

# EU GPP Criteria for Textiles

Green Public Procurement (GPP) is a voluntary instrument. This document provides the EU GPP criteria developed for textiles. The accompanying Technical Background Report provides full details on the reasons for selecting these criteria and references for further information.

For each product / service group two sets of criteria are presented:

- The core criteria are those suitable for use by any contracting authority across the Member States and address the key environmental impacts. They are designed to be used with minimum additional verification effort or cost increases.
- The comprehensive criteria are for those who wish to purchase the best environmental products available on the market. These may require additional verification effort or a slight increase in cost compared to other products with the same functionality.

## 1. Definition and Scope

This report covers the following textile products<sup>1</sup>:

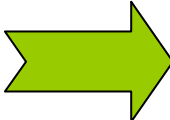
- Textile clothing and accessories: clothing and accessories (such as handkerchiefs, scarves, bags, shopping bags, rucksacks, belts etc.) consisting of at least 90 % by weight of textile fibres;
- Interior textiles: textile products for interior use consisting of at least 90 % by weight of textile fibres. Wall and floor coverings are excluded;
- Fibres, yarn and fabric: intended for use in textile clothing and accessories or interior textiles.

For ‘textile clothing and accessories’ and for ‘interior textiles’: down, feathers, membranes and coatings need not be taken into account in the calculation of the percentage of textile fibres.

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<sup>1</sup> Commission Decision of 9<sup>th</sup> July 2009 establishing the ecological criteria for the award of the Community eco-label for textile products

## 2. Key environmental impacts

Key Environmental Impacts	GPP Approach
<ul style="list-style-type: none"><li>• Air pollution, ozone formation (smog), bioaccumulation or food chain exposure and hazardous effects on aquatic organisms or the increased growth of undesirable aquatic organisms which can degrade water quality, due to the inappropriate use of certain pesticides and fertilisers in the production of fibres, and substances used during the processing of fibres and final textile products</li><li>• Negative impact on the occupational health of users due to residues of certain substances harmful to human health</li><li>• Avoidance of early failure and consequent waste of textiles by promoting colour –fast fabrics that do not shrink during use</li></ul>	 <ul style="list-style-type: none"><li>• Purchase organically produced textiles</li><li>• Purchase used textiles which can be reused for their original purpose or purchase textiles that contain recycled fibres</li><li>• Purchase textiles with a reduced use of environmentally harmful substances in production</li><li>• Purchase textiles with lower residues of substances harmful to human health</li><li>• Purchase textiles which meet the minimum requirements for colour fastness and dimensional stability</li></ul>

Please note that the order of impacts does not necessarily translate to the order of their importance.

### 3. EU GPP Criteria for Textiles

Core criteria	Comprehensive criteria
<b>3.1 EU GPP criteria for textiles</b>	
<b>SUBJECT MATTER</b>	<b>SUBJECT MATTER</b>
Purchase of textile products with low levels of <b>toxic substances</b> , with a preference for fibres and products with a low environmental impact during production and made from fibres produced with a minimum of <b>pesticides</b> .	Purchase of textile products with low levels of <b>toxic substances</b> , with a preference for fibres and products with a low environmental impact during production and made from fibres produced with a minimum of <b>pesticides</b> .
<b>SPECIFICATIONS</b>	<b>SPECIFICATIONS</b>
<p><b>1. Pesticides</b></p> <p>For products made from cotton or other natural cellulosic fibres, the final product shall not contain more than 0.05 ppm (parts per million) of each of the following substances The total sum content of the following substances shall not exceed <b>0.75 ppm</b>:</p> <ul style="list-style-type: none"> <li>• 2,4,5-T</li> <li>• Aldrin</li> <li>• Captafol</li> <li>• Chlordane</li> <li>• Chlordimeform</li> <li>• DDT</li> <li>• Dieldrin</li> <li>• Dinoseb and salts</li> <li>• Endrine</li> <li>• Heptachlor</li> <li>• Hexachlorobenzene</li> <li>• Hexachlorocyclohexane, <math>\alpha</math></li> <li>• Hexachlorocyclohexane, <math>\beta</math></li> </ul>	<p><b>1. Pesticides</b></p> <p>For products made from cotton or other natural cellulosic fibres, the final product shall not contain more than 0.05 ppm (parts per million) of each of the following substances The total sum content of the following substances shall not exceed <b>0.5 ppm</b>:</p> <ul style="list-style-type: none"> <li>• 2,4,5-T</li> <li>• Aldrin</li> <li>• Captafol</li> <li>• Chlordane</li> <li>• Chlordimeform</li> <li>• DDT</li> <li>• Dieldrin</li> <li>• Dinoseb and salts</li> <li>• Endrine</li> <li>• Heptachlor</li> <li>• Hexachlorobenzene</li> <li>• Hexachlorocyclohexane, <math>\alpha</math></li> <li>• Hexachlorocyclohexane, <math>\beta</math></li> </ul>

- Hexachlorcyclohexane,  $\delta$
- Metamidophos
- Monocrotophos
- Parathion
- Parathion-methyl
- Propethamphos
- Toxaphene

**Verification:** Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted.

- Hexachlorcyclohexane,  $\delta$
- Metamidophos
- Monocrotophos
- Parathion
- Parathion-methyl
- Propethamphos
- Toxaphene

For products made from wool fibres, the final product shall not contain more than the totals specified of each of the following substances:

The total sum content of the following substances does not exceed **0.5 ppm**:

$\gamma$ -hexachlorocyclohexane (lindane),  
 $\alpha$ -hexachlorocyclohexane,  
 $\beta$ -hexachlorocyclohexane,  
 $\delta$ -hexachlorocyclohexane,  
aldrin,  
dieldrin,  
endrin,  
p,p'-DDT,  
p,p'-DDD.

The sum total content of the following substances does not exceed **2 ppm**:

diazinon,  
propetamphos,  
chlorfenvinphos,  
dichlorfenthion,  
chlorpyriphos,  
fenchlorphosq,  
ethion,  
pirimphos-methyl.

	<p>The sum total content of the following substances does not exceed <b>0.5 ppm</b>:</p> <p style="padding-left: 40px;">cypermethrin, deltamethrin, fenvalerate, cyhalothrin, flumethrin.</p> <p>The sum total content of the following substances does not exceed <b>2 ppm</b>:</p> <p style="padding-left: 40px;">diflubenzuron, triflumuron, dicyclanil.</p> <p><b>Verification:</b> Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted.</p>
<p><b>2. Dyes classified as sensitising/allergenic, carcinogenic, mutagenic or toxic to reproduction</b></p> <p>The following dyes shall not be used in the manufacture of the final product:</p> <ul style="list-style-type: none"> <li>• C.I. Basic Red 9</li> <li>• C.I. Disperse Blue 1</li> <li>• C.I. Acid Red 26</li> <li>• C.I. Basic Violet 14</li> <li>• C.I. Disperse Orange 11</li> <li>• C. I. Direct Black 38</li> </ul>	<p><b>2. Dyes classified as sensitising/allergenic, carcinogenic, mutagenic or toxic to reproduction</b></p> <p>The following dyes shall not be used in the manufacture of the final product:</p> <ul style="list-style-type: none"> <li>• C.I. Basic Red 9</li> <li>• C.I. Disperse Blue 1</li> <li>• C.I. Acid Red 26</li> <li>• C.I. Basic Violet 14</li> <li>• C.I. Disperse Orange 11</li> <li>• C. I. Direct Black 38</li> </ul>

- C. I. Direct Blue 6
- C. I. Direct Red 28
- C. I. Disperse Yellow 3
- C.I. Disperse Yellow 23
- C.I. Disperse Yellow 149

The following dyes shall only be used if the fastness to perspiration (acid and alkaline) of the dyed fibres, yarn or fabric is at least 4:

- C.I. Disperse Blue 3 C.I. 61 505
- C.I. Disperse Blue 7 C.I. 62 500
- C.I. Disperse Blue 26 C.I. 63 305
- C.I. Disperse Blue 35
- C.I. Disperse Blue 102
- C.I. Disperse Blue 106
- C.I. Disperse Blue 124
- C.I. Disperse Orange 1 C.I. 11 080
- C.I. Disperse Orange 3 C.I. 11 005
- C.I. Disperse Orange 37
- C.I. Disperse Orange 76
- (previously designated Orange 37)
- C.I. Disperse Red 1 C.I. 11 110
- C.I. Disperse Red 11 C.I. 62 015
- C.I. Disperse Red 17 C.I. 11 210

- C. I. Direct Blue 6
- C. I. Direct Red 28
- C. I. Disperse Yellow 3
- C.I. Disperse Yellow 23
- C.I. Disperse Yellow 149

The following dyes shall only be used if the fastness to perspiration (acid and alkaline) of the dyed fibres, yarn or fabric is at least 4:

- C.I. Disperse Blue 3 C.I. 61 505
- C.I. Disperse Blue 7 C.I. 62 500
- C.I. Disperse Blue 26 C.I. 63 305
- C.I. Disperse Blue 35
- C.I. Disperse Blue 102
- C.I. Disperse Blue 106
- C.I. Disperse Blue 124
- C.I. Disperse Orange 1 C.I. 11 080
- C.I. Disperse Orange 3 C.I. 11 005
- C.I. Disperse Orange 37
- C.I. Disperse Orange 76
- (previously designated Orange 37)
- C.I. Disperse Red 1 C.I. 11 110
- C.I. Disperse Red 11 C.I. 62 015
- C.I. Disperse Red 17 C.I. 11 210

<ul style="list-style-type: none"> <li>• C.I. Disperse Yellow 1 C.I. 10 345</li> <li>• C.I. Disperse Yellow 9 C.I. 10 375</li> <li>• C.I. Disperse Yellow 39</li> <li>• C.I. Disperse Yellow 49</li> </ul> <p><b>Verification:</b> Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted.</p>	<ul style="list-style-type: none"> <li>• C.I. Disperse Yellow 1 C.I. 10 345</li> <li>• C.I. Disperse Yellow 9 C.I. 10 375</li> <li>• C.I. Disperse Yellow 39</li> <li>• C.I. Disperse Yellow 49</li> </ul> <p><b>Verification:</b> Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted.</p>
<p><b>3. Arylamines</b></p> <p>The final product shall not contain the following arylamines:</p> <ul style="list-style-type: none"> <li>• 4-aminodiphenyl (CAS no. 92-67-1)</li> <li>• Benzidine (CAS no. 92-87-5)</li> <li>• 4-chloro-o-toluidine (CAS no. 95-69-2)</li> <li>• 2-naphthylamine (CAS no. 91-59-8)</li> <li>• o-amino-azotoluene (CAS no. 97-56-3)</li> <li>• 2-amino-4-nitrotoluene (CAS no. 99-55-8)</li> <li>• p-chloroaniline (CAS no. 106-47-8)</li> <li>• 2,4-diaminoanisole (CAS no. 615-05-4)</li> <li>• 4,4'-diaminodiphenylmethane (CAS no. 101-77-9)</li> <li>• 3,3'-dichlorobenzidine (CAS no. 91-94-1)</li> <li>• 3,3'-dimethoxybenzidine (CAS no. 119-90-4)</li> <li>• 3,3'-dimethylbenzidine (CAS no. 119-93-7)</li> <li>• 3,3'-dimethyl-4,4'-diaminodiphenylmethane (CAS no. 838-88-0)</li> <li>• p-cresidine (CAS no. 120-71-8)</li> <li>• 4,4'-methylene-bis-(2-chloroaniline) (CAS no. 101-14-4)</li> </ul>	<p><b>3. Arylamines</b></p> <p>The final product shall not contain the following arylamines:</p> <ul style="list-style-type: none"> <li>• 4-aminodiphenyl (CAS no. 92-67-1)</li> <li>• Benzidine (CAS no. 92-87-5)</li> <li>• 4-chloro-o-toluidine (CAS no. 95-69-2)</li> <li>• 2-naphthylamine (CAS no. 91-59-8)</li> <li>• o-amino-azotoluene (CAS no. 97-56-3)</li> <li>• 2-amino-4-nitrotoluene (CAS no. 99-55-8)</li> <li>• p-chloroaniline (CAS no. 106-47-8)</li> <li>• 2,4-diaminoanisole (CAS no. 615-05-4)</li> <li>• 4,4'-diaminodiphenylmethane (CAS no. 101-77-9)</li> <li>• 3,3'-dichlorobenzidine (CAS no. 91-94-1)</li> <li>• 3,3'-dimethoxybenzidine (CAS no. 119-90-4)</li> <li>• 3,3'-dimethylbenzidine (CAS no. 119-93-7)</li> <li>• 3,3'-dimethyl-4,4'-diaminodiphenylmethane (CAS no. 838-88-0)</li> <li>• p-cresidine (CAS no. 120-71-8)</li> <li>• 4,4'-methylene-bis-(2-chloroaniline) (CAS no. 101-14-4)</li> </ul>

<ul style="list-style-type: none"> <li>• 4,4'-oxydianiline (CAS no. 101-80-4)</li> <li>• 4,4'-thiodianiline (CAS no. 139-65-1)</li> <li>• o-toluidine (CAS no. 95-53-4)</li> <li>• 2,4-diaminotoluene (CAS no. 95-80-7)</li> <li>• 2,4,5-trimethylaniline (CAS no. 137-17-7)</li> <li>• 4-aminoazobenzene (CAS no. 60-09-3)</li> <li>• o-anisidine (CAS no. 90-04-0)</li> </ul> <p><b>Verification:</b> Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted.</p>	<ul style="list-style-type: none"> <li>• 4,4'-oxydianiline (CAS no. 101-80-4)</li> <li>• 4,4'-thiodianiline (CAS no. 139-65-1)</li> <li>• o-toluidine (CAS no. 95-53-4)</li> <li>• 2,4-diaminotoluene (CAS no. 95-80-7)</li> <li>• 2,4,5-trimethylaniline (CAS no. 137-17-7)</li> <li>• 4-aminoazobenzene (CAS no. 60-09-3)</li> <li>• o-anisidine (CAS no. 90-04-0)</li> </ul> <p><b>Verification:</b> Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted.</p>
<p><b>4. Flame retardants</b></p> <p>The following flame retardants shall not be used in the final product:</p> <ul style="list-style-type: none"> <li>• PBB (Polybrominated biphenyls) CAS no. 59536-65-1</li> <li>• pentaBDE (Pentabromodiphenylether) CAS no. 32534-81-9</li> <li>• octaBDE (Octabromodiphenyl ether) CAS no. 32536-52-9</li> <li>• decaBDE (Decabromodiphenyl ether) CAS no. 1163-19-5</li> </ul> <p><b>Verification:</b> Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted.</p>	<p><b>4. Flame retardants</b></p> <p>The following flame retardants shall not be used in the final product:</p> <ul style="list-style-type: none"> <li>• PBB (Polybrominated biphenyls) CAS no. 59536-65-1</li> <li>• pentaBDE (Pentabromodiphenylether) CAS no. 32534-81-9</li> <li>• octaBDE (Octabromodiphenyl ether) CAS no. 32536-52-9</li> <li>• decaBDE (Decabromodiphenyl ether) CAS no. 1163-19-5</li> <li>• Tri-(2,3Dibromopropyl-)Phosphate, CAS-Nr. 126-72-7</li> <li>• HBCDD (Hexabromocyclododecane) CAS. 25637-99-4 and 3194-55-6</li> </ul> <p><b>Verification:</b> Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted.</p>
<p><b>5. Pentachlorophenol and tetrachlorophenol</b></p> <p>For products made from cotton or other natural cellulosic fibres, the final product shall not contain more than 0.5 parts per million of</p>	<p><b>5. Pentachlorophenol,tetrachlorophenol and 2,4,6-Trichlorophenol</b></p> <p>For products made from cotton or other natural cellulosic fibres, the final product shall not contain more than 0.05 parts per million of</p>



<p>pentachlorophenol.</p> <p><b>Verification:</b> Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted.</p>	<p>pentachlorophenol.</p> <p><b>Verification:</b> Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted.</p>
<p><b>6. Phthalate softeners</b></p> <p>For products that come into direct contact with the skin the following phthalate softeners shall not make up more than 0.1% by weight of the final product:</p> <ul style="list-style-type: none"> <li>• DEHP (Di-(2-ethylhexyl)-phthalate) CAS no. 117-81-7</li> <li>• BBP (Butylbenzylphthalate) CAS no. 85-68-7</li> <li>• DBP (Dibutylphthalate) CAS no. 84-74-2</li> <li>• DNOP (Di-n-octylphthalate)</li> <li>• DINP (Di-isononylphthalat)</li> <li>• DIDP (Di-isodecylphthalat)</li> <li>• DIBP (Diisobutylphthalat)</li> <li>• TCEP (Tris(2-chlorethyl)phosphate)</li> </ul> <p><b>Verification:</b> Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted.</p>	<p><b>6. Phthalate softeners</b></p> <p>For products that come into direct contact with the skin the following phthalate softeners shall not make up more than 0.1% by weight of the final product:</p> <ul style="list-style-type: none"> <li>• DEHP (Di-(2-ethylhexyl)-phthalate) CAS no. 117-81-7</li> <li>• BBP (Butylbenzylphthalate) CAS no. 85-68-7</li> <li>• DBP (Dibutylphthalate) CAS no. 84-74-2</li> <li>• DNOP (Di-n-octylphthalate)</li> <li>• DINP (Di-isononylphthalat)</li> <li>• DIDP (Di-isodecylphthalat)</li> <li>• DIBP (Diisobutylphthalat)</li> <li>• TCEP (Tris(2-chlorethyl)phosphate)</li> </ul> <p><b>Verification:</b> Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted.</p>
<p><b>7. Formaldehyde</b></p> <p>The amount of free and partly hydrolysable formaldehyde in the final product shall not exceed 70 ppm for products that come into direct contact with the skin and 300 ppm for all other products.</p>	<p><b>7. Formaldehyde</b></p> <p>The amount of free and partly hydrolysable formaldehyde in the final product shall not exceed 20 ppm in products for babies and young children under 3 years old, 30 ppm for products that come into direct contact with the skin and 75 ppm for all other products.</p>

<p><b>Verification:</b> Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted.</p>			<p><b>Verification:</b> Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted.</p>		
<p><b>8. Heavy metals</b></p> <p>The amount of Cadmium (Cd), Chromium (Cr), Nickel (Ni), Lead (Pb), Copper (Cu) in the final product shall not exceed:</p> <ul style="list-style-type: none"> <li>• Cadmium (Cd): 0.1 ppm</li> <li>• Chromium (Cr): 2.0 ppm</li> <li>• Nickel (Ni): 4.0 ppm</li> <li>• Lead (Pb): 1.0 ppm</li> </ul> <p>Copper (Cu): 50.0 ppm</p> <p><b>Verification:</b> Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted such as other private or national textile labels fulfilling the listed criteria or technical dossier of the manufacturer or a test report from a recognised body.</p>			<p><b>8. Heavy metals</b></p> <p>The amount of Cadmium (Cd), Chromium (Cr), Nickel (Ni), Lead (Pb), Copper (Cu) in the final product shall not exceed:</p> <ul style="list-style-type: none"> <li>• Antimony (Sb): 30 ppm</li> <li>• Arsenic (As): 1.0 ppm (outerwear), 0.2 ppm (others)</li> <li>• Cadmium (Cd): 0.1 ppm</li> <li>• Chromium (Cr): 2.0 ppm (outerwear), 1.0 ppm (others)</li> <li>• Chromium VI (Cr-VI): 0.5 ppm</li> <li>• Cobalt (Co): 4.0 ppm (outerwear), 1.0 ppm (others)</li> <li>• Mercury (Hg): 0.02 ppm</li> <li>• Nickel (Ni): 4.0 ppm (outerwear), 1.0 ppm (others)</li> <li>• Lead (Pb): 1.0 ppm (outerwear), 0.2 ppm (others)</li> <li>• Copper (Cu): 50.0 ppm (outerwear), 25.0 ppm (others)</li> </ul> <p><b>Verification:</b> Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted such as other private or national textile labels fulfilling the listed criteria or technical dossier of the manufacturer or a test report from a recognised body.</p>		
<p><b>9. Colour fastness and dimensional stability</b></p> <p>The product must meet the following minimum requirements for colour fastness and dimensional stability:</p>			<p><b>9. Colour fastness and dimensional stability</b></p> <p>The product must meet the following minimum requirements for colour fastness and dimensional stability:</p>		
<b>Parameter</b>	<b>Criteria</b>	<b>Test method</b>	<b>Parameter</b>	<b>Criteria</b>	<b>Test method</b>

<b>9.1 Dimensional changes during washing and drying</b>	Plus or minus 2 % for curtains and for furniture fabric that is washable and removable. Between minus 8% and plus 4% for other woven products, and durable non-wovens, other knitted products or for terry towelling.	ISO 5077 or equivalent	<b>9.1 Dimensional changes during washing and drying</b>	Plus or minus 2 % for curtains and for furniture fabric that is washable and removable. Between minus 8% and plus 4% for other woven products, and durable non-wovens, other knitted products or for terry towelling.	ISO 5077 or equivalent
<b>Verification:</b> All products must be tested to standard ISO 5077 or equivalent. Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted such as other private or national textile labels fulfilling the listed criteria or technical dossier of the manufacturer or a test report from a recognised body.			<b>Verification:</b> All products must be tested to standard ISO 5077 or equivalent. Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted such as other private or national textile labels fulfilling the listed criteria or technical dossier of the manufacturer or a test report from a recognised body.		
<b>Parameter</b>	<b>Criteria</b>	<b>Test method</b>	<b>Parameter</b>	<b>Criteria</b>	<b>Test method</b>
<b>9.2 Colour fastness to washing</b>	At least level 3 to 4 for colour change.  At least level 3 to 4 for staining.	ISO 105 C06 (single wash, at temperature as marked on the product, with perborate powder) or equivalent	<b>9.2 Colour fastness to washing</b>	At least level 4 for colour change.  At least level 4 for staining.	ISO 105 C06 (single wash, at temperature as marked on the product, with perborate powder) or equivalent
<b>Verification:</b> All products must be tested to standard ISO 105 C06 or equivalent. Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted such as other private or national textile labels fulfilling the listed criteria or technical dossier of the manufacturer or a test report from a recognised body.			<b>Verification:</b> All products must be tested to standard ISO 105 C06 or equivalent. Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted such as other private or national textile labels fulfilling the listed criteria or technical dossier of the manufacturer or a test report from a recognised body.		
<b>Parameter</b>	<b>Criteria</b>	<b>Test method</b>	<b>Parameter</b>	<b>Criteria</b>	<b>Test method</b>
<b>9.3 Colour fastness to</b>	At least level 3 to 4 (colour change and	ISO 105 E04 or equivalent	<b>9.3 Colour fastness to</b>	At least level 4 (colour change and staining).	ISO 105 E04 or equivalent

<b>perspiration (acid, alkaline)</b>	staining).  Level 3 when fabrics are both dark coloured (standard depth > 1/1) and made of regenerated wool or more than 20 % silk.		<b>perspiration (acid, alkaline)</b>	Level 3 to 4 when fabrics are both dark coloured (standard depth > 1/1) and made of regenerated wool or more than 20 % silk.	
<b>Verification:</b> All products must be tested to standard ISO 105 E04 or equivalent. Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted such as other private or national textile labels fulfilling the listed criteria or technical dossier of the manufacturer or a test report from a recognised body.			<b>Verification:</b> All products must be tested to standard ISO 105 E04 or equivalent. Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted such as other private or national textile labels fulfilling the listed criteria or technical dossier of the manufacturer or a test report from a recognised body.		
<b>Parameter</b>	<b>Criteria</b>	<b>Test method</b>	<b>Parameter</b>	<b>Criteria</b>	<b>Test method</b>
<b>9.4 Colour fastness to wet rubbing</b>	At least level 2 to 3.  Level 2 is allowed for indigo dyed denim.	ISO 105 X12 or equivalent	<b>9.4 Colour fastness to wet rubbing</b>	At least level 3.  Level 2 to 3 is allowed for indigo dyed denim.	ISO 105 X12 or equivalent
<b>Verification:</b> All products must be tested to standard ISO 105 X12 or equivalent. Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted such as other private or national textile labels fulfilling the listed criteria or technical dossier of the manufacturer or a test report from a recognised body.			<b>Verification:</b> All products must be tested to standard ISO 105 X12 or equivalent. Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted such as other private or national textile labels fulfilling the listed criteria or technical dossier of the manufacturer or a test report from a recognised body.		
<b>Parameter</b>	<b>Criteria</b>	<b>Test method</b>	<b>Parameter</b>	<b>Criteria</b>	<b>Test method</b>
<b>9.5 Colour fastness to dry rubbing</b>	At least level 4.  Level 3 to 4 is allowed for indigo dyed denim.	ISO 105 X12 or equivalent	<b>9.5 Colour fastness to dry rubbing</b>	At least level 4 to 5.  Level 4 is allowed for indigo dyed denim.	ISO 105 X12 or equivalent
<b>Verification:</b> All products must be tested to standard ISO 105 X12 or equivalent. Products holding a Type 1 ecolabel certificate fulfilling the			<b>Verification:</b> All products must be tested to standard ISO 105 X12 or equivalent. Products holding a Type 1 ecolabel certificate fulfilling the		

<p>listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted such as other private or national textile labels fulfilling the listed criteria or technical dossier of the manufacturer or a test report from a recognised body.</p>			<p>listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted such as other private or national textile labels fulfilling the listed criteria or technical dossier of the manufacturer or a test report from a recognised body.</p>		
Parameter	Criteria	Test method	Parameter	Criteria	Test method
<p><b>9.6 Colour fastness to light</b></p>	<p>For fabrics intended for furniture, curtains or drapes, at least level 4 to 5.</p> <p>For all other products at least level 4.</p> <p>Level 4 is allowed when fabrics intended for furniture, curtains or drapes are both light coloured (standard depth &lt; 1/12) and made of more than 20 % wool or other keratin fibres, or more than 20 % silk, or more than 20 % linen or other bast fibres.</p>	<p>ISO 105 B02 or equivalent</p>	<p><b>9.6 Colour fastness to light</b></p>	<p>For fabrics intended for furniture, curtains or drapes, at least level 5.</p> <p>For all other products at least level 4 to 5.</p> <p>Level 4 to 5 is allowed when fabrics intended for furniture, curtains or drapes are both light coloured (standard depth &lt; 1/12) and made of more than 20 % wool or other keratin fibres, or more than 20 % silk, or more than 20 % linen or other bast fibres.</p>	<p>ISO 105 B02 or equivalent</p>
<p><b>Verification:</b> All products must be tested to standard ISO 105 B02 or equivalent. Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted such as other private or national textile labels fulfilling the listed criteria or technical dossier of the manufacturer or a test report from a recognised body.</p>			<p><b>Verification:</b> All products must be tested to standard ISO 105 B02 or equivalent. Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted such as other private or national textile labels fulfilling the listed criteria or technical dossier of the manufacturer or a test report from a recognised body.</p>		

AWARD CRITERIA	AWARD CRITERIA
<p>Additional points will be awarded in proportion of:</p> <p><b>1. Organically produced cotton or other natural fibres (see explanatory note)</b></p> <p>Tenderers must indicate the proportion of cotton or other natural fibres used in the final product by weight deriving from organic production. To be considered as such the crop at the origin of the fibre must be produced in compliance with Regulation (EC) No 834/2007.</p> <p><b>Verification:</b> The supplier must provide evidence of the origin of the fibres used and the organic nature of their production, such as the EU organic logo or approved national logos for organic production.</p>	<p>Additional points will be awarded in proportion of:</p> <p><b>1. Organically produced cotton or other natural fibres (see explanatory note)</b></p> <p>Tenderers must indicate the proportion of cotton or other natural fibres used in the final product by weight deriving from organic production. To be considered as such the crop at the origin of the fibre must be produced in compliance with Regulation (EC) No 834/2007.</p> <p><b>Verification:</b> The supplier must provide evidence of the origin of the fibres used and the organic nature of their production, such as the EU organic logo or approved national logos for organic production.</p>
<p>Additional points will be awarded in proportion of:</p> <p><b>2. Recycled fibres</b></p> <p>Tenderers must indicate the proportion of the product by weight made of recycled fibres, i.e. fibres originating only from cuttings from textile and clothing manufacturers or from post-consumer waste (textile or otherwise).</p> <p><b>Verification:</b> The supplier must provide evidence of the origin of the recycled fibres used.</p>	<p>Additional points will be awarded in proportion of:</p> <p><b>2. Recycled fibres</b></p> <p>Tenderers must indicate the proportion of the product by weight made of recycled fibres, i.e. fibres originating only from cuttings from textile and clothing manufacturers or from post-consumer waste (textile or otherwise).</p> <p><b>Verification:</b> The supplier must provide evidence of the origin of the recycled fibres used.</p>

## **Explanatory notes**

### **Type I or ISO 14024 ecolabels**

The Type I or ISO 14024 ecolabels are those where the underlying criteria are set by an independent body and which are monitored by a certification and auditing process. As such they are a highly transparent, reliable and an independent source of information. These labels have to meet the following conditions:

- The requirements for the label are based on scientific evidence
- The ecolabels are adopted with the participation of all stakeholders, such as government bodies, consumers, manufacturers, distributors and environmental organisations
- They are accessible to all interested parties.

In public procurement, procurers may require that the criteria underpinning a certain ecolabel must be met, and that the ecolabel may be used as one form of proof of compliance. They are however not allowed to request that a product carries an ecolabel. Moreover, procurers may only use ecolabel criteria which refer to characteristics of the product or service itself or production processes, not those relating to the general management of the company.

### **Proof of compliances**

Where the verification for the criteria states that other appropriate means of proof can be used, this could include a technical dossier from the manufacturer, a test report from a recognised body, or other relevant evidence. The contracting authority will have to satisfy itself on a case by case basis, from a technical/legal perspective, whether the submitted proof can be considered appropriate.

### **Organically produced cotton or other natural fibres and recycled fibres**

Requiring a certain percentage of organically produced cotton or other natural fibres and recycled fibres can lead to a substantial reduction of the environmental impact. However, it is important to note that the supply of these products is still limited. The GPP criteria therefore propose not to include requirements in the technical specifications, but in the award criteria. However, if the contracting authority estimates - possibly after a market search - that the organic/recycled products market for the textiles to be purchased is sufficiently developed, this can also be included in the technical specifications by asking for a certain percentage of the textiles to meet these requirements. Moreover, points at the award stage could be given for an additional percentage of organic/recycled products.

### **Pesticides**

1. Most of these pesticides listed in the table are already banned from placing on the market and use.
2. Pentachlorophenol is already banned from pesticide applications in the group of plant protection products and severely restricted for other pesticide applications including biocides applications.

## Dyes and Colourants

Restrictions on the marketing and use of the blue colourant Index No 611-070-00-2 is specifically covered by Commission Directive 2003/3/EC.

**Additional criteria** (production process and fibre-specific criteria) based on the EU Ecolabel are also suggested. However, it is important to note that as there are currently few products on the market which carry the EU Ecolabel for textiles, the contracting authority should carry out a market search to check prices and availability before applying these criteria in the specifications. Alternatively they could be used as award criteria.

Where the following fibres make up more than 5% by weight of the total weight of the textile fibres in the product, the relevant criteria of the EU Ecolabel must be met (full criteria document available at:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:197:0070:0086:EN:PDF>

- Acrylic (criterion 1)
- Cotton and other natural cellulosic side fibres (including kapok) (criterion 2). Products deriving from organic production will be automatically deemed to comply.
- Elastane (criterion 3).
- Flax and other bast fibres (including hemp, jute and ramie) (criterion 4).
- Greasy wool and other keratin fibres (including wool from sheep, camel, alpaca, goat) (criterion 5).
- Man-made cellulosic fibres (including viscose, lyocell, acetate, cupro, triacetate) (criterion 6).
- Polyamide (criterion 7).
- Polyester (criterion 8).
- Polypropylene (criterion 9).

**Verification:** Tenderers must provide a list of all fibres that make up more than 5% by weight of the total weight of the textile fibres in the product, together with appropriate documentation demonstrating that the relevant criteria are met. Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted such as other private or national textile labels fulfilling the listed criteria or technical dossier of the manufacturer or a test report from a recognised body.

Products must meet the following criteria of the EU Ecolabel related to chemicals and processing methods (full criteria document available at:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:197:0070:0086:EN:PDF>

- Auxiliaries and finishing agents for fibres and yarns (criterion 10).
- Auxiliary chemicals (criterion 14).
- Detergents, fabric softeners and complexing agents (criterion 15).



- Bleaching agents (criterion 16).
- Impurities in dyes (criterion 17).
- Impurities in pigments (criterion 18).
- Waste water discharges from wet-processing (criterion 27).

**Verification:** Tenderers must provide a list of all fibres that make up more than 5% by weight of the total weight of the textile fibres in the product, together with appropriate documentation demonstrating that the relevant criteria are met. Products holding a Type 1 ecolabel certificate fulfilling the listed criteria will be deemed to comply. Other appropriate means of proof shall also be accepted such as other private or national textile labels fulfilling the listed criteria or technical dossier of the manufacturer or a test report from a recognised body.

**Award criteria:** Contracting authorities will have to indicate in the contract notice and tender documents how many additional points will be awarded for each award criterion. Environmental award criteria should, altogether, account for at least 15 % of the total points available.

## **Cost Considerations**

A Commission study on the Costs & Benefits of GPP in 2007, examined the cost implications of purchasing green (ecolabelled) cleaning products in the textiles sector – looking at the purchases of workwear.

Unfortunately as there were hardly any products on the market carrying the European Ecolabel relevant for contracting authorities in the areas researched (in fact only one supplier), it was not possible to find comparative information.

Although in the private sector purchases of organic clothing tend to be approximately twice as expensive, the one example of public procurement identified (City Police of Zürich) indicated that the price differences for police uniforms were negligible – possibly as the costs for textile finishing are lower than for conventional products, offsetting the additional price paid for organic fibres.

Additionally the Zürich case study indicated that the quality and user comfort of the green alternative is better than that of the conventional one.

## **Life Cycle Assessment**

A report commissioned by Defra in the UK in April 2010 has used life cycle assessment to determine the relative environmental impacts of textile fibres using the indicators of energy use, water use, greenhouse gas emissions, waste water and direct land use. These are summarised in the table below:

	<b>Energy use</b>	<b>Water use</b>	<b>Greenhouse gases</b>	<b>Waste water</b>	<b>Direct land use</b>
Decreasing environmental impact ↓	Acrylic Nylon Polyester/PTT <i>Regen. cellulosic (viscose, Modal)</i> PLA/Cotton/ Lyocell Wool <i>Natural bast fibres (nettle, hemp, flax)</i>	Cotton Silk Nylon <i>Regen. cellulosic</i> Acrylic Hemp Wool <i>Natural bast fibres</i> Polyester	Nylon Polyester Lyocell PLA Viscose Modal Cotton <i>Natural bast fibres</i> Wool	Wool <i>Regen. cellulosic</i> <i>Natural bast fibres</i> Nylon Polyester	Wool Ramie Cotton Flax Hemp Viscose and Modal Jute PLA Lyocell