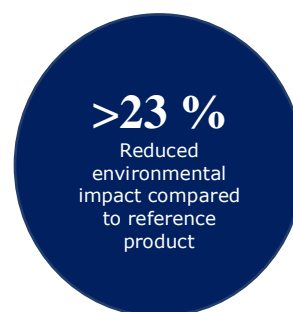


Certificate of Sustainability Ellwood Timber Wrap

Tom Rautakorpi 2 Mars 2022



SCOPE

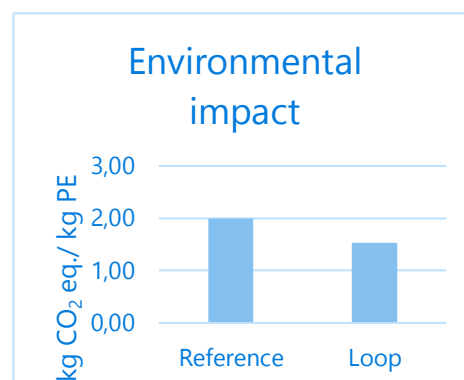
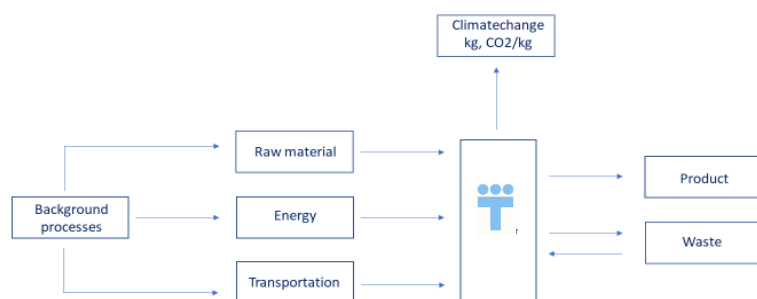
Comparison between previously delivered products (reference product) and a more sustainable and innovative product alternative in the form of Loop I (with > 30% PCR) according to the attached product specification.

Incoming data are means of typical values and associated assumptions.

Software: Sima Pro V.9.0.0.30, Database: Eco Invent 3.3. Method ILCD 1.0.9.

SYSTEM BOUNDARIES

From raw material origin Trioworld Sundsvalls "end gate".



Product Specification Ellwood Loop I (211100)

Tom Rautakorpi 2 Mars 2022

Product:	Co-extruded 3-layer PE-film. Loop I Combifilm and regular film																		
Anti-slip features:	1 x 1000 x 50 g/m ² . Friction > 0,3 (p. 8.4, SIS-TS 12:2006). Fulfils demands in the industries recommendation.																		
Colour:	Black inside, light grey/white outside																		
Print:	Printed 2 colours with company logo and Loop in traceability mark in as to proof. Print repeat 1280 mm max height 650 mm.																		
Dimension:	Width: 3200 mm flatlaid. Thickness: 80 microns Length: 200 m/reel Core: paper 76 x 11																		
Tolerance:	Thickness: +/- 10 % Width: +/- 10mm Length (reel): +/- 1 %																		
Pallet:	Reels/pallet:16 Appr weight: ~1000 kg																		
Technical data:	Material: Different grades of polyethylene [C ₂ H ₄] _n where of as a minimum 30 % is recycled material as PCR (post-consumer regranulate) In addition, pigments and additives for coloration, slip and UV-protection. UV-protection: min 120 kLy. No substances in the mixture are classified in accordance with Regulation (EC) No 1272/2008 or Directive 67/548/EEC 100 % Recyclable in accordance with Directive 94/62/EC and sorted as PELD04																		
Test result 80 microns (typical values)	<table><tr><td>Dart impact F50</td><td>450 g</td><td>(ASTM D 1709)</td></tr><tr><td>Tear strength MD</td><td>650 cN</td><td>(ISO 6383-2)</td></tr><tr><td>Tear strength TD</td><td>1650 cN</td><td>(ISO 6383-2)</td></tr><tr><td>Elongation MD</td><td>>600 %</td><td>(ISO 527-3)</td></tr><tr><td>Elongation TD</td><td>>900%</td><td>(ISO 527-3)</td></tr><tr><td>Puncture</td><td>80 N</td><td>(TW-method)</td></tr></table>	Dart impact F50	450 g	(ASTM D 1709)	Tear strength MD	650 cN	(ISO 6383-2)	Tear strength TD	1650 cN	(ISO 6383-2)	Elongation MD	>600 %	(ISO 527-3)	Elongation TD	>900%	(ISO 527-3)	Puncture	80 N	(TW-method)
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Puncture	80 N	(TW-method)																	
Comments:	Unused product to be stored in roofed area protected from direct sun radiation.																		

Note:

Comparison of different test results should consider test method and laboratories used, above results are from ongoing production in analyzed in Trioworlds own laboratories.