

# Declaration of Chemical Restrictions

As a supplier to PWT Brands, we hereby certify that our products comply with PWT Brands' Restricted Substances List and the Regulation (EC) No. 1907/2006 of the European Parliament, also known as the REACH regulation.

It is our responsibility to closely study and comply with this RSL, and to communicate the requirements to our production network. Chemicals that carry the statement 'not allowed' will not be used at any point during production.

We agree to pay compensation for goods if they fail in any random test performed by PWT Brands.

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Authorized signature and stamp

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Date of signature

*Sign and stamp this declaration and send it to the CSR Manager at PWT Brands*

# Restricted Substances List

Updated September 2025

*Always check supplier manual for latest version*

This document describes all substances that are not allowed or restricted in all garments, shoes and accessories manufactured for PWT Brands, including zippers, buttons, labels, etc. The restricted substances list (RSL) is based on the Regulation (EC) No. 1907/2006 of the European Parliament, also known as the REACH regulation and the PFAS ban in Denmark with some voluntary commitments added as well.

***Suppliers must comply with this RSL at all times.***

Concerning the REACH Candidate List 'Substances of Very High Concern' (SVHCs), PWT Brands requires that all products and all packaging contain less than 0,1 % for each substance on the list, unless a lower limit is specified in this document. If noticeable SVHC is known, it must be informed to PWT Brands. For an updated version of the SVHC list, please follow below link: <https://www.echa.europa.eu/candidate-list-table>.

Garments, shoes and accessories sold in Denmark must not exceed the legal limit of 50 mg/kg Total Fluorine as per national PFAS regulation (enter into force on July 1, 2026).

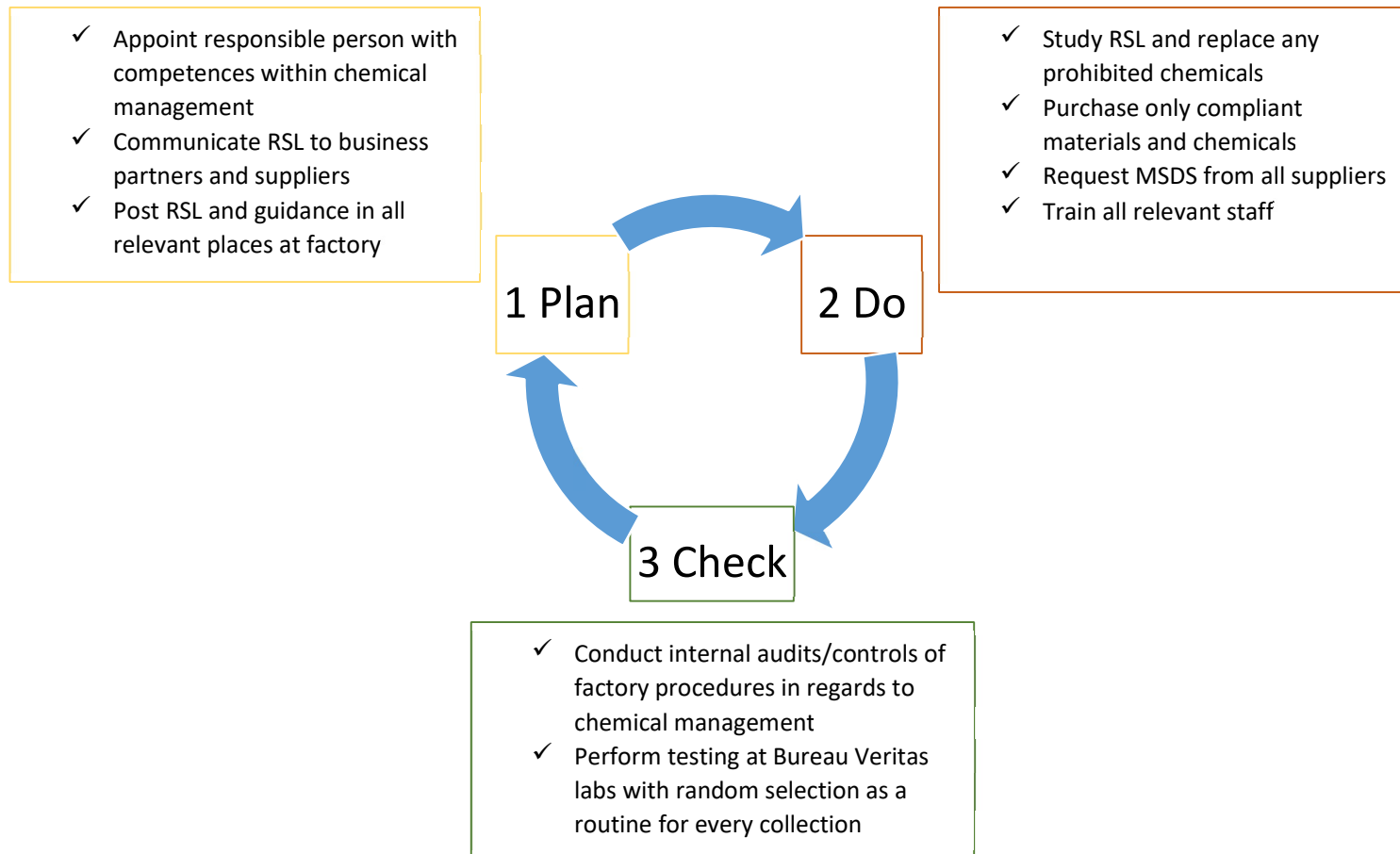
## *Regarding transportation of goods*

Fumigating, gassing or spraying cargo or containers with any chemicals is banned. Levels of chemicals will be measured when the container reaches the port of destination. Levels must not exceed acceptable health and safety levels. Regardless of the source, all costs in connection with cleaning containers, damage or loss of products and any resulting lost profit may be claimed.

## Guidance on RSL implementation

We require our suppliers to study this document carefully and implement chemical management processes in their operations. Below figure shows the three different steps in meeting the RSL requirements from PWT Brands.

Please visit the amfori Academy for online webinars and local trainings: <https://academy.amfori.org>



| CAS No.   | Chemical Substance                                     | Limit Value  | Test Method   | Potential Uses / Comment   | Changes and Additions   |
|---|--|--|---|--|---|
| <b>Alkylphenol (AP) &amp; Alkylphenol Ethoxylates (APEO) Surfactant</b> |  |  |   |  |   |
| Various   | Alkylphenols (OP, NP, HpP, PeP)                        | 10 mg/kg (Sum)                                     | Textiles and Leather:EN ISO 21084<br>Polymers and all other materials:<br>1 g sample/20 mL THF, sonication for 60 minutes at 70°C, analysis according to EN ISO 21084 | APEOs is used as or found in detergents, scouring agents, spinning oils, wetting agents, softeners, dispersing agents for dyes and prints.                             |   |
| Various   | Alkylphenol ethoxylates OP, NP, HpP, PeP OP(EO) NP(EO) | Total sum<br>100 mg/kg                             | EN ISO 18254-1<br>Leather: Sample prep and analysis using EN ISO 18218-1with quantification according to EN ISO 18254-1   | NPEO is the biggest source of NP present in the environment. NP is a potent endocrine disrupter to the aquatic environment.  |   |
| <b>AZO Dyes</b>   |  |  |   |  |   |
| 92-67-1   | 4-Aminobiphenol  | Not allowed<br>20 mg/kg each<br>Aniline: 100 mg/kg | Textile: EN ISO 14362-1, EN14362-3 for PAAB<br>Leather: ISO 17234-1; ISO 17234-2 for PAAB   | Azo dyes and pigments are colourants containing at least one azo bond (-N=N-) within the molecule. They are commonly used as colorant in textile and apparel industry. | Thousands of azo dyes exist, but only those that degrade to form the listed cleavable amines are restricted. These amines are classified as carcinogens and should no longer be used in colouring textiles. |
| 92-87-5   | Benzidine  |  |   |  |   |
| 95-69-2   | 4-Chloro-o-toluidine                                   |  |   |  |   |
| 91-59-8   | 2- Naphthylamine                                       |  |   |  |   |
| 97-56-3   | o-Aminoazotoluene                                      |  |   |  |   |
| 99-55-8   | 2-Amino-4-nitrotoluene                                 |  |   |  |   |
| 106-47-8  | p-Chloroaniline  |  |   |  |   |
| 615-05-4  | 2,4-Diaminoaniline                                     |  |   |  |   |
| 101-77-9  | 4,4' -Diaminobiphenylmethane                           |  |   |  |   |
| 91-94-1   | 3,3' -Dichlorobenzidine                                |  |   |  |   |
| 119-90-4  | 3,3' -Dimethoxybenzidine                               |  |   |  |   |
| 119-93-7  | 3,3' -Dimethylbenzidine                                |  |   |  |   |
| 838-88-0  | 3,3' -Dimethyl-4,4'-diaminobiphenolmethane             |  |   |  |   |
| 120-71-8  | p-Cresidine  |  |   |  |   |
| 101-14-4  | 4,4' -Methylene-bis-(2-chloroaniline)                  |  |   |  |   |
| 101-80-4  | 4,4' -Oxydianiline                                     |  |   |  |   |
| 139-65-1  | 4,4' -Thiodianiline                                    |  |   |  |   |
| 95-53-4   | 0 -Toluidine   |  |   |  |   |
| 95-80-7   | 2,4 -Toluyldiamine                                     |  |   |  |   |
| 137-17-7  | 2,4,5 -Trimethylaniline                                |  |   |  |   |
| 90-04-0   | o -Anisidine (2-Methoxyaniline)                        |  |   |  |   |
| 60-09-3   | 4 -Aminoazobenzene                                     |  |   |  |   |
| 95-68-1   | 2,4 -Xylidine  |  |   |  |   |
| 87-62-7   | 2,6 -Xylidine  |  |   |  |   |
| 3165-93-3   | 4-Chloro-o-toluidinium chloride                        |  |   |  |   |
| 553-00-4  | 2-Naphthylammoniumacetate                              |  |   |  |   |
| 39156-41-7  | 4-Methoxy-m-phenylene diammonium sulphate              |  |   |  |   |
| 21436-97-5  | 2,4,5-Trimethylaniline hydrochloride                   |  |   |  |   |

| Bisphenol A                     |   |   |  |   |  |
|---------------------------------|---|---|--|---|--|
| 80-05-7                         | Bisphenol A (BPA)                                     | Textiles & Leather:<br>10 mg/kg<br>Items intended to come in contact with the mouth:<br>1 mg/kg<br>Other Materials:<br>1000 mg/kg | Leather: EN ISO 11936:2023<br>All other materials:<br>Extraction:<br>1g sample/20 ml THF, sonication for 60 minutes at 60° C, then add methanol or acetonitrile for precipitation prior to analysis with LC/MS<br><br>Note for textiles:<br>For precipitation, draw the extract to another container and add methanol or acetonitrile. This keeps the extraction process consistent. | Used as a monomer in plastic, epoxy resin, flame retardants, PVC, and polycarbonate plastics.   | limit aligned with AFIRM. Method updated |
| 80-09-1                         | Bisphenol S (BPS)                                     | Textiles: 200 mg/kg each<br>Leather: 800 mg/kg each<br>Others: 1000 mg/kg each  |  | BPS may be used as a substitute for BPA for some specific uses.   | New added                                |
| 77-40-7                         | Bisphenol B (BPB)                                     |   |  | BPS and BPF can be found in polyamide dye-fixing agents and in  | New added                                |
| 620-92-8                        | Bisphenol F (BPF)                                     |   |  | sulfone- and phenol- based leather synthetic tanning agents. Bisphenols can be found in recycled polymeric and paper materials.   | New added                                |
| Chlorinated Benzenes & Toluenes |   |   |  |   |  |
| Various                         | (Di-, Tri-, Tetra-, Penta-, Hexa)Chlorinated Benzenes | Not allowed<br>1.0 mg/kg sum  | EN 17137   | Used as carriers in dyeing process of polyester or wool/polyester fibres. Also used as solvents.  | Method updated                           |
| Various                         | (Mono-, Di-, Tri-, Tetra-Penta)Chlorinated Toluenes   |   |  |   |  |
| 5216-25-1                       | p-Chlorobenzotrichloride                              |   |  |   |  |
| 98-07-7                         | Benzotrichloride                                      |   |  |   |  |
| 100-44-7                        | Benzyl Chloride                                       |   |  |   |  |
| Chlorinated Paraffin            |   |   |  |   |  |
| 85535-84-8                      | Short chain chlorinated paraffin's (SCCP,C10-C13)     | Not allowed<br>1000 mg/kg   | Leather: ISO 18219-1 (SCCP)<br>ISO 18219-2(MCCP)<br>Textiles and all other materials:<br>ISO 22818:2021 (SCCP + MCCP)  | Used as flame retardants or plasticisers in plastics, rubbers, inks, paints, adhesives and coatings. Can be found as impurities in fat-liquoring agents in leather production.  | Method updated                           |
| 85535-85-9                      | Medium-chain Chlorinated Paraffins (MCCPs) (C14-C17)  | Not allowed<br>1000 mg/kg   |  |   |  |
| Chlorinated Phenols             |   |   |  |   |  |
| 87-86-5                         | Pentachlorophenol (PCP)                               | 0.5 mg/kg   | EN 17134-2   | Chlorophenols are polychlorinated compounds used as preservatives and pesticides. PCP and TeCP are sometimes used as mould prevention for leather / hides, and as preservatives in print pastes, but are now regulated and should not be used.<br><br>Some Chlorophenols are toxic when inhaled, ingested or absorbed through the skin. Long term reproductive effects, liver and kidney damage, and suspected carcinogens. | Method updated                           |
| 935-95-5                        | 2,3,5,6-Tetrachlorophenol (TeCP)                      |   |  |   |  |
| 58-90-2                         | 2,3,4,6- Tetrachlorophenol (TeCP)                     |   |  |   |  |
| 4901-51-3                       | 2,3,4,5- Tetrachlorophenol (TeCP)                     |   |  |   |  |
| 15950-66-0                      | 2,3,4- Trichlorophenol (TrCP)                         | 2 mg/kg   |  |   |  |
| 933-78-8                        | 2,3,5- Trichlorophenol (TrCP)                         |   |  |   |  |
| 933-75-5                        | 2,3,6- Trichlorophenol (TrCP)                         |   |  |   |  |
| 95-95-4                         | 2,4,5- Trichlorophenol (TrCP)                         |   |  |   |  |
| 88-06-2                         | 2,4,6- Trichlorophenol (TrCP)                         |   |  |   |  |
| 609-19-8                        | 3,4,5- Trichlorophenol (TrCP)                         |   |  |   |  |
| 576-24-9                        | 2,3- Dichlorophenol (DCP)                             | 3 mg/kg   |  |   |  |
| 120-83-2                        | 2,4- Dichlorophenol (DCP)                             |   |  |   |  |
| 583-78-8                        | 2,5- Dichlorophenol (DCP)                             |   |  |   |  |
| 87-65-0                         | 2,6- Dichlorophenol (DCP)                             |   |  |   |  |
| 95-77-2                         | 3,4- Dichlorophenol (DCP)                             |   |  |   |  |
| 591-35-5                        | 3,5- Dichlorophenol (DCP)                             |   |  |   |  |
| 95-57-8                         | 2- Chlorophenol (MCP)                                 |   |  |   |  |
| 108-43-0                        | 3- Chlorophenol (MCP)                                 |   |  |   |  |
| 106-48-9                        | 4- Chlorophenol (MCP)                                 |   |  |   |  |
| 90-43-7                         | Orthophenylphenol (OPP)                               |   | 25 mg/kg   |   |  |

| Dimethylformamide        |                          |                              |   |   |
|--------------------------|--------------------------|------------------------------|---|---|
| 68-12-2                  | Dimethylformamide (DMFa) | 1000 mg/kg                   | DIN EN ISO 16189                            | Mainly used as solvent in plastics, rubber, and PU coating. Water-based PU does not contain DMFa and is therefore preferable. DMFa is fatal if inhaled, toxic if swallowed, causes severe skin burns and eye damage, may cause cancer, may damage fertility, and may cause allergy or asthma symptoms.                              |
| Dimethyl Fumerate (DMFu) |                          |                              |   |   |
| 624-49-7                 | Dimethyl Fumerate (DMFu) | Not allowed<br>0.1 mg/kg     | Textiles: EN 17131<br>Others ISO 16189:2021 | Mainly used as an anti-mold agent, applied in leather products during storage and transportation. It has been found in silica gel sachets and will evaporate onto the leather or other materials to protect them from mould.<br>Skin irritation, redness and acute respiratory difficulties are symptoms of exposure.               |
| DMAc                     |                          |                              |   |   |
| 127-19-5                 | DMAc                     | 1000 mg/kg                   | Textiles: EN 17131<br>Others: ISO 16189     | Used as a solvent in textile production.  |
| Dyes - Allergenic        |                          |                              |   |   |
| 2475-45-8                | Disperse Blue 1          | Not allowed<br>50 mg/kg each | DIN 54231                                   | Water-insoluble dyes that penetrate synthetic fibres and are held in place by physical forces without forming chemical bonds.<br><br>Used in synthetic fibers (polyester, acetate, polyamide, etc.)<br><br>Restricted disperse dyes are suspected of causing allergic reactions and are prohibited from use for dyeing of textiles. |
| 2475-46-9                | Disperse Blue 3          |                              |   |   |
| 3179-90-6                | Disperse Blue 7          |                              |   |   |
| 3860-63-7                | Disperse Blue 26         |                              |   |   |
| 12222-75-2               | Disperse Blue 35         |                              |   |   |
| 12222-97-8               | Disperse Blue 102        |                              |   |   |
| 12223-01-7               | Disperse Blue 106        |                              |   |   |
| 61951-51-7               | Disperse Blue 124        |                              |   |   |
| 258-69-3                 | Disperse Orange 1        |                              |   |   |
| 730-40-5                 | Disperse Orange 3        |                              |   |   |
| 12223-33-5               | Disperse Orange 37/76/59 |                              |   |   |
| 13301-61-6               |                          |                              |   |   |
| 51811-42-8               |                          |                              |   |   |
| 2872-52-8                | Disperse Red 1           |                              |   |   |
| 2872-48-2                | Disperse Red 11          |                              |   |   |
| 3179-89-3                | Disperse Red 17          |                              |   |   |
| 119-15-3                 | Disperse Yellow 1        |                              |   |   |
| 2832-40-8                | Disperse Yellow 3        |                              |   |   |
| 6373-73-5                | Disperse Yellow 9        |                              |   |   |
| 12236-29-2               | Disperse Yellow 39       |                              |   |   |
| 54824-37-2               | Disperse Yellow 49       |                              |   |   |
| 23355-64-8               | Disperse Brown 1         |                              |   |   |

Method updated

Method updated

| Dyes - Navy Blue     |  |                              |  |   |
|----------------------|--|------------------------------|--|---|
| 118685-33-9          | Blue color (azocolor), index no. 611-070-00-2          | Not allowed<br>50 mg/kg each | DIN 54231  | Navy blue colourants are regulated and prohibited from use for dyeing of textiles.  |
| Dyes - Carcinogenic  |  |                              |  |   |
| 3761-53-3            | Acid Red 26  | Not allowed<br>50 mg/kg each | DIN 54231  | Used for synthetic fibers, but they might be used in a few cases for natural materials.   |
| 2580-56-5            | Basic Blue 26 (with > 0,1% Michler's ketone or base)   |                              |  |   |
| 569-61-9             | Basic Red 9  |                              |  |   |
| 548-62-9             | Basic Violet 3 (with >> 0,1% Michler's ketone or base) |                              |  |   |
| 632-99-5             | Basic Violet 14  |                              |  |   |
| 1937-37-7            | Direct Black 38  |                              |  |   |
| 2602-46-2            | Direct Blue 6  |                              |  |   |
| 537-58-0             | Direct Red 28  |                              |  |   |
| 2475-45-8            | Disperse Blue 1  |                              |  |   |
| 82-28-0              | Disperse Orange 11                                     |                              |  |   |
| 2832-40-8            | Disperse Yellow 3                                      |                              |  |   |
| 12646-85-8           | Pigment Red 104  |                              |  |   |
| 1344-37-2            | Pigment Yellow 34                                      |                              |  |   |
| 60-09-3              | Solvent Yellow 1 (4-Aminoazobenzene)                   |                              |  |   |
| 97-56-3              | Solvent Yellow 3 (o-Aminoazotoluene)                   |                              |  |   |
| 16071-86-6           | Direct Brown 95  |                              |  |   |
| 2429-74-5            | Direct Blue 15   |                              |  |   |
| 6459-94-5            | Acid Red 114   |                              |  |   |
| Dyes - other, banned |  |                              |  |   |
| 85136-74-9           | Disperse Orange 149                                    | Not allowed<br>50 mg/kg each | DIN 54231  | Regulated and prohibited from use for dyeing of textiles.   |
| 6250-23-3            | Disperse Yellow 23                                     |                              |  |   |
| Flame retardants     |  |                              |  |   |
| 84852-53-9           | Decabromodiphenyl ethane (DBDPE)                       | 500 mg/kg                    | DIN EN ISO 17881-2                                 | <p>Flame retardants are used in a wide range of products like automobiles, electronics and textiles because of their stability and heat resistance.</p> <p>These kinds of flame retardants are suspected to be carcinogenic and/or mutagenic. Some are also persistens. They should no longer be used in apparel.</p>   |
| 1163-19-5            | Decabromodiphenylether (decaBDE)                       |                              |  |   |
| various              | Heptabromodiphenylether (heptaBDE)                     |                              |  |   |
| 25637-99-4           | Hexabromocyclododecane (HBCDD)                         |                              |  |   |
| 36483-60-0           | Hexabromodiphenylether (hexaBDE)                       |                              |  |   |
| 32536-52-0           | Octabromodiphenylether (octaBDE)                       |                              |  |   |
| 32534-81-9           | Pentabromodiphenylether (pentaBDE)                     |                              |  |   |
| 79-94-7              | Tetrabromobisphenol A (TBBP A)                         |                              |  |   |
| 59536-65-1           | Polybrominated biphenyls (PBB)                         |                              |  |   |
| various              | Tetrabromodiphenylether (tetraBDE)                     |                              |  |   |
| 3296-90-0            | 2,2-bis(bromomethyl)-1,3-propanediol (BBMP)            |                              |  |   |
| 5412-25-9            | Bis(2,3-dibromopropyl) phosphate (BDBPP)               |                              |  |   |
| 126-72-7             | Trisphosphat (2,3-dibromopropyl) (TRIS)                |                              |  |   |
| 115-96-8             | Tris-(2-chloroethyl)phosphate (TCEP)                   |                              |  |   |
| 13674-87-8           | Tris-(1,3-dichlor-2propyl) phosphate (TDCPP)           |                              |  |   |
| 545-55-1             | Tri(aziridinyl)-phosphinoxid (TEPA)                    |                              |  |   |
| 25155-23-1           | Trixylylphosphate (TXP)                                |                              |  |   |
| 115-86-6             | Triphenyl phosphate (TPP)                              |                              |  |   |
| Formaldehyde         |  |                              |  |   |
| 50-00-0              | Formaldehyde   | Adults: 75 mg/kg             | EN ISO 14184-1 (Textiles) EN ISO 17226-2 (Leather) | Used as an anti- creasing and anti-shrinking agent.It is also used in polymeric resins. In textiles, it may be found in stiffened and permanent press fabrics. When inhaled formaldehyde may cause headaches, a burning sensation in the throat, and difficulty breathing, and can trigger or aggravate asthma symptoms |

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| Formamide                         |   |  |  |   |                  |
|-----------------------------------|---|--|--|---|------------------|
| 75-12-7                           | Formamide                                 | 200 mg/kg  | Textiles: EN 17131<br>All other materials: ISO 16189   | Formed as a by-product in EVA-production  | method updated   |
| Mercaptobenzothiazol              |   |  |  |   |                  |
| 149-30-4                          | 2-Mercaptobenzothiazol (2-MBT)            | Not allowed 100 mg/kg                                | Extraction with acetonitrile 1h/70°C.<br>HPLC/DAD/MS   | Used for vulcanisation. Might be used in rubber production.   | Limit revised    |
| Metals - extractable heavy metals |   |  |  |   |                  |
| 7429-90-5                         | Aluminium (Al)                            | 200 mg/kg  | EN 16711-2; Leather: DIN EN ISO 17072-1  |   |                  |
| 7440-36-0                         | Antimony (Sb)                             | Extractable: 30 mg/kg                                |  | Found in or used as a catalyst in polymerization of polyester, flame retardants, fixing agents, pigments and alloys.  |                  |
| 7440-38-2                         | Arsenic (As)                              | Extractable: 1,0 mg/kg                               |  | Used in preservatives, pesticides and defoliant for cotton, synthetic fibers, paints, inks, trims and plastics. Banned in textile production.   |                  |
| 7440-43-9                         | Cadmium (Cd)                              | Extractable: 0,1 mg/kg<br>Total: 75 mg/kg            |  | Used as pigments (Especially in red, orange, yellow and green); as a stabilizer for PVC; and in fertilizers, biocides and paints. Banned in textile production.   |                  |
| 7440-47-3                         | Chromium (Cr)                             | Extractable for textiles: 2.0 mg/kg                  |  | Used as dyeing additives, dye-fixing agents, color fastness after-treatment, dyes for wool, silk and polyamide (especially dark shades) and leather tanning   |                  |
| 188540-29-9                       | Chromium (VI) (Textile)                   | 1 mg/kg  | EN 16711-2 with EN ISO 17075-1 if Cr is detected   |   | CAS number added |
| 188540-29-9                       | Chromium (VI) after Ageing (Leather only) | Not allowed 3 mg/kg                                  | ISO 17075-1 and -2 for confirmation in case of interference. Aging test: ISO 10195 Method A2 | Typically associated with leather tanning. Chromium (VI) is known to be carcinogenic and is corrosive to skin. Skin contact with certain chromium (VI) compounds can cause skin ulcer. Banned in textile production.    | method updated   |
| 7440-48-4                         | Cobalt (Co)                               | Extractable: 4,0 mg/kg                               | EN 16711-2   | Used in alloys, pigments, dyestuff and the production of plastic buttons.   |                  |
| 7440-50-8                         | Copper (Cu)                               | Extractable: 50 mg/kg                                |  | Used in alloys and pigments, and in textiles as an antimicrobial agent.   |                  |
| 7439-92-1                         | Lead (Pb)                                 | Extractable: 1,0 mg/kg<br>Total: 90 mg/kg            |  | Associated with plastics, paints, inks, pigments and surface coatings. Lead is a suspected carcinogen and can adversely affect the central nervous system, kidneys and the immune system. Banned in textile production. | method updated   |
| 7439-97-6                         | Mercury (Hg)                              | Extract.: 0.02 mg/kg<br>Total: Not allowed 1,0 mg/kg |  | Can be present in pesticides and as contaminants in caustic soda. They may also be used in paints. Banned in textile production.  |                  |

|                            |  |   |  |   |                |
|----------------------------|--|---|--|---|----------------|
| 7440-02-0                  | Nickel (Ni)  | Extract:<br>Textiles: 4.0 mg/kg<br>Release: 0,5 µg /cm <sup>2</sup> /week | EN 16711-2<br>Nickel release test EN 12472 and EN 1811                             | Can be used for plating alloys and improving corrosion-resistance and hardness of alloys. They can also occur as impurities in pigments and alloys.   | method updated |
| 7440-32-6                  | Titanium (Ti) (Leather only)   | Extractable: 200 mg/kg  | EN IISO 17072-1  | Might be used in tanning process as additional tanning salt   |                |
| 7440-67-7                  | Zirconium (Zr) (Leather only)  | Extractable: 200 mg/kg  |  | Might be used in tanning process as additional tanning salt   |                |
|                            | Heavy metals in packaging materials; Cadmium, Chromium VI, Mercury, Lead | 100 mg/kg (sum)   | Others: Acid digestion. ICP analysis. Cr (VI): alkaline digestion UV-Vis analysis. |   |                |
| <b>NMP</b>                 |  |   |  |   |                |
| 872-50-4                   | NMP  | 1000 mg/kg  | Textiles: EN 17131<br>All other materials: ISO 16189                               | NMP might be used as a solvent in some coatings.  | method updated |
| <b>N-Nitrosamines</b>      |  |   |  |   |                |
| Various                    | N-Nitrosamines   | Not detected<br>(detection limit: 0.5 mg/kg)                              | EN ISO 19577 with LCMS confirmation  | Nitrosamines are associated with rubber and latex products chemical intermediaries and finished cosmetics. Can be formed as by-product in the production of rubber. They are known to be carcinogenic.  | method updated |
| <b>Odour</b>               |  |   |  |   |                |
|                            | Odour  | Grade 3   | SNV 195651 mod.: grading 1-5   |   |                |
| <b>Organotin Compounds</b> |  |   |  |   |                |
| Various                    | Dibutyltin (DBT)   | Not allowed<br>2.0 mg/kg  | DIN EN ISO 16179   | Chemicals combining tin and organics such as butyl and phenyl groups. Organotins are predominantly found in the environment as antifoulants in marine paints, but they can also be used as biocides (e.g. antibacterials), catalysts in plastics and glue production, and heat stabilizers in plastics/rubber. In textiles, organotins are associated with plastics/rubber, inks, paints, metallic glitter, polyurethane products and heat-transfer material. | method updated |
|                            | Dimethyltin (DMT)  |   |  |   |                |
|                            | Dioctyltin (DOT)   |   |  |   |                |
|                            | Diphenyltin (DPhT)   |   |  |   |                |
|                            | Dipropyltin (DPT)  |   |  |   |                |
|                            | Monomethyltin (MMT)  |   |  |   |                |
|                            | Monobutyltin (MBT)   |   |  |   |                |
|                            | Monooctyltin (MOT)   |   |  |   |                |
|                            | Monophenyltin (MPhT)   | Not allowed<br>1.0 mg/kg  |  |   |                |
|                            | Tetrabutyltin (TeBT)   |   |  |   |                |
|                            | Tetraethyltin (TeET)   |   |  |   |                |
|                            | Tributyltin (TBT)  |   |  |   |                |
|                            | Tricyclohexyltin (TCyHT)   |   |  |   |                |
|                            | Trimethyltin (TMT)   |   |  |   |                |
|                            | Trioctyltin (TOT)  |   |  |   |                |
| Triphenyltin (TPhT)        |  |   |  |   |                |
| Tripropyltin (TPT)         |  |   |  |   |                |

| Perfluorinated Chemicals (PFCs) - PFOA                    |  |                       |                                    |  |  |
|---|--|-----------------------|------------------------------------|--|--|
| 3825-26-1   | Perfluorooctanoic acid (PFOA) and its salts                        | Not allowed<br>25 ppb | EN ISO 23702-1 or EN 17681-1       | Used to provide soil, oil and water resistance to textiles, apparels, leather and footwear. Also used in polymers like polytetrafluoroethylene (PTFE).   | Method updated   |
| Perfluorinated Chemicals (PFCs) - PFOA-related substances |  |                       |                                    |  |  |
| 39108-34-4  | 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)                 | 1000 ppb              | EN ISO 23702-1 or EN 17681-1       | Used to provide soil, oil and water resistance to textiles, apparels, leather and footwear. Also used in polymers like polytetrafluoroethylene (PTFE).   | Method updated   |
| 376-27-2  | Methyl perfluorooctanoate (Me-PFOA)                                |                       |                                    |  |  |
| 3108-24-5   | Ethyl perfluorooctanoate (Et-PFOA)                                 |                       |                                    |  |  |
| 678-39-7  | 2-Perfluorooctylethanol (8:2 FTOH)                                 |                       |                                    |  |  |
| 27905-45-9  | 1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)                      |                       |                                    |  |  |
| 1996-88-9   | 1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)                 |                       |                                    |  |  |
| Perfluorinated Chemicals (PFCs) - total Fluorine          |  |                       |                                    |  | new group added  |
| Various   | All PFAS as measured by total fluorine                             | 50 mg/kg              | EN 14582 or ASTM D7359 or EN 17813 | Used in oil and water resistant treatments.  | new requirement added due to upcoming requirements e.g. in Denmark |
| Perfluorinated Chemicals (PFCs) - PFOS                    |  |                       |                                    |  |  |
| 1763-23-1   | Perfluorooctane sulfonic acid and its salts                        | 25 ppb                | EN ISO 23702-1 or EN 17681-1       | PFOS has been used to provide soil, oil and water resistance to textiles, apparels, leather and footwear. In textile processing, PFOS is also used as wetting agents to improve the coverage and penetration of substances, and enhance dyeing and as a binder                       | update limit to align with new legal limit                         |
| Perfluorinated Chemicals (PFCs) - PFOS-related substances |  |                       |                                    |  |  |
| 754-91-6  | Perfluorooctane sulfonamide (PFOSA)                                | 1000 ppb              | EN ISO 23702-1 or EN 17681-1       | PFOS has been used to provide soil, oil and water resistance to textiles, apparels, leather and footwear. In textile processing, PFOS is also used as wetting agents to improve the coverage and penetration of substances, and enhance dyeing and as a binder in non-woven fabrics. | update limit to align with new legal limit                         |
| 307-35-7  | Perfluorooctane sulfonifluoride (PFOSF)                            |                       |                                    |  |  |
| 31506-32-8  | N-Methyl perfluorooctane sulfonamide (N-Me-FOSA)                   |                       |                                    |  |  |
| 4151-50-2   | N-Ethyl perfluorooctane sulfonamide (N-Et-FOSA)                    |                       |                                    |  |  |
| 24448-09-7  | N-Methyl perfluorooctane sulfonamide ethanol (N-Me-                |                       |                                    |  |  |
| 1691-99-2   | N-Ethyl perfluorooctane sulfonamide ethano (N-Et-FOSE)             |                       |                                    | PFOS is classified as a persistent organic pollutant   |  |
| Perfluorinated Chemicals - PFCAs                          |  |                       |                                    |  |  |
| 2058-94-8   | Perfluoroundecanoic acid / heni-cosafluoroundecanoic acid (PFUnDA) | 25 ppb                | EN ISO 23702-1 or EN 17681-1       | Used in oil and water resistant treatments.  | method updated   |
| 72629-94-8  | Perfluorotridecanoic acid (PFTrDA)                                 |                       |                                    |  |  |
| 375-95-1  | Perfluorononanoic acids (PFNA)                                     |                       |                                    |  |  |
| 307-55-1  | Perfluoroundecanoic acid (PFDoA)                                   |                       |                                    |  |  |
| 376-06-7  | Perfluorotetradecanoic acid (PFTeDA)                               |                       |                                    |  |  |
| 335-76-2  | Perfluorodecanoic acids (PFDA)                                     |                       |                                    |  |  |
| 172155-07-6   | Perfluoro(3,7-dimethyloctanoic acid (PF-3,7-DMOA)                  |                       |                                    |  |  |

| Perfluorinated Chemicals - PFCAs-related substances |   |           |                              |   | new group added  |  |  |  |  |
|---|---|-----------|------------------------------|---|--|--|--|--|--|
| 17741-60-5  | 1H,1H,2H,2H-Perfluorododecyl acrylate (10:2 FTA)      | 260 ppb   | EN ISO 23702-1 or EN 17681-1 | Used in oil and water resistant treatments. |  |  |  |  |  |
| 2144-54-9   | 1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2       |           |                              |   |  |  |  |  |  |
| 865-86-1  | 1H,1H,2H,2H-Perfluorododecanol (10:2 FTOH)            |           |                              |   |  |  |  |  |  |
| 34598-33-9  | 2H,2H,3H,3H-Perfluoroundecanoic acid (H4PFUnA)        |           |                              |   |  |  |  |  |  |
| 678-39-7  | 2-Perfluorooctylethanol (8:2 FTOH)                    |           |                              |   |  |  |  |  |  |
| 39239-77-5  | 1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)      |           |                              |   |  |  |  |  |  |
| 120226-60-0   | 1H,1H,2H,2H-Perfluorododecanesulphonic acid (10:2     |           |                              |   | Perfluorinated Chemicals - PFHxS   |  |  |  |  |
| 355-46-4  | Perfluorohexane sulfonic acid and its salts           | 25 ppb    | EN ISO 23702-1 or EN 17681-1 |   | method updated   |  |  |  |  |
| Perfluorinated Chemicals - PFHxS-related substances |   |           |                              |   |  |  |  |  |  |
| 68259-15-4  | N-Methylperfluoro-1-hexanesulfonamide (N-Me-FHxSA)    | 1000 ppb  | EN ISO 23702-1 or EN 17681-1 | Used in oil and water resistant treatments. | new added to reflect legal requirements & method update  |  |  |  |  |
| 41997-13-1  | Perfluorohexane sulfonamide (PFHxSA)                  |           |                              |   |  |  |  |  |  |
| Perfluorinated Chemicals - PFHxA                    |   |           |                              |   |  |  |  |  |  |
| 307-24-4  | Perfluorohexanoic acid and its salts                  | 25 ppb    | EN ISO 23702-1 or EN 17681-1 | Used in oil and water resistant treatments. | new group added<br>method updated  |  |  |  |  |
| Perfluorinated Chemicals - PFHxA-related substances |   |           |                              |   |  |  |  |  |  |
| 17527-29-6  | 1H,1H,2H,2H-Perfluorooctyl acrylate (6:2 FTA)         | 1000 ppb  | EN ISO 23702-1 or EN 17681-1 | Used in oil and water resistant treatments. | new added to reflect legal requirements<br>new added to reflect legal requirements<br>new order<br>new order |  |  |  |  |
| 2144-53-8   | 1H,1H,2H,2H-Perfluorooctyl methacrylate (6:2 FTMA)    |           |                              |   |  |  |  |  |  |
| 27619-97-2  | 1H,1H,2H,2H-Perfluorooctanoic sulfonic acid (6:2 FTS) |           |                              |   |  |  |  |  |  |
| 647-42-7  | 1H,1H,2H,2H-Perfluoro-1-octanol (6:2 FTOH)            |           |                              |   |  |  |  |  |  |
| Perfluorinated Chemicals - Other PFCs               |   |           |                              |   |  |  |  |  |  |
| various   | Perfluoroheptanoic acids (PFHpA)                      | 0,1 mg/kg | EN ISO 23702-1 or EN 17681-1 |   |  |  |  |  |  |
| 375-22-4  | Perfluorobutanoic acid (PFBA)                         |           |                              |   |  |  |  |  |  |
| 2706-90-3   | Perfluoropentanoic acid (PFPeA)                       |           |                              |   |  |  |  |  |  |
| 375-73-5  | Perfluorobutane sulfonic acid (PFBS)                  |           |                              |   |  |  |  |  |  |
| 375-92-8  | Perfluoroheptane sulfonic acid (PFHpS)                |           |                              |   |  |  |  |  |  |
| 335-77-3  | Henicosafuorodecane sulfonic acid (PFDS)              |           |                              |   |  |  |  |  |  |
| 1546-95-8   | 7H-Perfluoro heptanoic acid                           |           |                              |   |  |  |  |  |  |
| 2043-47-2   | 1H,1H,2H,2H-Perfluoro-1-hexanol (4:2 FTOH)            |           |                              |   |  |  |  |  |  |
|   |   |           |                              |   |  |  |  |  |  |

| Pesticides         |   |             |   |  |
|--------------------|---|-------------|---|--|
| 93-76-5            | 2-(2,4,5-Trichlorophenoxy) propionic acid, salts &      |             |   |  |
| 86-50-0            | Azinophosmethyl   |             |   |  |
| 309-00-2           | Aldrine   |             |   |  |
| 191906             | Captafol  |             |   |  |
| 57-74-9            | Chlordane   |             |   |  |
| 470-90-6           | Chlorfenvinphos   |             |   |  |
| 68359-37-5         | Cyfluthrin  |             |   |  |
| 52315-07-8         | Cypermethrin  |             |   |  |
| 52918-63-5         | Deltamethrin  |             |   |  |
| 3424-82-6, 72-     | DDE   |             |   |  |
| 333-41-5           | Diazinon  |             |   |  |
| 141-66-2           | Dicrotophos   |             |   |  |
| 60-51-5            | Dimethoate  |             |   |  |
| 959-98-8           | Endosulfane, alpha                                      |             |   |  |
| 72-20-8            | Endrine   |             |   |  |
| 51630-58-1         | Fenvalerate   |             |   |  |
| 1024-57-3          | Heptachloroepoxide                                      |             |   |  |
| 319-84-6           | Hexachlorcyclohexane, alpha                             |             |   |  |
| 319-86-8           | Hexachlorcyclohexane, gamma                             |             |   |  |
| 4234-79-1          | Kelevane  |             |   |  |
| 58-89-9            | Lindane   |             |   |  |
| 94-74-6            | MCPA  |             |   |  |
| 93-65-2            | Mecoprop  |             |   |  |
| 72-43-5            | Methoxychlor  |             |   |  |
| 6923-22-4          | Monocrotophos   |             |   |  |
| 298-00-0           | Parathion-methyl  |             |   |  |
| 7786-34-7          | Phosdrin/ Mevinphos                                     |             |   |  |
| 41198-08-7         | Profenophos   |             |   |  |
| 8001-50-1          | Strobane  |             |   |  |
| 8001-35-2          | Toxaphene   |             |   |  |
| 94-75-7            | 2,4-Dichloropenoxyacetic acid, salts & compounds ("2,4- | Not allowed | Extraction with acetone, silica gel clean | Found in natural fibers, primarily cotton. |
| 2642-71-9          | Azinophosethyl  | 1 mg/kg     | up,                                       |  |
| 4824-78-6          | Bromophos-ethyl   |             | analysis with GC-MS                       |  |
| 63-25-2            | Carbaryl  |             |   |  |
| 6164-98-3          | Chlordimeform   |             |   |  |
| 56-72-4            | Coumaphos   |             |   |  |
| 91465-08-6         | Cyhalothrin   |             |   |  |
| 78-48-8            | DEF   |             |   |  |
| 53-19-0, 72-54-8   | DDD   |             |   |  |
| 50-29-3, 789-02-06 | DDT   |             |   |  |
| 120-36-2           | Dichlorprop   |             |   |  |
| 60-57-1            | Dieldrine   |             |   |  |
| 88-85-7            | Dinoseb its salts and acetate                           |             |   |  |
| 33213-65-9         | Endosulfane, beta                                       |             |   |  |
| 66230-04-4         | Esfenvalerate   |             |   |  |
| 76-44-8            | Heptachlor  |             |   |  |
| 118-74-1           | Hexachlorobenzene                                       |             |   |  |
| 319-85-7           | Hexachlorcyclohexane, beta                              |             |   |  |
| 465-73-6           | Isodrin   |             |   |  |
| 143-50-0           | Kepone  |             |   |  |
| 121-75-5           | Malathion   |             |   |  |
| 94-81-5            | MCPB  |             |   |  |
| 10265-92-6         | Metamidophos  |             |   |  |
| 2385-85-5          | Mirex   |             |   |  |
| 56-38-2            | Parathion   |             |   |  |
| 72-56-0            | Perthrane   |             |   |  |
| 31218-83-4         | Propethamphos   |             |   |  |
| 13583-03-8         | Quinalphos  |             |   |  |
| 297-78-9           | Telodrin  |             |   |  |
| 1582-09-8          | Trifluralin   |             |   |  |

| pH Value                 |  |   |  |   |
|--------------------------|--|---|--|---|
|                          | pH Value   | Textile: 4.0 – 7.5<br>Leather: Chrome-tanned: 3.2–4.5; Other: 3.5 – 7.0 | EN ISO 3071 (Textiles)<br>ISO 4045 (Leather)   | Add requirements for Leather  |
| Phenol                   |  |   |  |   |
| 108-95-2                 | Phenol   | 50 mg/kg  | Extraction with organic solvent, GC/MS         | Phenol might be used in some plastic material.  |
| Phthalates               |  |   |  |   |
| 85-68-7                  | Butylbenzylphthalate (BBP)   | Sum and individual<br>1000 mg/kg  | DIN EN ISO 14389, analysis by GC- MS/<br>LC-MS | <p>Esters of Ortho-phthalic acid (Phthalates) are a class of organic compound commonly added to plastics to increase flexibility. They are sometimes used to facilitate the molding of plastic by decreasing its melting temperature.</p> <p>Predominantly found as plasticisers in flexible plastic products such as children toys, and coated textiles e.g. PV and PU. They are also used as fixatives, detergents, lubricatin oils and solvents.</p> <p>Phthalates are endocrine disruptors, impairing fertility, impacting aquatic life and are possible carcinogens.</p> |
| 84-74-2                  | Dibutylphthalate (DBP)   |   |  |   |
| 117-81-7                 | Di-(2-ethylhexyl)-phthalate (DEHP)   |   |  |   |
| 117-82-8                 | Di-(2-methoxyethyl)-phthalate (DMEP)   |   |  |   |
| 71888-89-6               | Di-C6-8-branched alkylphthalates. C7 rich (DIHP)   |   |  |   |
| 68515-42-4               | Di-C7-11-branched and linear alkylphthalates (DHNUP)   |   |  |   |
| 68515-50-4               | Di-hexylphthalate, branched and linear (DHxP)  |   |  |   |
| 84-66-2                  | Diethyl phthalate (DEP)  |   |  |   |
| 84-61-7                  | Dicyclohexyl phthalate   |   |  |   |
| 84-76-4                  | Di-n-nonyl phthalate (DNP)   |   |  |   |
| 84-69-5                  | Di-iso-butylphthalate (DIBP)   |   |  |   |
| 26761-40-0               | Di-iso-decylphthalate (DIDP)   |   |  |   |
| 28553-12-0               | Di-iso-nonylphthalate (DINP)   |   |  |   |
| 84-75-3                  | Di-n-hexylphthalate (DHP)  |   |  |   |
| 117-84-0                 | Di-n-octylphthalate (DNOP)   |   |  |   |
| 131-11-3                 | Dimethylphthalate (DMP)  |   |  |   |
| 131-18-0                 | Di-pentylphthalate, (n-, iso- or mixed) (DPP)  |   |  |   |
| 605-50-5                 | Diisopentyl phthalate (DIPP)   |   |  |   |
| 71850-09-4               | Diisohexyl phthalate (DIHxP)   |   |  |   |
| 84777-06-0               | 1,2-Benzenedicarboxylic acid Dipentyl ester, branched and linear   |   |  |   |
| 776297-69-9              | n-Pentyl-isopentylphthalate (nPIPP)  |   |  | new added   |
| 68648-93-1<br>68515-51-5 | di-C6-10-alkylphthalates; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC 201-559-5) |   |  | new added   |
| 27554-26-3               | Diisooctyl phthalate (DIOP)  |   |  |   |
| 131-16-8                 | Di-n-propyl phthalate (DPrP)   |   |  |   |

Method updated

new added

new added

new added

new added

new added

| Polycyclic aromatic hydrocarbons (PAHs) |   |   |  |   |
|---|---|---|--|---|
| 50-32-8                                 | Benzo(a)pyrene                          | 1.0 mg/kg                                     | AfPS GS 2019 PAH , EN 17132, or ISO 16190                | <p>PAHs are produced by the incomplete combustion of organic materials such as wood, oil, and animal fats. PAHs are less water-soluble, evaporable and degradable and attach themselves to organic particulate matter. PAH contaminations have been found in rubber and various plastics, and as contaminants in black carbon pigments.</p> <p>Many of these organic molecules are considered to be carcinogenic, mutagenic and toxic to the aquatic environment.</p> |
| 192-97-2                                | Benzo(e)pyrene                          |   |  |   |
| 56-55-3                                 | Benzo(a)anthracene                      |   |  |   |
| 218-01-9                                | Chrysene                                |   |  |   |
| 205-99-2                                | Benzo(b)fluoranthene                    |   |  |   |
| 205-82-3                                | Benzo(j)fluoranthene                    |   |  |   |
| 207-08-9                                | Benzo(k)fluoranthene                    |   |  |   |
| 53-70-3                                 | Dibenz(a,h)anthracene                   |   |  |   |
| 83-32-9                                 | Acenaphthene                            |   |  |   |
| 120-12-7                                | Anthracene                              | Sum of all 18PAHs<br>10 mg/kg<br>NAP: 2 mg/kg |  |   |
| 86-73-7                                 | Fluorene                                |   |  |   |
| 67580                                   | Phenanthrene                            |   |  |   |
| 129-00-0                                | Pyrene                                  |   |  |   |
| 56-55-3                                 | Benzo(a)anthracene*                     |   |  |   |
| 50-32-8                                 | Benzo(a)pyrene*                         |   |  |   |
| 205-99-2                                | Benzo(b)fluoranthene*                   |   |  |   |
| 192-97-2                                | Benzo(e)pyrene*                         |   |  |   |
| 208-96-8                                | Acenaphthylene                          |   |  |   |
| 191-24-2                                | Benzo(ghi)perylene                      |   |  |   |
| 206-44-0                                | Fluoranthene                            |   |  |   |
| 193-39-5                                | Indeno (1,2,3-cd)pyrene                 |   |  |   |
| 91-20-3                                 | Naphthalene (NAP)                       |   |  |   |
| 205-82-3                                | Benzo(j)fluoranthene*                   |   |  |   |
| 207-08-9                                | Benzo(k)fluoranthene*                   |   |  |   |
| 218-01-9                                | Chrysene*                               |   |  |   |
| 53-70-3                                 | Dibenzo(a,h)anthracene*                 |   |  |   |
| PVC                                     |   |   |  |   |
| 9002-86-2                               | PVC                                     | Prohibited                                    | Beilstein and confirmation by IR                         | Might be used in print.   |
| Quinoline                               |   |   |  |   |
| 91-22-5                                 | Quinoline                               | 50 mg/kg                                      | DIN 54231  | Chemical used to produce certain dyes.  |
| UV stabilizer                           |   |   |  |   |
| 3846-71-7                               | UV 320                                  | 1000 mg/kg                                    | ISO 24040:2022 with extraction in THF, analysis by GC/MS | <p>Used to stabilise certain materials against UV light. Normally used for hardline products exposed to sun light, light garden furniture.</p>  |
| 05/11/3896                              | UV 326                                  | 1000 mg/kg                                    |  |   |
| 3864-99-1                               | UV 327                                  | 1000 mg/kg                                    |  |   |
| 25973-55-1                              | UV 328                                  | 100 mg/kg                                     |  |   |
| 36437-37-3                              | UV 350                                  | 1000 mg/kg                                    |  |   |
| Volatile Organic Compounds (VOCs)       |   |   |  |   |
| 71-43-2                                 | Benzene                                 | Not allowed<br>1.0 mg/kg                      | 10 mg/kg each  | <p>Volatile organic compounds are associated with solvent- based processes like PU coatings and adhesives. They should not be used in textile chemical preparations or for industrial/ machine cleaning.</p> <p>VOC's can be harmful to workers health.</p>   |
| 108-88-3                                | Toluene                                 | Not allowed<br>10 mg/kg                       |  |   |
| 71-55-6                                 | 1,1,1-trichloroethane                   |   |  |   |
| 108-94-1                                | Cyclohexanone                           |   |  |   |
| 78-59-1                                 | Isophorone                              |   |  |   |
| 127-18-4                                | Tetrachloroethylene (perchloroethylene) |   |  |   |
| 67-64-1                                 | Acetone                                 |   |  |   |
| 141-78-6                                | Ethyl acetate                           |   |  |   |
| 78-93-3                                 | Methyl ethyl ketone (MEK)               |   |  |   |
| 1330-20-7                               | Xylenes (Dimethylbenzenes)              |   |  |   |

Method updated

Method updated  
new added

new limit because of legal requirement