# Technical criteria EYEWEAR FRONT

## 1. Resource extraction

***Appearance:*** ***Raw materials***

***Description:*** ***Use of sustainable raw materials and to which a circular economy logic is applied***

| **The following criterion applies only to fronts containing wood and cork** | | | |
|---|---|---|---|
| **Criterion 1** | FSC/PEFC certification for the front | | |
| **How to measure** | The criterion is fulfilled if the materials are certified. | | |
| **Thresholds** | **Gold' level threshold** | **Silver' level threshold** | **Bronze' level threshold** |
| | Yes | Yes | Yes |
| **How it occurs** | The company must provide proof of the certifications issued by the supplier. | | |

**The following three criteria are alternative to each other:**

| **Criterion 2A** | Percentage of recycled material in the front | | |
|---|---|---|---|
| **How to measure** | Summation for each component of the percentage of recycled content of each component by the weight of the component, compared to the total weight of the front<br>$$\%\ recycled\ material = \sum \frac{\%\ recycled\ material\ X\ component\ weight}{front\ weight}$$ | | |
| **Thresholds** | **Gold' level threshold** | **Silver' level threshold** | **Bronze' level threshold** |
| | > 90% | > 75% | > 50% |
| **How it occurs** | The company must provide evidence of how the calculation was applied and how the quantities were measured.<br>The content of recycled materials must be demonstrated in the following ways:<br>• GRS certification<br>• Self-declaration according to ISO 14021<br>• Other equivalent documentation to be assessed by the verifier<br>The verifier may proceed to weigh the individual components and the front to verify the calculations. | | |

| **Criterion 2B** | Percentage of material of biogenic origin in the front end | | |
|---|---|---|---|
| **How to measure** | The criterion is measured by calculating the sum of the percentage of biogenic material content of each component by the weight of the component, compared to the total weight of the front end<br>$$\%\ biogenic\ material = \sum \frac{\%\ biogenic\ material\ X\ component\ weight}{front\ weight}$$ | | |
| **Thresholds** | **Gold' level threshold** | **Silver' level threshold** | **Bronze' level threshold** |
| | > 50% | > 40% | > 30% |
| **How it occurs** | The company must present the calculation made according to the formula above ("How is it measured").<br>The content of materials of biogenic origin must be demonstrated in the following ways:<br>• ISCC<br>• REDcert<br>• Other equivalent documentation to be assessed by the verifier<br>The verifier may proceed to weigh the individual components and the front to verify the calculations. | | |

| Criterion 2C | Percentage of recycled and biogenic material in the front | | |
|---|---|---|---|
| **How to measure** | The criterion is measured by calculating the sum for each component of the percentage of recycled and biogenic material content of each component by the weight of the component, compared to the total weight of the front.<br>$$\%\ recycled\ and\ biogenic\ material = \sum \frac{(\%\ bio\ material + \%\ recycled\ material) \times componentweight}{front\ weight}$$ | | |
| **Thresholds** | **Gold' level threshold** | **Silver' level threshold** | **Bronze' level threshold** |
| | >80% | >50% | >30% |
| **How it occurs** | The company must provide evidence of how the calculation was applied and how the quantities were measured.<br>The content of recycled materials must be demonstrated in the following ways:<br>• ISCC<br>• REDcert<br>• GRS<br>• Other equivalent documentation to be assessed by the verifier<br>The verifier may proceed to weigh the individual components and the front to verify the calculations. | | |

## 2. Production

***Appearance:*** ***Scrap production***

***Description:*** ***Minimisation and sustainable management of processing residues, production process waste***

**The following criterion applies only to fronts made of metal, nylon and other injected materials (PC, CP, Tritan, etc.):**

| Criterion 3 | Percentage of scrap produced |
|---|---|
| **How to measure** | The criterion is measured by applying the following formula:<br>$$\%\ produced\ scraps = (1 - \frac{output\ product\ weight}{input\ material\ weight}) \times 100$$ |

| | | | |
|---|---|---|---|
| | Both the weight of the output product and the weight of the input material must refer to the same production interval (e.g. production batch, daily production, annual...).<br>The weight of the output product is calculated as the weight of the individual component multiplied by the number of pieces produced. | | |
| **Thresholds** | **Gold' level threshold** | **Silver' level threshold** | **Bronze' level threshold** |
| | < 10% | < 20% | < 30% |
| **How it occurs** | The company must provide evidence of how the calculation was applied and how the quantities were measured.<br>Data from waste management systems and waste registers may be presented to support the verification.<br>The verifier may proceed by weighing the individual components to verify the calculations. | | |

| **The following criterion applies only to fronts made of materials excluded from the previous criterion, such as acetate, titanium, wood, carbon, milled metal, etc:** | | | |
|---|---|---|---|
| **Criterion 4** | Percentage of offcuts that are a by-product and/or sent to a specialised recycling company | | |
| **How to measure** | The criterion is measured by applying the following formula:<br>$$\%\, recycling\ scraps/subproducts = \frac{rec.scraps/subproducts\ weight}{produced\ scraps\ weight} \times 100$$<br>Both the weight of waste sent for recycling/subproduced and the weight of waste produced must refer to the same production interval (e.g. production batch, daily production, annual...).<br><br>It only applies to the front and rods as predominant components. | | |
| **Thresholds** | **Gold' level threshold** | **Silver' level threshold** | **Bronze' level threshold** |
| | > 95% | > 80% | > 70% |
| **How it occurs** | The information can be obtained from the documentation provided by the waste management system if the scrap falls into this category.<br>The verifier, in this case, verifies that the data used in the calculation are consistent with the operating procedures and practices adopted by the company in waste management.<br>In general, the company must, as far as possible, limit the quantities used for the calculation to the individual material actually used in the product to be certified by isolating it from flow data. | | |

***Appearance:*** ***Handling of defective products***

***Description:*** ***Valorisation of defective products for material recycling***

| Criterion 5 | Existence of a procedure for the recovery of materials through re-use, put back into production | | |
|---|---|---|---|
| **How to measure** | This criterion is fulfilled if procedures are in place for the re-use or re-production of components. | | |
| **Thresholds** | **Gold' level threshold** | **Silver' level threshold** | **Bronze' level threshold** |
| | Yes | Yes | No |
| **How it occurs** | The verifier verifies the presence and implementation of an appropriate procedure.<br>The procedure must be included either within a certified company management system or, in any case, be subject to an internal audit procedure. | | |

| Criterion 6 | Send defective products for recycling by homogeneous fractions | | |
|---|---|---|---|
| **How to measure** | The criterion is fulfilled on the basis of the actual recycling of non-repairable defective products by homogeneous fractions. | | |
| **Thresholds** | **Gold' level threshold** | **Silver' level threshold** | **Bronze' level threshold** |
| | Yes | Yes | No |
| **How it occurs** | The information must be obtained from the documentation provided by the waste management system.<br>The verifier verifies that the data used in the calculation is consistent with the operational procedures and practices adopted by the company in waste management. | | |

***Appearance:*** ***Consumption of resources (energy, water) in the production process***

***Description:*** ***Maximising efficiency in the use of natural resources***

| Criterion 7 | Average water consumption (l) per product front |
|---|---|
| **How to measure** | The criterion must be assessed for the specific product (or product family) being certified.<br>In general, the criterion is measured by relating the volume of water disposed of in the production process to the number of parts produced:<br>$$water\ consumption\ by\ front = \frac{disposed\ water\ volume}{number\ of\ produced\ items}$$<br>The evaluation can be carried out in one of the following ways:<br>1) Direct measurement of the water disposed of by the processes concerned by means of dedicated meters or sensors, then relating the measured quantity to the number of pieces treated in the measuring interval. |

<table>
<tr><td></td><td colspan="3">2) Allocation of the general quantity of disposed water to the specific product, using appropriate parameters to adequately characterise the disposed water relative to the specific product in relation to the other company products (e.g. weight, processing time, number of cycles, etc.). The calculation model used will be subject to evaluation by the verifier.<br><br>The criterion applies to the washing and tumbling phases.<br>As 'disposed water' should be considered:<br>- water sent for treatment within the plant and then for discharge into the sewerage system or surface water body;<br>- water discharged into the sewerage system;<br>- water managed as waste and sent for treatment in external plants.</td></tr>
<tr><td rowspan="2">Thresholds</td><td>Gold' level threshold</td><td>Silver' level threshold</td><td>Bronze' level threshold</td></tr>
<tr><td>< 0,3 l</td><td>< 1 l</td><td>< 2 l</td></tr>
<tr><td>How it occurs</td><td colspan="3">The company must provide evidence of how the calculation was applied and how the quantities were measured.</td></tr>
</table>

| **Criterion 8** | Average energy consumption (kWh) per spectacle produced |
|---|---|
| **How to measure** | The criterion must be assessed for the specific product (or product family) being certified.<br>In general, the criterion is measured by relating the electrical energy used in the process to the number of parts produced:<br><br>$$energy\ consumption\ by\ front = \frac{total\ electrical\ energy\ consumption}{number\ of\ produced\ item}$$<br><br>The evaluation can be carried out in one of the following ways:<br>1) Direct measurement of the consumption of the processes concerned by means of dedicated meters, sensors or current clamps, then relating the measured consumption to the number of parts produced in the measuring interval.<br>2) Allocation of general consumption to the specific product, using appropriate parameters to adequately characterise consumption relative to the specific product in relation to other company products (e.g. weight, processing time, number of cycles, machine power, etc.). The calculation model used will be subject to evaluation by the verifier.<br>3) Using the following standard formula:<br><br>$$Energy\ consumption = \sum \frac{Power\ machine\ *\ working\ time}{number\ of\ processed\ items}$$<br><br>The formula sums up the consumption of the different work phases considering, for each phase, the power of the machine used, the duration of the machining operation and the number of parts produced in the machining operation. |

<table>
<tr><td></td><td colspan="3">The steps to be considered in energy consumption depend on the material of the glasses and are as follows:<br>- Metals: tumbling<br>- Milled materials: cutting, tumbling, animating<br>- Injected: printing, tumbling</td></tr>
<tr><td rowspan="2">Thresholds</td><td>Gold' level threshold</td><td>Silver' level threshold</td><td>Bronze' level threshold</td></tr>
<tr><td>- Metals: <0.1kWh<br>- Milled materials: <0.5 kWh<br>- Injected: <0.7 kWh</td><td>- Metals: <0.2 kWh<br>- Milled materials: <0.75 kWh<br>- Injected: <0.9 kWh</td><td>- Metals: <0.3 kWh<br>- Milled materials: <1.0 kWh<br>- Injected: <1.1 kWh</td></tr>
<tr><td>How it occurs</td><td colspan="3">The company must provide evidence of how the quantities were measured and how the calculation was applied.<br>The verifier will be able to verify the data used by examining the sources, which can be meter data, energy bills.</td></tr>
</table>

<table>
<tr><td>Criterion 9</td><td colspan="3">Use of electricity from renewable sources for production</td></tr>
<tr><td>How to measure</td><td colspan="3">The criterion is measured by applying the following formula:<br>$$\%\ renewable\ energy = \frac{self\ produced\ or\ purchased\ renewable\ energy}{total\ energy\ consumption}$$<br>Both the amount of renewable energy and the amount of total energy consumed must refer to the last complete calendar year.<br><br>The calculation must be carried out at the level of the company applying for certification.</td></tr>
<tr><td rowspan="2">Thresholds</td><td>Gold' level threshold</td><td>Silver' level threshold</td><td>Bronze' level threshold</td></tr>
<tr><td>> 50% self-produced</td><td>>15% self-produced + > 25% purchased<br>or<br>100% purchased</td><td>> 50% purchased</td></tr>
<tr><td>How it occurs</td><td colspan="3">The company must provide evidence of how the quantities were measured and how the calculation was applied.<br>The verifier will be able to verify the data used by examining the sources, which can be meter data, energy invoices, certificates of origin issued by the producer.</td></tr>
</table>

***Appearance:*** ***Surface treatments***

***Description:*** ***Efficiency in surface treatment processes***

**The following criterion applies only to fronts that undergo PVD (physical vapour deposition) or galvanic treatments**

| **Criterion 10** | Sustainability of coating processes | | |
|---|---|---|---|
| **How to measure** | The criterion is evaluated alternatively in the case of PVD treatment or galvanic treatment.<br><br>In the case of PVD treatment, the criterion is measured by the presence or absence of the process<br><br>In the case of galvanic treatment, the criterion is measured by applying the following formula:<br><br>$$\%\ replenished\ water = \frac{replenished\ water\ quantity}{volume\ of\ water\ used} \times 100$$<br><br>The criterion must be evaluated on an annual basis. | | |
| **Thresholds** | **Gold' level threshold** | **Silver' level threshold** | **Bronze' level threshold** |
| | PVD yes<br>or<br>make-up < 5% | PVD no<br>and<br>make-up < 10%. | PVD no<br>and<br>make-up < 15% |
| **How it occurs** | For galvanic treatments, the company must provide evidence of how the calculation was applied and how the quantities were measured, including a definition of the production range considered.<br><br>For PVD treatment, the company must provide evidence that the product has undergone the treatment. | | |

**The following criterion applies only to spectacles that are subject to the application of varnish:**

| **Criterion 11** | Sustainability of painting processes |
|---|---|
| **How to measure** | The criterion is evaluated alternatively in the case of water- or solvent-based painting.<br><br>In the case of water-based coating, the criterion is to indicate whether the process is present or not.<br><br>In the case of solvent painting, the criterion involves the measurement of VOC emissions into the atmosphere. |

| | | | |
|---|---|---|---|
| **Thresholds** | **Gold' level threshold** | **Silver' level threshold** | **Bronze' level threshold** |
| | Water painting yes<br>or<br>VOC cl. I < 1 mg/Nm3<br>VOC cl. II < 5 mg/Nm3<br>VOC cl. III < 25 mg/Nm3<br>VOC cl. IV < 50 mg/Nm3<br>VOC cl. V < 100 mg/Nm3 | Water painting no<br>and<br>VOC cl. I < 2 mg/Nm3<br>VOC cl. II < 10 mg/Nm3<br>VOC cl. III < 50 mg/Nm3<br>VOC cl. IV < 100 mg/Nm3<br>VOC cl. V < 200 mg/Nm3 | Water painting no<br>and<br>VOC cl. I < 4 mg/Nm3<br>VOC cl. II < 15 mg/Nm3<br>VOC cl. III < 100 mg/Nm3<br>VOC cl. IV < 200 mg/Nm3<br>VOC cl. V < 400 mg/Nm3 |
| **How it occurs** | For water-based coatings, the company must provide evidence that the product has undergone the treatment itself.<br><br>For solvent painting, the verifier verifies the stack analysis carried out in accordance with the applicable regulations. | | |

***Appearance:*** ***Transport***
***Description:*** ***Minimisation of material transport impacts along the supply chain***

| | | | |
|---|---|---|---|
| **Criterion 12** | Distance travelled by direct suppliers | | |
| **How to measure** | Percentage of transport carried out by direct suppliers at a distance of less than 250 km from the production site.<br><br>Transport means those of:<br>- Raw materials (one-way)<br>- Components (one-way)<br>- Products from toll manufacturing (adding round trip distance) | | |
| **Thresholds** | **Gold' level threshold** | **Silver' level threshold** | **Bronze' level threshold** |
| | > 90% | > 70% | > 50% |
| **How it occurs** | The company must provide evidence of the list of first-tier suppliers and their distances from the production site, also by consulting the Transport Documents (DDT). | | |

***Appearance:*** ***Supply chain responsibility***
***Description:*** ***Responsible supply chain***

<table>
<tr><td>Criterion 13</td><td colspan="3">Compliance with conventions and commitments to respect human rights and the environment along the supply chain</td></tr>
<tr><td>How to measure</td><td colspan="3">The criterion is fulfilled if it can be certified that the production chain respects the principles of corporate social responsibility.</td></tr>
<tr><td rowspan="2">Thresholds</td><td>Gold' level threshold</td><td>Silver' level threshold</td><td>Bronze' level threshold</td></tr>
<tr><td>Yes</td><td>No, but the company audits suppliers</td><td>No, but the company audits suppliers</td></tr>
<tr><td>How it occurs</td><td colspan="3">For each supplier, the company must produce evidence of the application of corporate social responsibility principles by presenting documentation proving the adoption of one or more of the main standards or adherence to nationally and internationally recognised social responsibility programmes.<br><br>The following standards and programmes are considered valid:<br><br>• SA 8000:2014 - Social Accountability 8000 International Standard by Social Accountability International<br>• UNI ISO 26000:2010 - A guide to social responsibility<br>• GRI Standards Guidelines, prepared by the Global Reporting Initiative<br>• Accession to the UN Global Compact<br>• EcoVadis recognition (with an overall score of at least 40)<br>• B-Corp certification (www.bcorporation.net)<br>• Sedex Member Ethical Trade Audit Programme (Sedex SMETA)<br>• Responsible Care' programme - https://www.federchimica.it/servizi/sviluppo-sostenibile/responsible-care)<br>• Other equivalent documentation to be assessed by the verifier<br><br>Alternatively, for Silver and Bronze levels, the company is required to implement a supplier audit programme in which social sustainability aspects are assessed.</td></tr>
</table>

## 3. Distribution

***Appearance:*** ***Packaging***

***Description:*** ***Using sustainable packaging***

<table>
<tr><td>Criterion 14</td><td colspan="3">Percentage of FSC/PEFC or recycled material in packaging</td></tr>
<tr><td>How to measure</td><td colspan="3">The criterion is calculated by applying the following formula:<br><br>$$\%\ FSC.PEFC\ or\ ricycled\ material\ = \frac{FSC.PEFC\ or\ ricycled\ material\ weight}{packaging\ weight} \times 100$$</td></tr>
<tr><td rowspan="2">Thresholds</td><td>Gold' level threshold</td><td>Silver' level threshold</td><td>Bronze' level threshold</td></tr>
<tr><td>> 95%</td><td>> 85%</td><td>> 75%</td></tr>
</table>

| | |
|---|---|
| **How it occurs** | The company must provide evidence of how the calculation was applied and how the quantities were measured.<br>Only materials with FSC/PEFC certification or with a proven recycled content can be considered in the numerator:<br><br>• GRS certification<br>• Self-declaration according to ISO 14021<br>• FSC Recycled<br>• Other equivalent documentation to be assessed by the verifier |

| **Criterion 15** | Recyclability of packaging | | |
|---|---|---|---|
| **How to measure** | The criterion is measured by assessing acceptability in waste recycling chains, i.e. by calculating the percentage of recyclable raw material by applying the formula and indicating whether the packaging is disassemblable.<br><br>$$\%\ recycling\ material = \frac{recycling\ material\ weight}{packaging\ weight} \times 100$$<br>Flows that are considered recyclable are those for which a recycling system is sufficiently widespread that the end-of-life can reasonably be considered to be sent to that system.<br><br>A monomaterial is defined in the regulations as a material with less than 5 per cent secondary materials. | | |
| **Thresholds** | **Gold' level threshold** | **Silver' level threshold** | **Bronze' level threshold** |
| | Single recyclable material | 100% disassemblable and recyclable | Disassemblable and recyclable > 75 per cent |
| **How it occurs** | The company must provide evidence of how the calculation was applied and how the quantities were measured. | | |

## 4. Use

***Appearance:*** ***Restricted substances***
***Description:*** ***Responsible use of potentially hazardous substances***

| **Criterion 16** | Responsible use of potentially hazardous substances | | |
|---|---|---|---|
| **How to measure** | The criterion assesses both the use phase and the use of hazardous substances during production (e.g. in surface treatments).<br><br>The criterion is fulfilled if the thresholds defined by ANFAO in its PRSL are met. | | |
| **Thresholds** | **Gold' level threshold** | **Silver' level threshold** | **Bronze' level threshold** |
| | Yes | Yes | Yes |
| **How it occurs** | The auditor will check the actual adoption of ANFAO's PRSL or otherwise verify compliance with its requirements. | | |

## 5. Disposal

***Appearance:*** ***End of life of complete spectacles***
***Description:*** ***Management of eyewear disposal with a view to the circular economy, through reuse and recovery***

| **Criterion 17** | Possibility of sorting the materials making up the front (Sorting for recycling) | | |
|---|---|---|---|
| **How to measure** | The criterion assesses the possibility of disassembling the frontlale by separating the materials of which it is composed, in order to facilitate its recycling.<br>The criterion is measured by applying the following formula:<br><br>$$\%\ separable\ materials = \frac{separable\ materials\ weight}{front\ weight} \times 100$$<br><br>Separation of materials must be possible for non-specialists using simple tools (pliers, screwdrivers, cutters, etc.). | | |
| **Thresholds** | **Gold' level threshold** | **Silver' level threshold** | **Bronze' level threshold** |
| | 100% | > 85% | > 70% |
| **How it occurs** | The company must provide evidence of the separation process and how the quantities were measured. | | |