# Product Specification Criteria
# Single-Use Camera (PSC-ID: AC-03)

2004.09.29AC-03
2004.03.01AC-02
2002/06/13



| No. | Major key | Minor key | Class | Requirements |
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| 1 | Preconditions | Target product | Description | Single-use camera |
| 2 | | | Scope | Product and packaging included in smallest retail unit (wrapping and box)<br>However, developing accessories, straps, and other items are not included. |
| 3 | | Stage | Scope | All stages covered.<br>Note: Developing and printing processes are outside the scope, but discarding and recycling of the camera's inside and outside packaging are included. |
| 4 | Product data sheet (PDS) Input data for the LCI: Lifecycle inventory analysis | Manufacturing stage information (production information) | Product materials or ingredient makeup | Class A parts (see section 3.4 of implementation guidelines for definition of class A parts): Photographic lens, finder lens, and film (photosensitive materials excluding inside and outside packaging).<br>Product material categories<br>• Photosensitive materials: Cellulose acetate (Polyethylene naphthalate for Advanced Photo System), gelatin, silver halide (only silver is factored in)<br>• Metals: Iron, stainless steel, aluminum<br>• Plastics: According to material<br>• Paper<br>• Batteries<br>• Flash<br><br>Open recycling and reuse<br>When open recycling and reuse are included, each company can calculate these categories by creating scenarios considered appropriate, and while taking careful note of the following items. The soundness of scenario bases is subject to verification.<br>(1) Processes regarded within the scope of "indirect effects"<br>(2) Deductions and impacts within the scope of "indirect effects"<br>Note<br>PSC-AC-01: No distinction is made between direct and indirect effects with regard to recycling effectiveness. |

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| 5 | | Manufacturing stage information (production site information) | Material and energy inputs, consumption, and emissions | Manufacturing stage scope<br>• Photosensitive material manufacturing process (manufacturing of base and silver nitrate, preparation, dissolution, application)<br>• Packaging process (film cutting, punching, rolling)<br>• Camera manufacturing process (lens formation, camera assembly, film winding, packaging)<br>Input and consumption items<br>Electricity, fuel oil A, diesel fuel, kerosene, gasoline, LNG (town gas), LPG, city tap water, industrial water supply, groundwater, volatile organic compounds (VOCs)<br>Emissions<br>• Enter VOCs and items that each company deems important.<br>Others<br>• Resource inputs are amounts per product unit.<br>• When manufacturing occurs at 2 or more sites, use actual data for inter-site distribution. |
| 6 | | Distribution stage information | Product transport conditions | Final processing in Japan: Each company formulates a model assuming an average transport distance of 500 km by truck.<br>Final processing abroad: Each company develops a model for transport to Japan, and adds that distance to the above.<br>To determine the overseas transport impact, calculate the overseas production site's domestic transport and the transport to Japan, and add these to the transport impact within Japan. Each company can set transport conditions to reflect its own situation, but it must clearly describe the basis.<br>Note<br>PSC-AC-01: Overseas transport impact is not included. |
| 7 | | Usage stage information | Product usage conditions | Only discarding of packaging material is considered.<br>Use the latest recycling conditions set forth in the Container and Packaging Waste Recycling Law.<br>Recycling amount under the law is the anticipated container and packaging emissions multiplied by a coefficient.<br>• Processing impact and deduction amount are both zero.<br>Management of portions not recycled under this law involves incineration as municipal solid waste (MSW). |
| 8 | Product data sheet (PDS) Input data for the LCI: Lifecycle inventory analysis | Waste/ recycling stage information | Product waste/ recycling conditions | How to calculate reuse/recycling impact, and deduction amount<br>• For each part subject to calculation:<br>* Reuse<br>Deduction amount = potential reuse amount x recovery rate x nondefective product rate (yield)<br>Note: Recovery rate is amount recovered divided by amount domestically shipped (use industry values).<br>Assumptions for treatment are handling as MSW, with impacts being actual impacts arising in treatment or those calculated according to specified conditions. If treatment impact is not included, both treatment impact and deduction amount are zero.<br>* Recycling<br>1. Deduction amount = amount of recycled materials generated x |

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| | | | | usage rate according to application.<br>The amount of recycled materials generated = the potential recycled amount x the recovery rate x the recycling rate (yield).<br>Impacts are the actual impacts arising in treatment, or those calculated according to specified conditions.<br>If treatment impact is not included, both treatment impact and deduction amount are zero.<br>2. Open recycling/reuse<br>When open recycling and reuse are included, each company can calculate these categories by creating scenarios considered appropriate, and while taking careful note of the following items. The soundness of scenario bases is subject to verification.<br>(1) Processes regarded within the scope of “indirect effects”<br>(2) Deductions and impacts within the scope of “indirect effects”<br>Note<br>PSC-AC-01: No distinction is made between direct and indirect effects with regard to recycling effectiveness. The following quality weighting coefficients are multiplied by the amount of recycled materials recovered. When a basis can be shown for recycled material quality: Z = (price of recycled materials) / (price of new materials); when a basis cannot be shown: Z = 0.5 for metals, Z = 0.35 for other materials.<br>Camera bodies not recovered from market<br>Treatment impact and deduction amount are both zero.<br>Transport of recovered items<br>• Each company formulates a model assuming an average transport distance of 500 km by truck.<br>• When the receiving facility for recovered items is abroad, each company develops a model for transport from Japan, and adds that distance to the above.<br>Inter-process transport<br>• When 2 or more sites are involved, use actual data for inter-site distribution. |
| 9 | Product Environmental Information Disclosure Sheet (PEIDS) | Inventory analyses | Lifecycle inventory calculation rules | When open recycling and reuse are included, calculate direct and indirect effects separately and express the indirect portion as “recycling effectiveness.” On the PEIDS, put the indirect effect total in the “Recycling Effectiveness” space. Put the recycling effectiveness breakdown in the PEIDS explanation space.<br>Note<br>PSC-AC-01: No distinction is made between direct and indirect effects with regard to recycling effectiveness. |
| 10 | | Impact analysis | Additional impact category | “Photochemical oxidants” item added.<br>“Ozone layer depletion” and “eutrophication” items deleted. |

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| 11 | Breakdown data sheet (PDS-related) | Data processing | Allocation rule | Not unified; each company decides as it sees fit. |
| 12 | | Data collection | Coverage | (1) Data directly related to product manufacturing, including air conditioning, lighting, and other utilities, are included.<br>(2) When data are unobtainable, you may substitute data (including intensities) that include the conditions used in designing or planning.<br>(3) When there are 2 or more production facilities, a representative facility may be used. |
| 13 | | | Cut-off rules | (1) Additives used in film manufacturing<br>(2) Manufacturing losses<br>(3) Sub-materials<br>(4) Transport to feedstock manufacturing sites<br>(5) Intra-site transport<br>* Sub-materials: Defined as materials input and discarded at manufacturing sites, and not shipped with products. |
| 14 | Breakdown data sheet (PEIDS-related) | Database | Intensity database selection | 1. Use PET intensity for the manufacture of acetylcellulose and polyethylene naphthalate.<br>2. Use methanol intensity for VOC manufacturing.<br>3. Use silver intensity for silver halide manufacturing.<br>4. Use assembled circuit board intensity for flash manufacturing.<br>5. Use styrene butadiene rubber intensity for gelatin manufacturing.<br>See the “List of Intensities” for the names of these intensities. |
| 15 | | | Intensity database addition | Silver (added to common intensities). |
| 16 | | | Addition of characterization factor | Added “photochemical oxidants” (already added to common characterization factors). |
| 17 | Product environmental information | Product specification | | Main functions: Format (135 or APS), has flash or not, number of photographs, film speed<br>Auxiliary functions: Waterproof, autodate, close-up, telephoto, autoflash metering, etc. |
| 18 | | Data disclosure | | Follow the guidelines.<br>When open recycling and reuse are included:<br>• Show recycling effectiveness with dotted lines independently for each stage, without integrating actual impact;<br>• Enter the recycling effectiveness breakdown in the margin.<br>Note<br>PSC-AC-01: No distinction is made between direct and indirect effects with regard to recycling effectiveness. |
| 19 | Other environment-related | Optional items | | The following may be entered.<br>(1) Type I and/or Type III environmental label<br>(2) Acquisition of ISO 14001 certification |

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| | information | | | (3) Certificates, approvals, or awards from national or industry organizations<br>(4) Information on hazardous substances |