


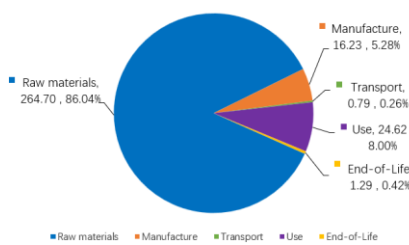
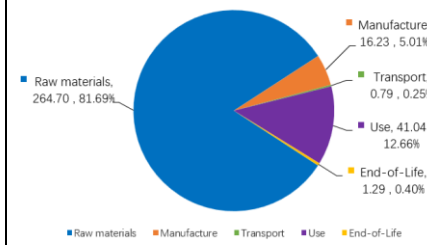


TPV PHILIPS Product Carbon Footprint (PCF) Information Sheet

| | | |
|-------------------|--|--|
| Company Name | TPV Technology Group |   |
| Manufacturer Name | MMD-Monitors & Displays Nederland B.V. | |
| Commercial Name | LCD monitor | |
| Model Number | 27B2G5500 | |
| Review Date | 2024-12-09 | |
| Issue Date | 2024-12-10 | |

| Product Environmental Attributes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|----------------|--------------------------------|----------------------------------|----------------|---------------|--------|--------|-------------|-------|-------|-----------|------|-------|-----|-------|-------|-------------|------|-------|--|--|------------|----------------------------------|----------------|---------------|--------|--------|-------------|-------|-------|-----------|------|-------|-----|-------|--------|-------------|------|-------|
| (a) Product Carbon Footprint Value: | Expected Product Lifetime (see Note 1 below) | 3 years | 286.20 kg of CO ₂ e | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 5 years | 303.04 kg of CO ₂ e | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Estimates Uncertainty | | ± 14.28% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (b) Product Picture: | (c) Life Cycle Detail by Life Stage (Pie Chart): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | <p>Expected Product Lifetime: 3 years (kg CO₂e/pcs)</p>  <table border="1"><thead><tr><th>Life Stage</th><th>Value (kg CO₂e/pcs)</th><th>Percentage (%)</th></tr></thead><tbody><tr><td>Raw materials</td><td>264.70</td><td>86.04%</td></tr><tr><td>Manufacture</td><td>16.23</td><td>5.28%</td></tr><tr><td>Transport</td><td>0.79</td><td>0.26%</td></tr><tr><td>Use</td><td>24.62</td><td>8.00%</td></tr><tr><td>End-of-Life</td><td>1.29</td><td>0.42%</td></tr></tbody></table> | | Life Stage | Value (kg CO ₂ e/pcs) | Percentage (%) | Raw materials | 264.70 | 86.04% | Manufacture | 16.23 | 5.28% | Transport | 0.79 | 0.26% | Use | 24.62 | 8.00% | End-of-Life | 1.29 | 0.42% | <p>Expected Product Lifetime: 3 years (kg CO₂e/pcs)</p>  <table border="1"><thead><tr><th>Life Stage</th><th>Value (kg CO₂e/pcs)</th><th>Percentage (%)</th></tr></thead><tbody><tr><td>Raw materials</td><td>264.70</td><td>81.69%</td></tr><tr><td>Manufacture</td><td>16.23</td><td>5.01%</td></tr><tr><td>Transport</td><td>0.79</td><td>0.25%</td></tr><tr><td>Use</td><td>41.04</td><td>12.66%</td></tr><tr><td>End-of-Life</td><td>1.29</td><td>0.40%</td></tr></tbody></table> | | Life Stage | Value (kg CO ₂ e/pcs) | Percentage (%) | Raw materials | 264.70 | 81.69% | Manufacture | 16.23 | 5.01% | Transport | 0.79 | 0.25% | Use | 41.04 | 12.66% | End-of-Life | 1.29 | 0.40% |
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Note 1:

Disclaimer:

All estimates of carbon footprint are uncertain.

This information sheet contains a description of the carbon footprint data for this declared product, which is based on estimates of the current state of the product life cycle, but is subject to known or unknown risks or uncertainties, so actual results may be different from the statement.

Note 2:

This product is based on the PAS2050:2011 & ISO 14067:2018 standard for carbon footprint inventory and calculation.

And this product use SimaPro 9.5.0.0 for PCF calculation tool. The lifecycle impact assessment methodology follows the IPCC 100-year Greenhouse Gas Emissions Assessment Method (IPCC 2021 GWP 100a) to calculate the CO₂ emission equivalent of a product from raw material extraction to product disposal (Cradle to Grave).

Note 3:

This calculation was based upon a 27B2G5500 with the assumptions and configuration described in the calculation assumptions in the next page.

Note 4:

This pie chart provides the percent contribution of the mean value for each element of the analysis for the full life cycle CO₂e impacts of the product. If individual elements displaying 0% are less than 0.1%.

TPV PHILIPS Product Carbon Footprint (PCF) Information Sheet

| Assumption Table | | | |
|--|--|----------|------------|
| Category | Element | Unit | Input |
| Product Specifics | Product Weight (with packaging) | kg | 9.77 |
| | Screen Size | inches | 27 |
| | Product Lifetime | years | 3 |
| | Standby Mode & Power-On Mode | w | 0.3 & 11.3 |
| | Estimated standby hour & usage hour | hrs | 8 & 8 |
| | Estimated total annual standby and power-on consumption | kwh | 23.2 |
| Location | Assembly Location | no unit | CN |
| | Use Location | no unit | GLO |
| Transport from Assembly to Customer | To country of use: by air | fraction | 0 |
| | To country of use: by ship | fraction | 1 |
| | To country of use: by rail | fraction | 0 |
| | To country of use: by truck | fraction | 0 |
| | In country of use: by air | fraction | 0 |
| | In country of use: by ship | fraction | 0 |
| | In country of use: by rail | fraction | 0 |
| | In country of use: by truck | fraction | 0 |
| End of Life | Waste incineration | % | 20 |
| | Material recycling | % | 80 |
| The PCF value is calculated using the specific attributes above for assembly, use and transportation mode. | | | |

Notes:

Life Cycle Analysis (LCA) can be grouped into five categories which include Raw Material, Manufacture, Transport, Use, and End-of-Life. Below is a brief description of each phase.

Raw Material: This life cycle phase captures emissions generated during the extraction, production, and transport of raw materials.

Manufacture: This life cycle phase captures emissions generated during the manufacture of subassemblies (including the product packaging) and product assembly.

Transport: Emissions included in the distribute phase include all those generated during the air, ocean or land distribute of finished or semi-finished MMD products between MMD facilities and from MMD facilities to customers.

Use: In use energy consumption is calculated in accordance with the U.S. Environmental Protection Agency's Energy Star® Typical Energy Consumption (TEC) methodology. Calculated energy consumption is then used in combination with average emissions factors for the designated country of use to calculate emissions. Estimated monitor usage days by end user are 250 days a year.

End-of-life: The recycle rate is calculated based on the company's own calculated WEEE recycle rate. It is also assumed that the balance of the product waste materials is disposed of by incineration. Emissions generated during the mechanical destruction, separation and transport of end of life materials are included in the calculation.