

ENVIRONMENTAL DATA SHEET

WE TAKE RESPONSIBILITY

FOR THE WORLD AROUND US, THE ENVIRONMENT AND THE FUTURE

Every one of us, every manufacturer, every decision maker and every consumer, has a great responsibility for the world around us, our environment and the future. Only if we are aware of the consequences our decisions will have can we make the right decisions. Protecting resources is no longer just a question of environmental protection. The world around us – our social life and interactions between each and every one of us – is interwoven at a global level. The way in which resources are created and handled is a question of social fairness and a significant factor in the development of global poverty.

Handling resources responsibly is the only way to prevent the exploitation of nature as well as people.

At Interstuhl, one of our most important aims is to leave our descendants a world worth living in. Protecting all types of resources is therefore an integral part of our DNA. We want to take responsibility together with all of our partners. This is a core principle in our procurement, development and production processes. But we can only be successful if our customers also make protecting resources an important factor in their decisions. This requires transparency. Our environmental data sheets provide this transparency for all our products. We would be happy to send you our comprehensive sustainability report with its integrated environmental statement if you would like to know more about sustainability at Interstuhl.

PROVEN SUSTAINABILITY

Acting in a way that is oriented towards the environment is always a work in progress. In order to reflect on our processes and con-

tinue improving, we regularly undergo certification. The following commendations and certificates are evidence of what we do.



FEMB level 3 certification: Highest sustainability standard of the European Office Furniture Federation



BIFMA LEVEL certification: Strict sustainability certification for materials, energy, health and safety, and social responsibility



EMAS certification: Environmental management system certified in accordance with Regulation (EC) No. 1221/2009 and EN ISO 14004:2015



Blue Angel: Environmental label of the federal government of Germany for the protection of people and the environment



EcoVadis Gold: Certified corporate social responsibility and sustainability



TÜV emissions testing: Certified safety from harmful substances for people, the environment and technology



DIN EN ISO 50001:2011: Certified energy management system for development, production and sales



DIN EN ISO 14001:2015: Certified environmental management system for development, production and sales



DGNB: Certification from the German Sustainable Building Council



TÜV management system: Certified occupational health and safety



Baden-Württemberg Environmental Award: Jury award for corporate responsibility and regional commitment 2010



Baden-Württemberg Environmental Award: Jury award for corporate responsibility and regional commitment 2016



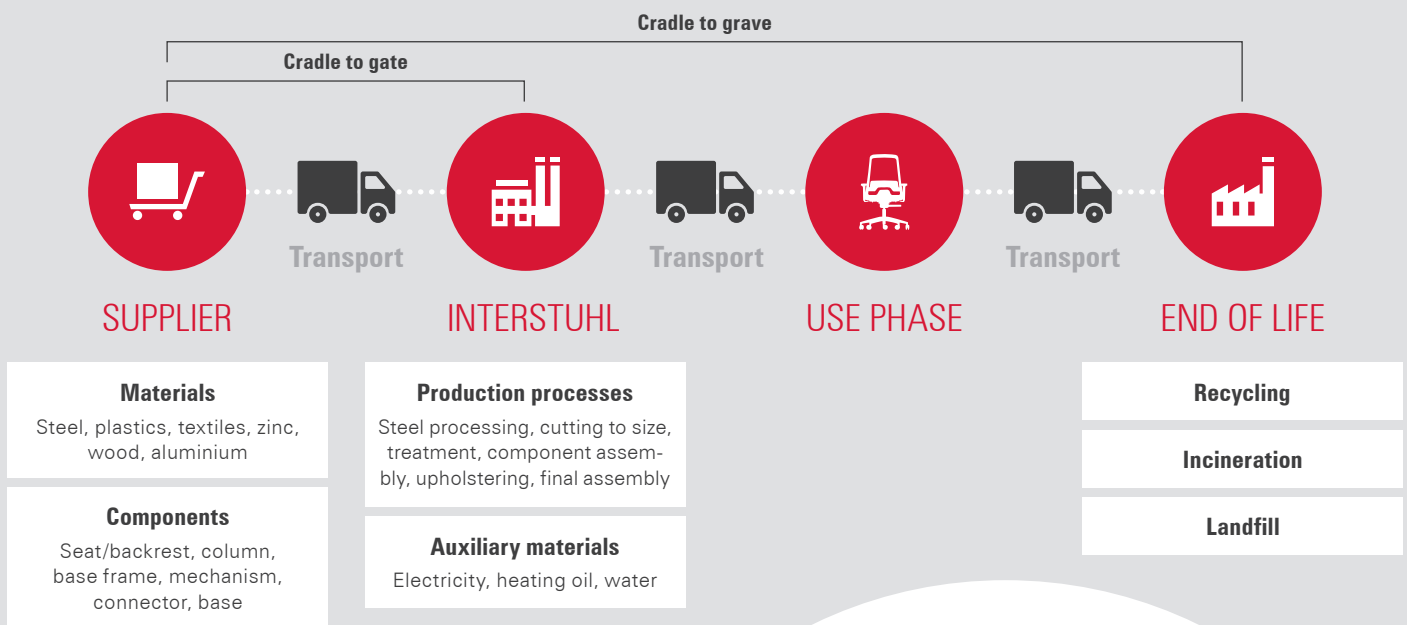
100 companies for resource efficiency: Award for resource-saving management



LIFE CYCLE AND ENVIRONMENTAL IMPACT OF INTERSTUHL PRODUCTS

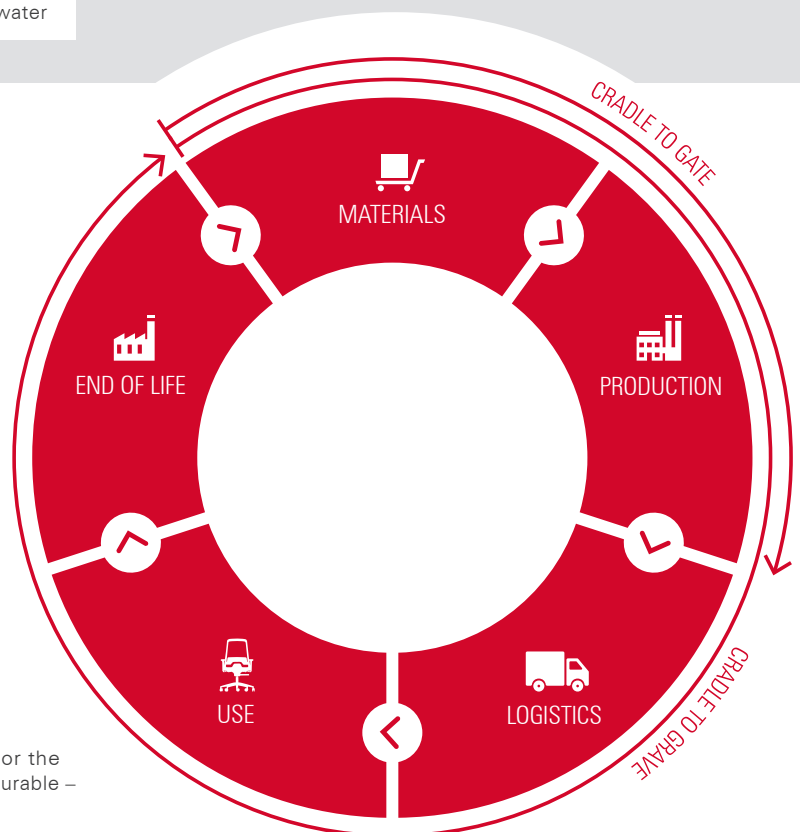
When it comes to evaluating the overall environmental impact of a product, the entire product life cycle needs to be taken into account. There are two different possible assessments: The „cradle to gate“ section considers the complete environmental

impact from raw material to finished product. The „cradle to grave“ section goes further to consider logistics, use phase and also the recycling or disposal once a product has reached the end of its useful life.



EXAMPLES FOR IMPROVED ENVIRONMENTAL CONDITIONS

- Materials and components**
 We reduce material requirements through product design and make sure that our suppliers also meet our requirements for sustainability. Approximately 20% of our materials are recyclates.
- Production processes and auxiliary materials**
 Our production takes place at certified sites, with few harmful substances, in a way that conserves resources and makes use of renewable energies.
- Logistics**
 We use lightweight packaging to reduce waste. The logistics process is made more sustainable through smaller packaging sizes and the use of modern vehicles.
- Use phase**
 Our products comply with the statutory thresholds for the emission of harmful substances. They are robust and durable – and we guarantee this with our 10-year warranty.
- End of life**
 We largely abstain from using composite materials and thereby enable more effective recycling. We take responsibility for collecting and recycling old chairs.



MATERIALS RECYCLING RATE YOUNICO 16GD1

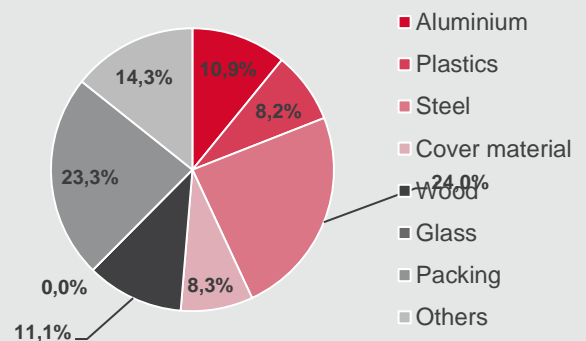
	Weight in kg	Weight in %	Recycling rate			
			Post-Consumer rate		Pre-Consumer rate	
			in kg	in %	in kg	in %
Aluminium	2,29	10,87%	2,06	90,00%	0,00	0,00%
Plastics	1,72	8,17%	0,06	3,67%	0,32	18,81%
• PP	0,52	2,47%	0,02	4,00%	0,10	20,00%
• PA	0,00	0,00%	0,00	2,00%	0,00	20,00%
• POM	0,00	0,00%	0,00	2,00%	0,00	18,00%
• PE	1,20	5,70%	0,05	4,00%	0,19	16,00%
• ABS	0,00	0,00%	0,00	6,00%	0,00	20,00%
Steel	5,06	24,03%	3,04	60,00%	0,00	0,00%
Cover material	1,74	8,26%	0,00	0,00%	0,00	0,00%
• Foam	1,15	5,46%	0,00	0,00%	0,00	0,00%
• Textile	0,59	2,80%	0,00	0,00%	0,00	0,00%
• Leather	0,00	0,00%	0,00	0,00%	0,00	0,00%
• Cotton wool	0,00	0,00%	0,00	0,00%	0,00	5,00%
Wood	2,34	11,11%	0,00	0,00%	0,70	30,00%
Glass	0,00	0,00%	0,00	60,00%	0,00	0,00%
Packing	4,90	23,27%	3,77	77,00%	0,00	0,00%
• Cardboard	4,86	23,08%	3,89	80,00%	0,00	0,00%
• Foil	0,40	1,90%	0,31	77,00%	0,00	0,00%
Others	3,01	14,29%	0,00	0,00%	0,00	0,00%
	21,06		8,93		1,02	

Post-Consumer Recycling rate 42,4%

Post-Consumer Recycling means recycling of a material, after use by the end customer (e. g. yoghurt cup, glass waste from bottles etc.).

Pre-Consumer Recycling rate 4,8%

Pre-Consumer Recycling means recycling of a material, before use by the end customer (e. g. chipped wood as waste product).



98 % of the materials can be recycled after using the chair.

On request you will receive a data sheet, exactly fitting on each chair, respectively each model version.
If required, please apply for this model specific information.



CHAIR LIFE CYCLE ASSESSMENT PER PRODUCTION STEP



Impact category	Materials	Production	CO ₂	Logistics + packaging	End of life	Total
Global Warning Potential	85,8%	1,5%	86,8 kg CO ₂ -eq	2,2%	10,5%	97,4 kg CO ₂ -eq
Acidification Potential	94,9%	0,6%	0,34 kg SO ₂ -eq	3,4%	1,1%	0,38 kg SO ₂ -eq
Eutrophication Potential	97,7%	0,2%	0,13 kg P-eq	1,5%	0,6%	0,15 kg P-eq
Photochem. Ozone Creation Potential	97,0%	0,7%	0,020 kg C ₂ H ₄ -eq	1,1%	1,2%	0,023 kg C ₂ H ₄ -eq.
Fossil resource consumption	95,0%	1,2%	980,5 MJ	2,8%	1,1%	1100,5 MJ
Basic resource consumption	99,9%	0,1%	0,003 kg Sb-eq	0,0%	0,0%	0,007 kg Sb-eq
Ozone Layer Depletion	99,3%	0,2%	2,14E-06 kg R11-eq	0,0%	0,5%	4,64E-06 kg R11-eq
Primary energy requirements	91,4%	3,4%		3,7%	1,5%	1557,8 MJ



Climate change

The impact of a product on climate change is measured with a carbon dioxide equivalent value. This describes the global-warming potential of a product by specifying an equivalent amount of CO₂ emissions in kg.



Acidification

The impact of a product on the acidification of soils and bodies of water is measured with a sulphur dioxide equivalent value. This describes product's effect on lowering the pH value by specifying an equivalent amount of SO₂ emissions in kg.



Eutrophication

The impact of a product on the accumulation of nutrients in an ecosystem is measured with a phosphate equivalent value. This describes the nutrient loading caused by a product by specifying an equivalent amount of PO₄ emissions in kg.



Formation of photochemical oxidants

The impact of a product on the formation of photochemical oxidants is measured with an C₂H₄(ethylene) equivalent value. This describes the harmful release of hydrocarbons by a product by specifying an equivalent amount of C₂H₄ emissions in kg.



Fossil resource consumption

The amount of fossil resources used by a product is measured in megajoules (MJ). For reference, a litre of petrol corresponds to an energy of approx. 32 megajoules.



Basic resource consumption

The amount of basic resources used by a product is measured with an antimony (Sb) equivalent value. This extremely rare element is used as a comparative value and measured in kg.



Destruction of the ozone layer

The impact of a product on the ozone layer is measured with a trichlorofluoromethane equivalent value. This describes the destruction of the ozone layer by a product by specifying an equivalent amount of CFC-11 emissions in kg.



Primary energy requirements

The primary energy requirements not only include the energy requirements of a production step, but also the energy required for upstream processes. They therefore indicate how high the actual energy requirements are.



MATERIALS RECYCLING RATE YOUNICO 16GD2

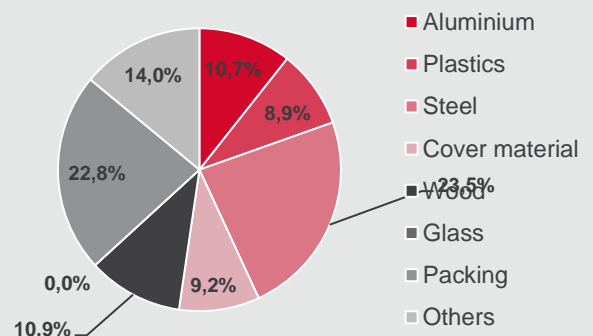
	Weight in kg	Weight in %	Recycling rate			
			Post-Consumer rate		Pre-Consumer rate	
			in kg	in %	in kg	in %
Aluminium	2,29	10,65%	2,06	90,00%	0,00	0,00%
Plastics	1,92	8,93%	0,07	3,67%	0,36	18,81%
• PP	0,72	3,35%	0,03	4,00%	0,14	20,00%
• PA	0,00	0,00%	0,00	2,00%	0,00	20,00%
• POM	0,00	0,00%	0,00	2,00%	0,00	18,00%
• PE	1,20	5,58%	0,05	4,00%	0,19	16,00%
• ABS	0,00	0,00%	0,00	6,00%	0,00	20,00%
Steel	5,06	23,53%	3,04	60,00%	0,00	0,00%
Cover material	1,98	9,21%	0,00	0,00%	0,00	0,00%
• Foam	1,31	6,09%	0,00	0,00%	0,00	0,00%
• Textile	0,67	3,12%	0,00	0,00%	0,00	0,00%
• Leather	0,00	0,00%	0,00	0,00%	0,00	0,00%
• Cotton wool	0,00	0,00%	0,00	0,00%	0,00	5,00%
Wood	2,34	10,88%	0,00	0,00%	0,70	30,00%
Glass	0,00	0,00%	0,00	60,00%	0,00	0,00%
Packing	4,90	22,79%	3,77	77,00%	0,00	0,00%
• Cardboard	4,86	22,60%	3,89	80,00%	0,00	0,00%
• Foil	0,40	1,86%	0,31	77,00%	0,00	0,00%
Others	3,01	14,00%	0,00	0,00%	0,00	0,00%
	21,50		8,94		1,06	

Post-Consumer Recycling rate 41,6%

Post-Consumer Recycling means recycling of a material, after use by the end customer (e. g. yoghurt cup, glass waste from bottles etc.).

Pre-Consumer Recycling rate 4,9%

Pre-Consumer Recycling means recycling of a material, before use by the end customer (e. g. chipped wood as waste product).



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POTENTIAL CONTRIBUTION OF A CHAIR FOR CERTIFICATION IN LINE WITH LEED AND WELL

Chairs make an important contribution if a building is to undergo sustainability certification in line with LEED or WELL. The following list shows the potential contribution of an Interstuhl product:

WELL

Movement	V02 Visual and physical ergonomics	Part 3	Seat flexibility	Pre-conditions
		Part 5	Ergonomics education	Pre-conditions
Materials	X08 Hazardous material reduction	Part 1	Limit hazardous material	1 point
	X10 Volatile compound reduction	Part 1	Volatile organic compound	max. 2 points
	X11 Long-term emission control	Part 1	Furniture and furnishings emission	max. 2 points
	X14 Material transparency	Part 1	Promote Disclosure of materials used	max. 2 points

LEED

Materials and Resources (MR)	Building product disclosure and optimization	Environmental product declaration	1– 2 Points
		Sourcing of raw materials	1– 2 Points
		Composition of materials	1– 2 Points
Indoor Environmental Quality (EQ)	EQ-Credit	Low-emitting materials	1– 3 Points

WELL BUILDING CERTIFICATION

WELL is the sustainability certification system of the International WELL Building Institute. It assesses the environmental factors of a building based on categories like air, light, water, health, knowledge/information or innovation with a score of 1 to 10. Find out more about WELL at www.wellcertified.com

LEED BUILDING CERTIFICATION

LEED stands for "Leadership in Energy and Environmental Design" and is assessed by the U.S. Green Building Council. Different scores are awarded for different areas: Sustainable Sites (21), Water Efficiency (11), Energy and Atmosphere (37), Materials and Resources (14), Indoor Environmental Quality (17), Innovation (6) and Regional Priority (4). The LEED V3/Commercial Interiors standard is used for office furniture. You can find out more about LEED at www.usgbc.org