

Annex 3

Annex 3.1

EU Ecolabel Restricted Substance List (RSL) compiled from the existing criteria

| Substance | Scope of restriction | Threshold limit | Test method |
|--|--|--------------------------------|---|
| Biocides | | | |
| Biocides shall not be used to give biocidal properties to the final product | Including triclosan, nano-silver, zinc organic compounds, tin organic compounds, dichlorophenyl(ester) compounds, benzimidazol derivatives and isothiazolinones. | Limit of detection 0.05 ppm | Derivatisation with acetic anhydride, determination by capillary gas-liquid chromatography with electron capture detection. |
| The following biocides shall not be used to protect goods during transportation and storage. <i>Only biocides that are authorised under Biocide Directive 98/8/EC and Biocide Regulation (EC) No 528/2012 are permitted.</i> | Chlorophenols (their salts and esters) | | |
| | PCB | | |
| | Organotin compounds | | |
| | DMFu (dimethyl fumarate) | 100 ppm | Solvent extraction and GCMS |
| Auxilliaries | | | |
| The following substances shall not be used in any preparations or formulations. | Alkylphenoethoxylates (APEOs) | Limit of detection 100 ppm | C65 Solvent extraction LCMS |
| | bis(hydrogenated tallow alkyl) dimethyl ammonium chloride (DTDMAC) | | |
| | distearyl dimethyl ammonium chloride (DSDMAC) | | |
| | di(hardened tallow) dimethyl | | |

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| | ammonium chloride (DHTDMAC) | | |
| | ethylene diamine tetra acetate (EDTA), | | |
| | diethylene triamine penta acetate (DTPA) | | |
| | 4-(1,1,3,3-tetramethylbutyl)phenol | | |
| | 1-Methyl-2-pyrrolidone | | |
| | Nitrilotriacetic acid (NTA) | | |
| Dyeing | | | |
| Halogenated carriers shall not be used to dye polyester. | Including trichlorobenzene | 1 ppm | Solvent extraction and GCMS |
| Azo dyes | Azo dyes shall not be used that may cleave to aromatic amines - see Annex 3.2: Azo dye listing. | 5 ppm | EN 14362-1 and 2 |
| CMR dyes | Dyes shall not be used that are carcinogenic, mutagenic or toxic to reproduction – see Annex 3.3: CMR dye listing | | DIN 54231 |
| Potentially sensitising dyes | Dyes shall not be used that are potentially sensitising – see Annex 3.3: Sensitising dye listing | | |
| Chrome mordant dyes | Chrome mordant dyes shall not be used | 3 ppm | EN ISO 17075:2007 |
| Metal complex dyes based on copper, chrome and nickel shall only be permitted for dyeing wool or polyamide. | Cellulose fibre dyeing. | 80% dye fixation required | Cu and Ni: ISO 8288 |
| | Wool fibre dyeing. | 93% dye fixation required | Cr: EN 1233 |

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| Dyestuff should not contain impurities exceeding the following limit values. | Antimony (Sb) | 50 ppm | MSDS and supplementary data from suppliers |
| | Arsenic (As) | 50 ppm | |
| | Barium (Ba) | 100 ppm | |
| | Cadmium (Cd) | 20 ppm | |
| | Chromium (Cr) | 100 ppm | |
| | Cobalt (Co) | 500 ppm | |
| | Copper (Cu) | 250 ppm | |
| | Iron (Fe) | 2,500 ppm | |
| | Lead (Pb) | 100 ppm | |
| | Nickel (Ni) | 200 ppm | |
| | Manganese (Mn) | 1,000 ppm | |
| | Mercury (Hg) | 4 ppm | |
| | Selenium (Se) | 20 ppm | |
| | Silver (Ag) | 100 ppm | |
| Tin (Sn) | 250 ppm | | |
| Zinc (Zn) | 1,500 ppm | | |
| Pigments should not contain impurities exceeding the following limit values. | Antimony (Sb) | 250 ppm | MSDS and supplementary data from suppliers |
| | Arsenic (As) | 50 ppm | |
| | Barium (Ba) | 100 ppm | |
| | Cadmium (Cd) | 50 ppm | |
| | Chromium (Cr) | 100 ppm | |
| | Cobalt (Co) | 500 ppm | |
| | Lead (Pb) | 100 ppm | |

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|--|--|--|----------------------------------|
| | Mercury (Hg) | 25 ppm | |
| | Selenium (Se) | 100 ppm | |
| | Tin (Sn) | 250 ppm | |
| | Zinc (Zn) | 1,000 ppm | |
| Printing | | | |
| Printing pastes shall not contain more than the specified levels of VOC's | <i>Examples to be listed</i> | 5% w/w | Solvent extraction and GCMS |
| Plastisols | Plastisol print applications shall not be used. | n/a | |
| Finishes | | | |
| Formaldehyde | Products for babies and children under 3 years old. | 20 ppm | EN ISO 14184-1 |
| | Products that come into direct contact with the skin. | 75 ppm | |
| | All other products. | 300 ppm | |
| Anti-felting | Halogenated substances or preparations shall only be applied to wool slivers and loose scoured wool. | xx ppm | ISO 11480:97 |
| Water repellents | PFOS (perflouroctane sulfonate and its derivatives) | >1µg/m ² of the coated materials. | Solvent extraction LCMS |
| | PFOA (perfluorooctanoic acid) | 25 ppm | |
| Flame retardants <u>shall not be used</u> unless they are required by Member State legislation or their use is | HBCD – Hexabromocyclododecane | 5 ppm | Solvent extraction and GCMS/LCMS |
| | PeBDE – Pentabromodiphenyl ether | | |

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|--|--|-------------------------------|--|
| <p>stipulated by EN or ISO standards for specific applications. <i>The following flame retardants shall not be used:</i></p> | OcBDE – Octabromidiphenyl ether | | |
| | PBBs – Polybrominated biphenyls | | |
| | TEPA – Tris(aziridinyl) phosphin oxide | | |
| | TRIS – Tris (2,3 dibromopropyl) phosphate | | |
| | TCEP – Tris (2, chloroethyl) phosphate | | |
| <p>Coatings, laminates and membranes should not contain the following phthalates:</p> | DEHP (Bis-(2-ethylhexyl)-phthalate) | <p>Sum total 1000 ppm</p> | <p>C61 solvent extraction and GCMS</p> |
| | BBP (Butylbenzylphthalate) | | |
| | DBP (Dibutylphthalate) | | |
| | Di-isononyl phthalate (DINP) | | |
| | Di-isodecyl phthalate (DIDP) | | |
| | Di-n-octyl phthalate (DNOP) | | |
| | Bis(2-methoxyethyl) phthalate | | |
| | DIBP (Diisobutylphthalat) | | |
| Accessories | | | |
| <p>Accessories such as buttons, rivets and zips, should not contain the following substances:</p> | <p>Metal accessories: Nickel and Chrome</p> | | |
| | <p>Rubber accessories: Organotin compounds</p> | | |
| | <p>Plastic accessories: Phthalates (as listed under coatings, laminates and membranes)</p> | | |

Annex 3.2

Dyes that may cleave to aromatic amines

| Disperse dyes that may cleave to aromatic amines | |
|--|---------------------|
| Disperse Orange 60 | Disperse Yellow 7 |
| Disperse Orange 149 | Disperse Yellow 23 |
| Disperse Red 151 | Disperse Yellow 56 |
| Disperse Red 221 | Disperse Yellow 218 |

| Basic dyes that may cleave to aromatic amines | |
|---|------------------|
| Basic Brown 4 | Basic Red 114 |
| Basic Red 42 | Basic Yellow 82 |
| Basic Red 76 | Basic Yellow 103 |
| Basic Red 111 | |

| Acid dyes that may cleave to aromatic amines | | |
|--|------------------|-----------------|
| CI Acid Black 29 | CI Acid Red 26 | CI Acid Red 128 |
| CI Acid Black 94 | CI Acid Red 26:1 | CI Acid Red 135 |
| CI Acid Black 131 | CI Acid Red 26:2 | CI Acid Red 148 |
| CI Acid Black 132 | CI Acid Red 35 | CI Acid Red 150 |
| CI Acid Black 209 | CI Acid Red 48 | CI Acid Red 158 |
| CI Acid Black 232 | CI Acid Red 73 | CI Acid Red 167 |
| CI Acid Brown 415 | CI Acid Red 85 | CI Acid Red 170 |

| | | |
|-------------------|-------------------|-------------------|
| CI Acid Orange 17 | CI Acid Red 104 | CI Acid Red 264 |
| CI Acid Orange 24 | CI Acid Red 114 | CI Acid Red 265 |
| CI Acid Orange 45 | CI Acid Red 115 | CI Acid Red 420 |
| CI Acid Red 4 | CI Acid Red 116 | CI Acid Violet 12 |
| CI Acid Red 5 | CI Acid Red 119:1 | |
| CI Acid Red 8 | CI Acid Red 128 | |
| CI Acid Red 24 | CI Acid Red 115 | |

Direct dyes that may cleave to aromatic amines

| | | | |
|------------------|------------------|-------------------|------------------|
| Direct Black 4 | Direct Blue 201 | Direct Green 6 | Direct Red 39 |
| Direct Black 29 | Direct Blue 215 | Direct Green 8 | Direct Red 44 |
| Direct Black 38 | Direct Blue 295 | Direct Green 8.1 | Direct Red 46 |
| Direct Black 154 | Direct Blue 306 | Direct Green 85 | Direct Red 62 |
| Direct Blue 1 | Direct Brown 1 | Direct Orange 1 | Direct Red 67 |
| Direct Blue 2 | Direct Brown 1:2 | Direct Orange 6 | Direct Red 72 |
| Direct Blue 3 | Direct Brown 2 | Direct Orange 7 | Direct Red 126 |
| Direct Blue 6 | Basic Brown 4 | Direct Orange 8 | Direct Red 168 |
| Direct Blue 8 | Direct Brown 6 | Direct Orange 10 | Direct Red 216 |
| Direct Blue 9 | Direct Brown 25 | Direct Orange 108 | Direct Red 264 |
| Direct Blue 10 | Direct Brown 27 | Direct Red 1 | Direct Violet 1 |
| Direct Blue 14 | Direct Brown 31 | Direct Red 2 | Direct Violet 4 |
| Direct Blue 15 | Direct Brown 33 | Direct Red 7 | Direct Violet 12 |
| Direct Blue 21 | Direct Brown 51 | Direct Red 10 | Direct Violet 13 |

| | | | |
|-----------------|------------------|---------------|------------------|
| Direct Blue 22 | Direct Brown 59 | Direct Red 13 | Direct Violet 14 |
| Direct Blue 25 | Direct Brown 74 | Direct Red 17 | Direct Violet 21 |
| Direct Blue 35 | Direct Brown 79 | Direct Red 21 | Direct Violet 22 |
| Direct Blue 76 | Direct Brown 95 | Direct Red 24 | Direct Yellow 1 |
| Direct Blue 116 | Direct Brown 101 | Direct Red 26 | Direct Yellow 24 |
| Direct Blue 151 | Direct Brown 154 | Direct Red 22 | Direct Yellow 48 |
| Direct Blue 160 | Direct Brown 222 | Direct Red 28 | |
| Direct Blue 173 | Direct Brown 223 | Direct Red 37 | |
| Direct Blue 192 | Direct Green 1 | Direct Red 21 | |

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Annex 3.3

Dyes that are CMR or which potentially be sensitising

| Dyes that are carcinogenic, mutagenic or toxic to reproduction | | |
|--|-----------------------|-------------------------|
| C.I. Acid Red 26 | C. I. Direct Black 38 | C.I. Disperse Blue 1 |
| C.I. Basic Red 9 | C. I. Direct Blue 6 | C.I. Disperse Orange 11 |
| C.I. Basic Violet 14 | C. I. Direct Red 28 | C. I. Disperse Yellow 3 |

| Disperse dyes that are potentially sensitising | | | |
|--|-------------------------|-------------------------|-------------------------|
| C.I. Disperse Blue 1 | C.I. Disperse Blue 106 | C.I. Disperse Orange 76 | C.I. Disperse Yellow 9 |
| C.I. Disperse Blue 3 | C.I. Disperse Blue 124 | C.I. Disperse Red 1 | C.I. Disperse Yellow 39 |
| C.I. Disperse Blue 7 | C.I. Disperse Brown 1 | C.I. Disperse Red 11 | C.I. Disperse Yellow 49 |
| C.I. Disperse Blue 26 | C.I. Disperse Orange 1 | C.I. Disperse Red 17 | |
| C.I. Disperse Blue 35 | C.I. Disperse Orange 3 | C.I. Disperse Yellow 1 | |
| C.I. Disperse Blue 102 | C.I. Disperse Orange 37 | C.I. Disperse Yellow 3 | |

Annex 4

**Criteria 12 Hazard Statement
categorisation**

Acute toxicity

| Category A (CLP Category 1 and 2 acute toxicity) | Category B (CLP Category 3 acute toxicity) |
|---|---|
| H350i May cause cancer by inhalation (R49) | |
| H300 Fatal if swallowed (R28) | H301 Toxic if swallowed (R25) |
| H310 Fatal in contact with skin (R27) | H311 Toxic in contact with skin (R24) |
| H330 Fatal if inhaled (R23/26) | H331 Toxic if inhaled (R23) |
| H304 May be fatal if swallowed and enters airways (R65) | EUH070 Toxic by eye contact (R39/41) |

Organ toxicity

| Category A (CLP Category 1 organ toxicity) | Category B (CLP Category 2 organ toxicity) |
|---|--|
| H370 Causes damage to organs (R39/23/24/25/26/27/28) | H371 May cause damage to organs (R68/20/21/22) |
| H372 Causes damage to organs (R48/25/24/23) | H373 May cause damage to organs (R48/20/21/22) |

CMR substances

| Category A (CLP Category 1 CMR substances) | Category B (CLP Category 2 CMR substances) |
|--|---|
| H340 May cause genetic defects (R46) | H341 Suspected of causing genetic defects (R68) |
| H350 May cause cancer (R45) | H351 Suspected of causing cancer (R49) |
| H360F May damage fertility (R60) | H361f Suspected of damaging fertility (R62) |
| H360D May damage the unborn child (R61) | H361d Suspected of damaging the unborn child (R63) |
| H360FD May damage fertility. May damage the unborn child (R60/61/60-61) | H361fd Suspected of damaging fertility. Suspected of damaging the unborn child (R62/63) |
| H360Fd May damage fertility. Suspected of damaging the unborn child (R60/63) | H362 May cause harm to breast fed children (R64) |
| H360Df May damage the unborn child. Suspected of damaging fertility (R61/62) | |

Sensitisers

| Category A | Category B (CLP Category 1 sensitisation) |
|------------|--|
| | H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled (R42) |
| | H317: May cause allergic skin reaction (R43) |

Environmental hazards

| Category A (CLP Category 1 hazards) | Category B (CLP Category 2-4 hazards) |
|--|---|
| H400 Very toxic to aquatic life (R50) | H411 Toxic to aquatic life with long-lasting effects (R51/53) |
| H410 Very toxic to aquatic life with long-lasting effects (R50/53) | H412 Harmful to aquatic life with long-lasting effects (R52/53) |
| H413 May cause long-lasting effects to aquatic life (R53) ¹ | |
| EUH059 Hazardous to the ozone layer (R59) | |

Notes:

1. Where a substance that is classified with H413 is both non-biodegradable and bioaccumulative.