

Environmental Product Declaration

SAVO®

LCA in accordance with ISO 14040:2006 and ISO 14044:2006 standards

Savo Soul

from

European Furniture Group AB

e|F|G

LCA carried out by:	IVL Environmental Research Institute on behalf of EFG
Third party verifier:	Miljögiraff AB
Publication date:	2020-01-16
Database(s) and LCA software used:	Thinkstep and ecoinvent databases, GaBi LCA software



Company information

Owner of the environmental declaration:

EFG European Furniture Group AB,
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Certificates:

- ISO 9001:2015, certificate number SE006478-1
- ISO 14001:2015, certificate number SE006479-1
- FSC Chain of Custody FSC-STD-40-004 V3-0, certificate number BV-COC-061003

Name and location of production site:

EFG European Furniture Group AB, Tranås, Sweden

Product information

Product name: Savo Soul

Reference Service Life: 15 years

UN CPC code: 3811

Geographical scope: Europe

Product description: SAVO Soul is built with the most advanced technology available in the simplest form possible, SAVO Soul is design to meet all seating needs using a minimum of adjustments. Following the body's natural movements, it helps improve both posture and overall well-being.

- Adjustable seat height, seat depth and back height.

- Tilttable seat.

- Automatic regulation of tilt resistance that easily can be adjusted

- Adjustable seat height 400-520 mm as standard (soft seat 420- 540 mm).

- Backrest angle lockable in several positions.

- Base in black plastic (standard) with unbroken castors for hard floors.

Key environmental indicators	Unit	Upstream	Core	Downstream	Total
Global warming ¹	kg CO2 eq.	61,1	1,70	3,78	66,6
Total energy use	MJ	1070	45,1	14,1	1110 ²
Amount of recycled materials	%				24

¹Excluding biogenic carbon

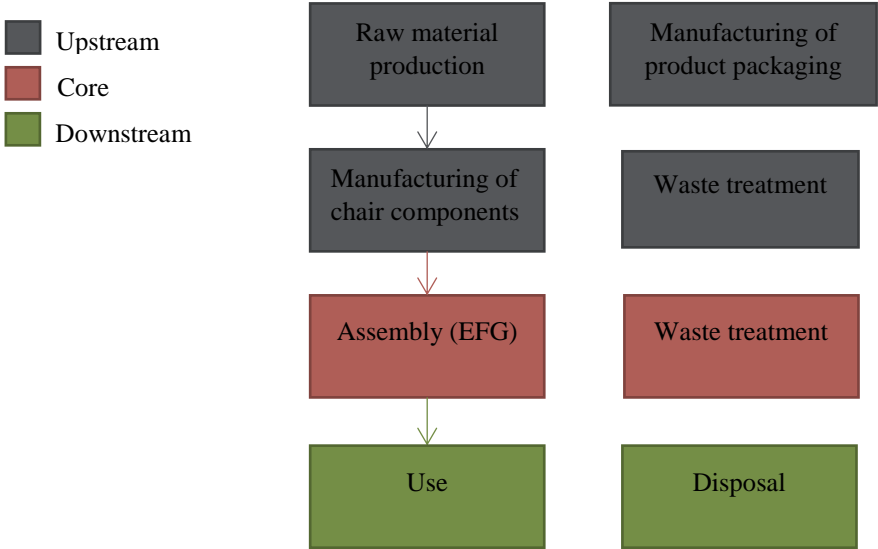
²213 MJ of this is renewable energy

LCA information

Functional unit / declared unit: One chair
Reference service life: 15 years
Time representativeness: Data collection was performed during 2017–2018.
Database(s) and LCA software used: thinkstep and ecoinvent databases, GaBi LCA software

Description of system boundaries: Cradle-to-grave
LCA practitioner: IVL Swedish Environmental Research Institute

System diagram:



Content declaration

Product

Material	kg	%
PA6, glass reinforced	5,001	36
Steel	3,669	27
PP, talcum reinforced	1,235	9
Aluminium	1,087	8
PUR	0,800	6
PP	0,693	5
PA, unspecified	0,440	3
Fabrics	0,400	3
PA66, glass reinforced	0,188	1
POM/NBR	0,103	1
Other	0,136	1
Total	13,753	100

The recycled content of the product is modelled in the LCA as 24%, but it might vary between around 15% and 35% primarily depending of actual recycled content in steel.

Packaging

Material	kg	%
Corrugated fiberboard	2,759	99
Plastics	0,036	1
Total	2,795	100

Environmental performance

Potential environmental impact

PARAMETER		UNIT	Upstream	Core	Downstream	TOTAL
Global warming potential (GWP)	Fossil	kg CO ₂ eq.	61,1	1,70	3,78	66,6
	Biogenic	kg CO ₂ eq.	-4,16	-0,0120	0,375	-3,80
	TOTAL	kg CO ₂ eq.	56,9	1,69	4,16	62,8
Acidification potential (AP)		kg SO ₂ eq.	0,125	0,0139	0,00379	0,142
Eutrophication potential (EP)		kg PO ₄ ³⁻ eq.	0,0186	0,00210	7,80E-04	0,0214
Photochemical oxidant creation potential (POCP)		kg C ₂ H ₄ eq.	0,0153	1,70E-06	-5,12E-04	0,0148
Human toxicity, cancer impacts		CTUh	2,89E-07	1,03E-08	5,80E-09	3,05E-07
Human toxicity, non-cancer impacts		CTUh	4,32E-06	2,77E-07	7,05E-08	4,66E-06
Ecotoxicity		CTUe	1340	14,8	8,29	1360
Land use		species.yr	7,75E-08	2,89E-08	2,31E-09	1,09E-07

Use of resources

PARAMETER	UNIT	Upstream	Core	Downstream	TOTAL
Non-renewable resources: Material resources					
Inert rock	kg	60,8	0,145	0,121	61,1
Other	kg	7,91	0,130	0,0805	8,12
Non-renewable resources: Energy resources					
Crude oil	kg	9,66	0,449	0,275	10,4
Hard coal	kg	3,39	0,00482	0,00463	3,40
Lignite	kg	2,55	0,00676	0,00709	2,57
Natural gas	kg	6,93	0,0442	0,0341	7,01
Other	kg	0,0747	8,75E-05	7,82E-05	0,0749
Renewable resources: Material resources					
Carbon dioxide	kg	7,40	2,22	0,0545	9,68
Other	kg	0,205	8,30E-06	6,88E-06	0,205
Renewable resources: Energy resources					
Primary energy from solar energy	MJ	159	22,2	0,661	182
Primary energy from hydro power	MJ	16,0	1,62	0,0331	17,7
Primary energy from wind power	MJ	12,8	0,0375	0,0360	12,9
Other	MJ	1,77	0,00153	0,00132	1,77
Secondary resources: Material resources					
Steel scrap	kg	2,52	0	0	2,52
Aluminium scrap	kg	1,10	0	0	1,10
Other	kg	0,0128	0	0	0,0128
Water use					
Total amount of water	kg	1500	123	23,8	1650
Direct amount of water used by the core process	kg	-	4,30	-	4,30

Waste production

Waste from assembly plant and chair component manufacturing plants. Waste from e.g. raw material and energy production is not included as it is not reported in the data sets used.

PARAMETER	UNIT	Upstream	Core	Downstream	TOTAL
Waste	kg	0,790	0,805	-	1,60

References

IVL Swedish Environmental Research Institute. (2020). *LCA Report Savo Soul*.