

Six action areas of EU Green Deal

Niaga® is working in all six areas and found that the underlying infrastructure is missing



Design for reuse



Ingredient transparency & phase out chemicals of concern, start proactively



Expand low emission technologies



Produce emission & pollution free



Increase share of recycled, clean and recyclable materials or renewables



Understand the (multiple) Life Cycle Impact (LCA/EPD/CFP)

Comparison to food

2011 2014

Nutrition Information

Serving per package: (insert number of servings)
Serving size: q (or mL or other units as appropriate)

	Qty per Serving	Qty per 100g (or ml)
Energy	kJ (Cal)	kJ (Cal)
Protein	g	g
Total fat	g	g
Saturated fat	g	g
Carbohydrate	g	g
Sugar	g	g
Sodium	mg (mmol)	mg (mmol)
(insert any other	a ma ua	a ma ua

INGREDIENTS:

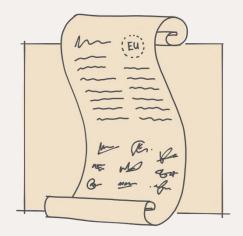
Whole grain wheat, corn, rolled oats, palm oil, aspartame, mango pieces [mango, mango juice, humectant (glycerol), tartrazine, natural mango flavour], royal jelly, walnuts, minerals (Calcium carbonate, iron sulphate), vitamins (Vitamin C, Vitamin B6, Folic acid, Vitamin B12) and spices.

PHENYLKETONURICS:

CONTAINS PHENYLALANINE

WARNING - THE PRODUCT MAY NOT BE SUITABLE FOR ASTHMA AND ALLERGY SUFFERERS.

EU ESPR



ESPR:

Ecodesign for Sustainable Products Regulation

"... sets new requirements to make products more durable, reliable, reusable, upgradable, reparable, easier to maintain, refurbish and recycle, and energy and resource efficient. It is also anticipated that hazardous chemicals making it difficult to recycle products may be banned."

"...all regulated products will have **DPPs**. This will make it easier to **repair or recycle products and facilitate tracking substances of concern**"

For a product to be circular return is key!

For repair, reuse, refurbishing and recycling transparency and return are key.

That's why Niaga® started building an infrastructure for enabling <u>transparency</u> on materials used in redesigned products and to keep products <u>out of the trash</u> to use materials again and again.



Infrastructure for producers cross products and industries









- To show what is inside
- Not a certificate or green claim
- Not a marketing tool
- To substantiate claims

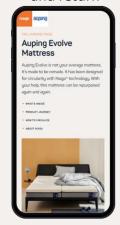


The infrastructure

Niaga® tag to keep products out of the trash



Tag page to enable transparency and return



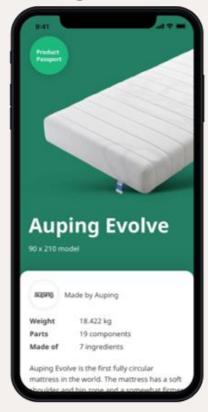
Digital Product passport to provide ingredient and component transparency



Return page to return the product



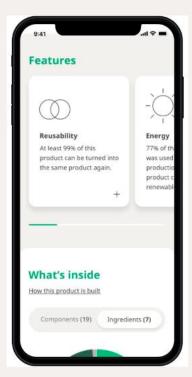
The Digital Product Passport



- Built on ingredient transparency
- Objective and fact-based tool
- Brand neutral
- Product specific
- Applicable to all products
- Can have qualifications
- Relevant documentation and certifications can be added
- IP sensitive information can be protected through layered access



Data integrity & confidentiality

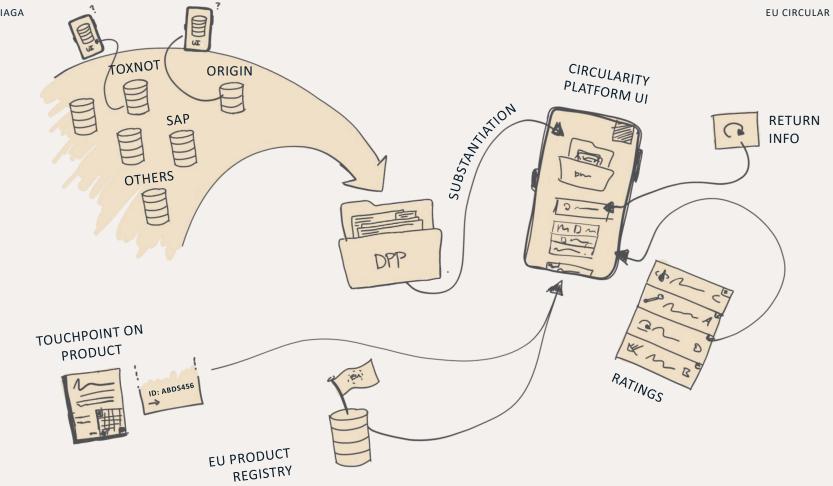


Integrity:

- Distinction between self declared or third party validated data
- Integrity of data through validation

Confidentiality:

- Layered levels of access to protect sensitive data
- Product specific and product related

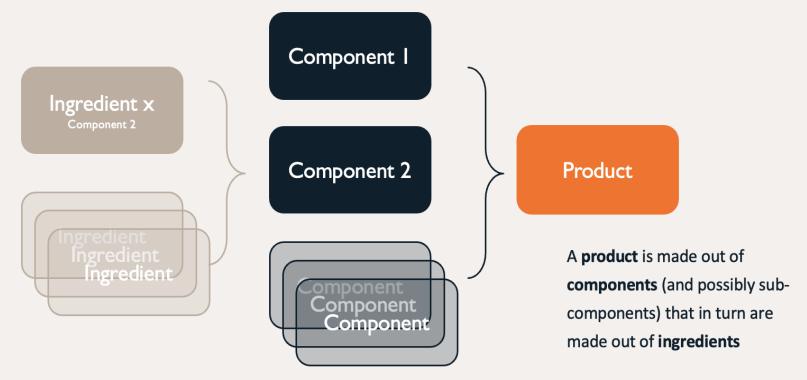




Thank you

Sascha Bloemhoff

Product composition



Niaga® is all about helping partners to move to a circular economy, about bringing circularity from theory to practice

- A circular economy cannot exist without knowledge and transparency of product components and ingredients.
- To understand a product's recyclability, all partners in the value-chain, from consumers to recyclers, need to know what's inside.
- Full ingredient transparency/product knowledge is crucial for repair, maintenance, reuse, remanufacturing and recycling of both simple and more complex, assembled, products
- The tool that can help to systematically provide information is a Digital Product Passport (DPP) concept based on ingredient transparency