

O21 Labels for rigid plastic packaging and flexible plastic pouches: Design for recycling of packaging

- Containers in polyethylene (PE) and polypropylene (PP), must have a label with the same plastic material as the packaging (i.e. PE-label on PE packaging and PP-label on PP packaging).
- Packaging in polyethylene terephthalate (PET) must have a label of a different plastic material, with a density $< 1.0 \text{ g/cm}^3$.

Note: For the time being, cPET labels are not allowed. Nordic Ecolabelling will consider to allow cPET-labels with the appropriate specifications, if cPET labels become endorsed by EPBP (The European PET Bottle Platform for PET bottles) and/or by RecyClass (www.recyclclass.eu).

- PET-G (polyethylene terephthalate glycol modified), polyvinyl chloride (PVC) and other halogenated plastics must not be used in labels.
- Paper labels must not be used.
- Metallized labels/shrink film labels are not permitted.
- For labels of different material than the packaging (PET containers): Labels must not cover more than 60% of the container. The calculation of the percentage shall be based on the two-dimensional profile of the container i.e. the area of the top and bottom of the packaging and the sides of a box/ container/bottle/can shall not be included in the calculation. If the label on the front of pack and back of pack are of different size, the maximum percentage of 60% shall be fulfilled for each side separately. For a cylindrical bottle, the calculation can also be based on the three-dimensional profile exclusive bottom and top of the bottle.
- Direct print on the container is not permitted except for date codes, batch codes and UFI (Unique Formula Identifier).

Label means "traditional label", shrink film label/sleeve, direct print etc.

- ☒ Label specifications showing the material used and density. Appendix 4 Declaration from the manufacturer(s) of the packaging can be used as part of the documentation.
- ☒ Declarations that PET-G, PS, PVC and other halogenated plastics, paper, aluminium and other metals have not been used. Appendix 4 can be used.
- ☒ For labels of different material than the packaging (PET containers): Calculation of label size compared to the surface of the container.
- ☒ Declaration from the applicant that direct print is not used except for date codes, batch codes and UFI. Appendix 2 can be used.

Background to requirement O21

The label requirements are based on the findings in a label project run by Nordic Ecolabelling in the summer/autumn of 2020 for laundry detergents, cleaning products and hand dishwashing detergents. Key players within the recycling industry in Sweden (FTI), Finland (Uusiomuovi), Norway (RoAF, Mepex, Norner, Grønt Punkt Norge) and Denmark (Plastindustrien) were consulted, in order to ensure relevant requirements with respect to the current Nordic waste streams. Furthermore, major label producers and suppliers, as well all Nordic Swan Ecolabel licensees within the above-mentioned product categories were consulted, to ensure achievable requirements.

PE and PP containers must have labels of the same plastic material, in order to facilitate correct sorting by the NIR sensor.

PET labels must have labels with density <1.0 g/ml to ensure correct separation in the float/sink bath. (PET has a density > 1.0 g/ml). As a consequence, for the time being, cPET labels are not allowed. Nordic Ecolabelling will consider to allow cPET-labels with the appropriate specifications, if cPET labels become endorsed by EPBP (The European PET Bottle Platform for PET bottles) and/or by RecyClass (www.recyclclass.eu).

PET-G labels/shrink film labels are excluded since PET-G is problematic in recycling in large quantities as it is not compatible with the PET commonly used for the containers (A-PET). PVC and other halogenated plastics are excluded since they lead to adverse environmental impacts in waste handling.

Paper labels are prohibited because residue paper fibres cause quality issues in the recycled plastic.

If the NIR sensor at the sorting facility hits the label instead of the bottle, the bottle may end up in the rejected fraction. Therefore, labels and shrink film labels of different materials than the container must not cover more than 60% of the container surface.

Laser printing is permitted as there are no inks used in the process.

Direct printing on the container is restricted, as ink residues lower the quality of the recycled plastic.

Metallized labels can be detected by metal detectors causing the packaging to be sorted to reject. Thin metal layers do not seem to possess major problems for the sorting or recycling, if the labels can be separated from the containers¹. However, these metal materials will not be recycled, and single use of metal is not supportable from a resource point of view.

This is a new requirement.

¹ <https://www.epbp.org/design-guidelines/products> (Accessed on 2021-01-04).

Appendix 4 Declaration from the manufacturer of the primary packaging component

- plastic packaging

-paper-based packaging for solid products

To be used in conjunction with an application for a licence for the Nordic Ecolabelling of dishwasher detergents and rinse aids.

This declaration is based on the knowledge we have at the time of the application, based on tests and/or declarations from raw material manufacturers, with reservations for new advances and new knowledge. Should such new knowledge arise, the undersigned is obliged to submit an updated declaration to Nordic Ecolabelling.

Please note that small amounts of impurities when using recycled materials are possible and do not affect fulfilment of the requirements.

Producer/distributor
Part of the packaging (container, closure, label)
Packaging material (type of plastic, cardboard etc.) List all materials included in the packaging component and the percentage of each material.

How should the packaging component be recycled? (E.g. as cardboard or plastic packaging) (O18)
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O19: Rigid plastic packaging		
Does the container/closure contain post-consumer/commercial recycled material (PCR), as defined in ISO 14021?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If yes, state the percentage PCR:		
Is the component made of monomaterial?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If made of polyethylene terephthalate (PET): Have any pigments/colours been added?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Has carbon black been added to the component?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Are fillers used in the components?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If yes, state the density of the packaging component:		
Are any barriers used in the component?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Does the component contain metal seals or other metal parts?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
For closures: Does the component contain silicone?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
O20: Flexible plastic pouches		
Does the container contain post-consumer/commercial recycled material (PCR), as defined in ISO 14021?	Yes <input type="checkbox"/>	No <input type="checkbox"/>

If yes, state the percentage PCR:		
Is the component made of monomaterial?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Are any barriers used in the component?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Has carbon black been added to the component?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Are fillers used in the components?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If yes, state the density of the packaging component:		
Does the component contain metal seals or other metal parts?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
For closures: Does the component contain silicone?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
O21: Labels for plastic packaging		
Does the label contain post-consumer/commercial recycled material (PCR), as defined in ISO 14021? (requirement O19)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If yes, state the percentage PCR:		
For labels applied to PET containers: Please state the density of the label:		
Note: Density in g/ cm3, not the grammage.		
Is there PET-G (polyethylene terephthalate glycol modified), polyvinyl chloride (PVC) or other halogenated plastics present in the labels PET?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Does the label contain paper?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Does the label contain metal?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
O22: Paper-based packaging for solid products		
Does the packaging contain post-consumer/commercial recycled material (PCR), as defined in ISO 14021?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If yes, state the percentage PCR:		
Is the packaging a cardboard or a corrugated board packaging?		
Is the packaging laminated with any barrier material?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If yes, please state the barrier material type:		
Is yes, is the laminate on one side only?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Does the packaging contain PVC (polyvinyl choride) or other types of halogenated plastics?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Is there PS (polystyrene) and PVC (polyvinyl choride) or plastic based on other types of halogenated plastics present in the packaging?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Does the packaging contain metal seals or other metal parts?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Is all print done as direct printing on the packaging?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
If yes, are all inks that are used water-based?	Yes <input type="checkbox"/>	No <input type="checkbox"/>

Place and date	Company name/stamp
Responsible person	Signature of responsible person
Telephone	Email