

1. Objective

The Signify Sustainable Design process pursues a reduction of the environmental impact of its products and packaging by using responsible materials from renewable sources. This approach is governed by the Sustainability (QS-000164) and Environmental, Health and Safety (QS-000165) policies.

The Sustainable Packaging requirements document encourages packaging designers, purchasing communities and suppliers to minimize the environmental impact of packaging materials in all phases of its life cycle by adhering to the directions for a sustainable packaging design and production including specific requirements and criteria (described in Chapter 3).

2. Scope and responsibilities

The scope of the Sustainable Packaging requirements document is applicable for the packaging components used for Signify finished products and includes:

1. Packaging for all newly introduced products and changes in packaging of current portfolio,
2. Sales packaging (i.e. packaging conceived to constitute a sales unit to the final user or consumer at the point of purchase),
3. Grouped packaging (i.e. packaging conceived to constitute at the point of purchase a grouping of a certain number of sales units whether the latter is sold as such to the final user or consumer or whether it serves only to replenish the shelves at the point of sale; it can be removed from the product without affecting its characteristics),
4. Transport packaging (i.e. packaging conceived to facilitate handling and transport of a number of sales units or grouped packaging in order to prevent physical handling and transport damage. Transport packaging does not include road, rail, ship, and air containers),
5. Manuals (incl. quick start guidelines) and warranty cards.

The scope of this document does not describe the following:

1. Product and/or promotional materials supporting the sales in the shops, and (re-usable) industrial packaging of parts delivered to Signify production sites and does not end up at the final customer,
2. Other marking requirements (e.g. Mobius triangle, Grüner Punkt logo) as these are included in packaging brand identity and packaging guidelines.

We request suppliers to regularly check the Signify Sustainability website downloads to remain informed on the latest changes in legislative and policy obligations (o.a. Regulated Substances List, and Sustainable Packaging requirements document).

<https://www.signify.com/global/sustainability/downloads>

Table 1: The structure of responsibilities regarding this document

Topic	Responsibility	Description
1. Sustainable Packaging requirements	Sustainability, EAC board	Create, review, publish the packaging requirements. Review and decide on packaging related waivers.
2. Implementation of Sustainable packaging requirements	Business, Procurement, PCC	Execute the Sustainable Packaging requirements and meet the criteria. Procurement to ensure supplier deliver according to requirements.
3. Support	Sustainability, PCC	Provide advice as well as support.
4. Packaging data collection	Packaging owners & creators	The responsible stakeholder needs to ensure that packaging related data is received from suppliers, and/or collected.
5. Packaging validation	Procurement, Supplier	On request of Signify, suppliers shall provide written evidence, such as certificates or declarations of conformity to demonstrate compliance to the risk assessment for responsible sourcing and requirements and criteria included in this requirements document.
6. Packaging reporting	Procurement, Supplier	Quarterly report an overview of all grades supplied to Signify (weight, recycled content, certification, etc.) in packaging reporting template.

3. Design directions and requirements.

Signify wants to develop and use as environmental-friendly as possible packaging. Over the years, we have taken multiple steps to reduce the environmental impact through e.g. reducing weight and volume of packaging, using multipacks, phasing out fossil fuel based plastic materials in consumer packaging. The journey continues and we want to encourage the organization to look for further improvements, based on following directions:

1. **Reduce:** minimize the amount of material considering weight, volume, and form factor for container loading, while offering sufficient product protection that meets Signify testing standards. Ensure that the empty space is reduced to the minimum necessary.
2. **Recyclability:** maximize recyclability to close the material loop. Important is to ensure that in case different materials are used they are separable.
3. **Recycled content:** try to achieve the highest feasible recycled content percentage to close the material loop, without compromising the technical performance and protection standard.
4. **Reusability:** consider reuse of transport packaging (like re-usable pallet, box, crates).

5. **Sustainable Materials:** paper-based materials are preferred; if considering use of alternative materials, target certified renewable resources or bio-based materials (incl. compostable and biodegradable), depending on functionality and price.
6. **Digitalization:** consider use of alternatives for hardcopy where possible (e.g. QR code iso hardcopy for manuals and/or return forms).
7. **Collect and store packaging data** enabling accurate internal as well as external reporting or communicating about packaging used and put on the market.

Furthermore, following are requirements which must be fulfilled:

- Adhere to all mandatory local and global regulations and policy requirements for packaging related to chemical substances, materials, and gassing,
- Assure responsible sourcing and compliance with Signify Sustainable Packaging requirements by requiring suppliers to conduct a risk assessment,
- Avoid use of wood harvested in violation of traditional and civil rights, e.g. forests where high conservation values are threatened, or which are converted to plantations,
- Assure wood used for products and packaging originate from sustainable sources (FSC, PEFC, ...) or are based on alternative materials like bamboo, rattan, and leftovers from sugar production (UNESCO) or pressed wood from wood shavings from timber production.

In exceptional cases, exemptions for individual products can be obtained in mutual agreement with the supplier, e.g. in case of regulatory, technical performance, or business critical reasons. This might be applicable for instance for packaging of large, heavy and/or fragile products. The business must request for a waiver from the Signify EAC.

3.1 Design criteria for paper, paper-pulp and (corrugated) cardboard packaging

We prioritize the use of paper-based materials as they have a lower environmental impact. However, if there is a need for alternative materials for reasons like customer preference or product protection, exceptions may be considered.

Signify sets the following criteria for recycled content of certain packaging materials as specified below.

Table 2: Criteria for paper, paper-pulp and (corrugated) cardboard single-use packaging

Production in	Recycled content
Europe or the Americas	>80%
Rest of the World	>80%



Remarks:

1. Where the required recycled content is not feasible, recycled materials are not or limited available:
 - a. Materials from certified renewable sources (e.g. FSC, SFI, PEFC) shall be used, in case average packaging materials cannot meet the required recycled content. In this case, a waiver is not required.
 - b. Bio-based materials (incl. compostable and biodegradable) may be used as alternative, provided these sources do not compete with the food chain. No criteria are set as the market for bio-based materials differs widely per country.
2. Labeling packaging with FSC/SFI/PEFC logo is optional but is encouraged, if space is available, cost is acceptable, and it contributes to communicating our sustainability credentials towards our customers.
3. When specific criteria are included in the requirement document (e.g. for recycled content) they apply as an average % for the total of all packaging materials supplied per supplier.

3.2 Design criteria for plastic packaging

As part of our commitment to responsible packaging, we avoid the use of fossil fuel-based plastic in our consumer packaging. For B2B product packaging, if functional and/or commercial conditions require, the use of plastics may be allowed.

Signify sets the following criteria for recycled content of PET packaging materials as specified below.

Table 3: Criteria for PET packaging

Production in	Recycled content
Europe or the Americas	>50%
Rest of the World	>10%

Remarks:

1. PVC and EPS and other polymeric foam materials in packaging for products are restricted in accordance with RSL.
2. When specific criteria are included in the requirement document (e.g. for recycled content) they apply as an average % for the total of all packaging materials supplied per supplier.

4. Terms and abbreviations

EAC	Environmental Authorization Committee for waiver applications and approval (Sustainability dept)	PET	Polyethylene terephthalate
EPS	Expanded poly styrene	PVC	Polyvinyl chloride
FSC	Forest Stewardship Council / Fair Wood	RSL	Regulated Substance List
PCC	Packaging Competence Center	SFI	Sustainable Forestry Initiative
PEFC	Program for the Endorsement of Forest Certification		

Document version history:

Date	Author	V.	Reasoning
21-05-2024	T.B.L.W. Marinelli	7.1	<ul style="list-style-type: none"> • Adjustment document name “Signify Sustainable Packaging requirements”
15-05-2024	T.B.L.W. Marinelli	7	<ul style="list-style-type: none"> • Expand the document with innovative packaging directions, • Update the requirements, • Add the obligation to collect and store key packaging data
15-03-2021	T.B.L.W. Marinelli	6	<ul style="list-style-type: none"> • Change in document structure, move important requirements from Annexes to main content, • Update of the recycled paper and plastic criteria • Annex 3 became Annex 1
27-02-2020	T.B.L.W. Marinelli	5	<ul style="list-style-type: none"> • Change document type from Policy to Procedure, • Consequently change in QS code to QS-014359
25-07-2019	T.B.L.W. Marinelli	4	<ul style="list-style-type: none"> • Update of the Policy at end of validity period, new QS code QS-000168 • Adding bleaching process requirements
22-10-2017	L.U.E. Konings QS-Exc4-012	3	<ul style="list-style-type: none"> • Signify version with adapted targets from January 2018 onwards
27-09-2013	T.B.L.W. Marinelli	2	<ul style="list-style-type: none"> • Update of the Philips Packaging Policy
08-02-2013	J.W. Scheijgrond	1	<ul style="list-style-type: none"> • Introduction of the Packaging policy