOR PLASTIC & RUBBER		
Application date: 26Aug25		Page 1/10
Written by	Quality review (signature/date)	Process owner (signature/date)
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Change log

Version	Date	Modification
09	03Mar25	Revision (minor changes for PFAS family & Flame retardants – only TWG information 19Feb25 – action CQI-25-180) <ul style="list-style-type: none"> - Precision of CAS numbers to cover all isomers of BPS and BPF and addition of a note - Change of limit for HBCDD following entry into EU POP regulation - Extraction from C4-C6 PFAS of PFHxS salts and related substances - Precision of PFHxA salts and related substances - Add of Total Fluorine and Extractable Fluorine testing as 2 options for different plastic/rubber materials (for info)
10	12Mar25	Correction of the AQC limit for PFHxA, its salts & related substances in the table in page 7.
11	26Aug25	Revision – Validation TWG 22Aug25 <ul style="list-style-type: none"> • Addition of PRO051 as Level 2 document • Quantification method update for total fluorine • Anti-UV: reduction of limit for UV 328 to 100 mg/kg • Flame retardants: addition of triphenyl phosphate • Metal: reduction of cadmium limit to 75 mg/kg and of lead to 90 mg/kg as per Minnesota 325E.3892 • PFOS: change of limit: <ul style="list-style-type: none"> ○ PFOS and its salts 0.025 mg/kg (sum) ○ PFOS related substances 1 mg/kg (sum) • Miscellaneous typo correction: <ul style="list-style-type: none"> ○ Merging of limit (1'000mg/kg (each)) ○ C4-C7 : correction of carbon number ○ split of PFAS compound & its salts and compounds related substance (PFOS, PFHxS, PFHxA, C9-C14) ○ Addition of note 4

Associated document (level 1)

Document	Title
MAQ016	Chemical Compliance Process

Associated document (level 2)

Document	Title
PRO007	Management of AQC Quality control for insides
PRO051	Veille réglementaire et normative

Associated document (level 3)*

Document	Title
-	-

* Some Internal documents are not disclosed.

Scope of the document

This document defines the list of restricted dangerous chemical substances and testing requirements for plastic and rubber materials used in leather bracelet manufacturing. These materials could be used in different cases:

- Plastic insert
- Rubber inlay
- Rubber inlay with integrated insert
- Rubber part for bicomponent leather/rubber bracelet

For the definition of the limit 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.

International regulations mentioned in this document are:

Abbreviation	Regulation	Country	Comment
AGEC	"anti-waste for a circular economy law" of February 10, 2020	France	SVHC substances in the "Arrêté du 30 août 2023"
EU POP	Regulation (EU) 2019/1021 of the European Parliament and of the Council on persistent organic pollutants	European Union	-
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	-
Proposition 65	Safe Drinking Water and Toxic Enforcement Act	USA (California)	-
REACH XVII	Regulation (EC) no 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)	Europe	Annex XVII Substances subject to restriction
REACH SVHC			Substances of Very High Concern

Specific AQC considerations

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

- "AQC" alone is applied for substances without known regulation
For some substances, AQC performs testing without limit (for information) or with a limit concentration
- (AQC) after a regulation indicates that the scope has been enlarged to plastic and rubber materials by AQC or that the limit applied by AQC is lower than requested by the more stringent regulation.

Entry 72 of Annex XVII of REACH

As precisely described in the *EXPLANATORY GUIDE ON THE RESTRICTION ON CMRs 1A and 1B IN TEXTILES AND CLOTHING* endorsed by CARACAL on 27 June 2018 [CA/44/2018], watch bracelets ("wristwatch straps") are in the scope of entry 72.

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In compliance with Q&A 1805 version 1.0 of 02 June 2021, any material that enters the composition of an article in contact with human skin under normal and reasonably foreseeable conditions of use falls into the scope of this entry (cf extract below).

Entry 72 of Annex XVII to REACH – CMR substances in clothing, other textile

▼ **Does the restriction in entry 72 on specific substances which are carcinogenic, mutagenic and toxic to reproduction apply to clothing or related accessories such as rainwear, accessories or footwear mainly made of plastic material or synthetic leather?**

Yes. The European Commission has published an [explanatory guide](#) concerning the restriction under Entry 72 of Annex XVII to REACH aiming to clarify the scope of the articles intended to be covered by the restriction. It provides a non-exhaustive list of articles which are considered to be within the scope of the restriction and those that are not. The raw material of articles is not a determining factor for the application of the restriction, but rather the nature of the article in question, i.e. is it clothing, a related accessory, a textile other than clothing which under normal or reasonably foreseeable conditions of use comes into contact with human skin to an extent similar to clothing or footwear. Raincoats are explicitly mentioned as an example of articles covered by the restriction in the explanatory guide. According to paragraph 3 of the entry, the restriction does not apply to clothing, related accessories, footwear, or parts of clothing, related accessories or footwear, made exclusively of natural leather, fur or hide. It does not apply either to non-textile fasteners and non-textile decorative attachments.

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Therefore, AQC considers rubber and plastic accessories, even if they are not in direct contact with skin, to be in the scope of the entry 72.

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.

AQC limit 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 articles with a related 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.

AQC limit for EU POP

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

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General requirements for laboratory testing

- Sample picture

Pictures of samples received by the laboratory have to be taken **without** plastic bag.

- Sample preparation

Sample preparation methods to apply are the ones described in normalized analytical methods.
AQC has no specific requirement for samples preparation when internal methods are applied by the laboratory.

Metallic inserts should be removed from the material before sample preparation.
They could be tested according AQC RSL for metals (LIS007) if indicated in the testing request form.

RESTRICTED SUBSTANCES LIST FOR PLASTIC & RUBBER

Substance family	Substance Name	Abbr.	CAS Number	AQC limit	Strictest Regulation	Test Method
Aromatic amines	Biphenyl-4-ylamine	-	92-67-1	< 30 mg/kg each	REACH XVII entry 43 & entry 72 ¹	ISO 14362 adapted
	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			
4-methyl-m-phenylenediamine	-	90-04-0				
4-aminoazobenzene	-	60-09-3				
2,6-xylidine	-	87-62-7				
2,4-xylidine	-	95-68-1				
Anti-UV	2-benzotriazol-2-yl-4,6-di-tert-butylphenol	UV-320	3846-71-7	1'000 mg/kg (each)	REACH SVHC	Solvent extraction GC-MS detection
	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol	UV-327	3864-99-1			
	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol	UV-350	36437-37-3			
	2-(2'-Hydroxy-3'-t-butyl-5'-methylphenyl)-5-chlorobenzotriazole (Bumetrizole)	UV-326	3896-11-5			
	2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethyl butyl)phenol	UV-329	3147-75-9			
	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol	UV-328	25973-55-1	100 mg/kg	EU POP	
Antioxidant	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	-	119-47-1	1'000 mg/kg	REACH SVHC	Solvent extraction GC-MS detection
Bisphenols	4,4'-isopropylidenediphenol (bisphenol A)	BPA	80-05-7	1'000 mg/kg (each)	REACH SVHC	ISO 23377
	4,4'-(1-methylpropylidene)bisphenol (bisphenol B)	BPB	77-40-7			
	4,4'-sulphonyldiphenol (bisphenol S)	BPS	80-09-1 (4,4') 5397-34-2 (2,4')			
	2,2'-methylenediphenol (bisphenol F)	BPF	1333-16-0 ³	for information	AQC	
	4,4'-[2,2,2-trifluoro-1 (trifluoromethyl)ethylidene] diphenol (bisphenol AF)	BPAF	1478-61-1			
Chlorine compounds	Alkanes, C10-13, chloro	SCCP	85535-84-8	1'000 mg/kg	REACH SVHC	Internal method
	Alkanes, C14-17, chloro	MCCP	85535-85-9	1'000 mg/kg	REACH SVHC	

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Substance family	Substance Name	Abbr.	CAS Number	AQC limit	Strictest Regulation	Testing Method		
Flame retardants	Polybromobiphenyls	PBB	59536-65-1	not detected	REACH XVII entry 8 (AQC)	ISO 17881 adapted		
	Diphenyl ether, pentabromo derivative	PentaBDE	32534-81-9	not detected	EU POP			
	Diphenyl ether, octabromo derivative	OctaBDE	32536-52-0	not detected				
	Diphenyl ether, decabromo derivative	DecaBDE	1163-19-5	not detected				
	Diphenyl ether, tetrabromo derivative	TetraBDE	40088-47-9	not detected				
	Diphenyl ether, heptabromo derivative	HeptaBDE	68928-80-3	not detected				
	Diphenyl ether, hexabromo derivative	HexaBDE	36483-60-0	not detected				
	Diphenyl ether, nonabromo derivative	NonaBDE	63936-56-1	not detected	AQC			
	Hexabromocyclododecane and isomers	HBCDD	25637-99-4 3194-55-6 134237-50-6 134237-51-7 134237-52-8	75 mg/kg	EU POP			
	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol (Tetrabromobisphenol A)	TBBPA	79-94-7	1'000 mg/kg (each)	REACH SVHC			
	Bis(2-ethylhexyl) tetrabromophthalate	-	26040-51-7					
Triphenyl phosphate	TPP	115-86-6						
Metals	Cadmium	Cd	7440-43-9	75 mg/kg	Minnesota 325E.3892 JP 112	EPA 3050B or EN 16711-1		
	Lead	Pb	7439-92-1	90 mg/kg				
	Mercury	Hg	7439-97-6	1 mg/kg				
	Chromium (VI) ²	Cr(VI)	18540-29-9	1 mg/kg	REACH XVII entry 72	ISO 17075-2 adapted		
	Cadmium (extractable)	Cd	7440-43-9	1 mg/kg		EN 16711-2		
	Lead (extractable)	Pb	7439-92-1	1 mg/kg				
	Mercury (extractable)	Hg	7439-97-6	1 mg/kg				
	Arsenic (extractable)	As	7440-38-1	1 mg/kg				
Organostannic compounds	Tributyltin and related compounds Incl. TBT metacrylate	TBT	several CAS incl. 2155-70-6	1'000 mg/kg each	REACH XVII entry 20 & REACH SVHC	ISO 16179 adapted		
	Triphenyltin and related compounds Incl. TPT hydroxide	TPT	several CAS incl. 76-87-9					
	All other tri-substituted tin compounds	-	Several CAS					
	Dibutyltin and related compounds	DBT	several CAS incl. 683-18-1					
	Diocetyl tin and related compounds	DOT	several CAS					
	di-μ-oxo-di-n-butylstanniohydroxyborane	DBB	75113-37-0		ORRChim REACH XVII entry 21			
Phenols	Octylphenols - 4-(1,1,3,3-tetramethylbutyl)phenol	OP PTOP	- 140-66-9	100 mg/kg (sum OP+OPEO)	REACH SVHC OChim (AQC)	Internal method		
	Octylphenol ethoxylates - 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	OPEO -	- 9002-93-1 2497-59-8 2315-67-5 2315-61-9					
	Nonylphenols incl. - 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)
	Nonylphenol Ethoxylates incl. - 4-Nonylphenol, branched and linear, ethoxylated - Isononylphenol, ethoxylated	NPEO (4-NPEO) -	- several CAS incl. 26027-38-3 37205-87-1					
	2,4,6-tri-tert-butylphenol	-	732-26-3	1'000 mg/kg	REACH SVHC			
	1,3-benzenediol (Resorcinol)	-	108-46-3	1'000 mg/kg	AGEC SVHC			

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Substance family	Substance Name	Abbr.	CAS Number	AQC limit	Strictest Regulation	Test Method
C4-C7 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 and its salts	Perfluorooctanesulfonic acid	PFOS	1763-23-1	0.025 mg/kg (sum)	EU POP ORRChim	
	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			
PFOS related substances	N-Ethylperfluoro-1-octanesulfonamide	N-Et-FOSA	4151-50-2	1 mg/kg (sum)	EU POP ORRChim	
	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			
	Perfluoro-1-octanesulfonyl fluoride	POSF	307-35-7			
	Perfluorooctane sulfonamide	PFOSA	754-91-6			
	1-Decanaminium, N-decyl-N,N-dimethyl-, salt with heptadecafluorooctane-1-sulfonic acid (1:1)	-	251099-16-8			
PFOA and its salts	Perfluorooctanoic acid	PFOA	335-67-1	0.025 mg/kg (sum)	EU POP ORRChim	
	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			
	Ammonium pentadecafluorooctanoate	APFO	3825-26-1			
	Chromium(3+) perfluorooctanoate	-	68141-02-6			
	Ethanaminium, N,N,N-triethyl-, salt with pentadecafluorooctanoic acid (1:1)	-	98241-25-9			
PFOA related substances	1H,1H,2H,2H-Perfluorodecanesulfonic acid	8:2 FTS	39108-34-4	1 mg/kg (sum)	EU POP ORRChim	
	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			
	1H,1H,2H,2H-Perfluorodecyl methacrylate	8:2 FTMA	1996-88-9			
	2H,2H-Perfluorodecanoic acid	H2PFDA	27854-31-5			
PFHxS and, its salts	Perfluorohexane-1-sulphonic acid	PFHxS	355-46-4	0.025 mg/kg (sum)	EU POP ORRChim	
	Perfluorohexane-1-sulphonic acid, potassium salt	PFHxS-K	3871-99-6			
	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			
PFHxS related substances	Potassium N-ethyl-N-[(tridecafluorohexyl)sulphonyl]glycinate	-	67584-53-6	1 mg/kg (sum)	EU POP ORRChim	
	Tridecafluoro-N-methylhexanesulphonamide	-	68259-15-4			
	Perfluorohexanesulfonamide	-	41997-13-1			
PFHxA and its salts	Undecafluorohexanoic acid	PFHxA	307-24-4	0.025 mg/kg (sum)	REACH XVII Entry 79	
	Undecafluorohexanoic acid, ammonium salt	APFHx	21615-47-4			
	Undecafluorohexanoic acid, sodium salt	-	2923-26-4			
PFHxA related substances	1 H,1H,2H,2H-Perfluorooctane sulfonic acid	6:2 FTS	27619-97-2	1 mg/kg (sum)	REACH XVII Entry 79	
	1H,1H,2H,2H-Perfluoro-1-octanol	6:2 FTOH	647-42-7			
	1H,1H,2H,2H-Perfluorooctyl methacrylate	6:2 FTMA	2144-53-8			
	1H,1H,2H,2H-Perfluorooctyl acrylate	6 :2 FTA	17527-29-6			

Substance family	Substance Name	Abbr.	CAS Number	AQC limit	Strictest Regulation	Test Method
C9-C14 PFCAs and their salts	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			
C9-C14 PFCAs related substances	1H,1H,2H,2H-Perfluorododecyl acrylate	10:2 FTA	17741-60-5	0.260 mg/kg (sum)		
	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			
Phthalates	Diisobutyl phthalate	DIBP	84-69-5	1'000 mg/kg (sum)	REACH XVII (entry 51)	ISO 14389
	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			
	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	DHNUP (L&R)	68515-42-4	1'000 mg/kg (each)	REACH SVHC	
	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			
	Di-"iso-decyl" phthalate	DIDP	26761-40-0 68515-49-1			
	Diisooctyl phthalate	DIOP	27554-26-3			

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Polycyclic Aromatic Hydrocarbons (PAHs)	Benzo(a)pyrene	BaP	50-32-8	1 mg/kg	REACH XVII entry 50 ORRChim	A6PS-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	REACH SVHC OChim	
	Phenanthrene	PEH	85-01-8	1'000 mg/kg		
	Fluoranthene	FLT	206-44-0	1'000 mg/kg		
	Pyrene	PYR	129-00-0	1'000 mg/kg		
	Benzo(g,h,i)perylene	BPE	191-24-2	1'000 mg/kg	Prop65	
	Anthracene	-	120-12-7	1'000 mg/kg		
	Indeno(1,2,3-cd)pyrene	IPY	193-39-5	for information		
	Naphtalene	NAP	91-20-3	for information	AQC	
	Acenaphtylene	ANY	208-96-8	for information		
	Acenaphtene	ANA	83-32-9	for information		
Fluorene	FLU	86-73-7	for information			

OPTION FOR NBR & HNBR, TPU and plastic/rubber materials not based on fluorinated polymers

Substance family	Substance Name	Abbr.	CAS Number	AQC limit	Strictest Regulation	Testing Method
PFAS	Total Fluorine	TF	7782-41-4	For information	REACH XVII proposal	EN 17813

OPTION FOR FKM Rubber

Substance family	Substance Name	Abbr.	CAS Number	AQC limit	Strictest Regulation	Testing Method
PFAS	Extractable Fluorine	EF	7782-41-4	For information	AQC requirement	Methanol extraction followed by EN 14582 and then by ISO 10304-1

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-naphthylammoniumacetate	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 hydroxyoctaoxidizincatedichromate (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'-methylenebisphenol (CAS 2467-02-9)
- 4,4'-methylenebisphenol (620-92-8)
- 2,4'-methylenebisphenol (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.









LIS005_11 DRAFT AQC RSL for Plastic and Rubber

Final Audit Report

2025-08-26

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